

**ZMA2018-018 River’s Edge
Application Narrative**

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Property Overview:

	ACREAGE	EXISTING ZONING	COMP PLAN DESIGNATION
Parcel 5A	4.81	RA	Neighborhood Density (3-6)
Parcel 5A-1	27.71	RA	Neighborhood Density (3-6)
TOTAL:	32.52		

Project Proposal:

Rivers Edge Holdings LLC and Rivers Edge Associates LLC (collectively, the “applicant”) are the owners of property located in Albemarle County, Virginia (the “County”) designated on County Tax Maps as parcels 03200-00-00-005A and 03200-00-00-005A1 (collectively “the property”). The property is approximately 32.52 acres in the aggregate and is located approximately 1,000 linear feet north of the intersection of Lewis and Clark Dr. and U.S. Route 29 and just south of the National Ground Intelligence Center (NGIC) within the Hollymead Community, a designated Growth Area within Albemarle County. The applicant requests to rezone the property from Rural Areas to Planned Residential Development (PRD) to allow for a maximum of 100 size restricted units limited to a maximum of 1,200 square feet, with a maximum total residential footprint area set at 50,000 square feet.

The property is located at the North Fork of the Rivanna River, at a “horseshoe bend” in the River. The natural features of this property, notably the proximity to and views of the Rivanna River and the mature vegetation on the property, coupled with the direct adjacency of the property to Route 29 and close proximity to major employment centers at the National Ground Intelligence Center and the University of Virginia Research Park, create a unique opportunity for a residential community in the development areas with direct access to rich environmental assets, transportation networks, and employment opportunities.

We propose a residential community that maximizes density on developable portions of the property by proposing small pre-fabricated residential units that will be constructed as single, duplex, triplex, and quadruplex structures. The units are intended to interact with the existing landscape by implementing construction techniques, like pier foundations, that minimize disturbance of existing terrain. Mass grading on the site will be limited to roadway construction and parking areas. The existing roadway is proposed to be reoriented and improved to allow for easier maneuverability for future residents and safe and efficient access to the site for emergency vehicles. The parking areas will require mass grading to ensure the parking areas comply

with applicable site design requirements and to ensure some units onsite are ADA accessible from the parking lot.

Consistency with the Comprehensive Plan:

The comprehensive plan identifies the developable area of the parcels as neighborhood density residential, recommending a density of three (3) to six (6) dwelling units per acre. The land area in the neighborhood density residential area, less the areas designated as environmentally sensitive, result in a maximum recommended density of 51 dwelling units on the property. These units could be constructed as 51 single family detached units with accessory apartments, equating a maximum of 102 dwelling units. We contend the impact from 100 size restricted units is not greater than the impact from 51 single family dwellings with 51 accessory apartments.

The applicant proposes the conversion of the existing accessway to a pedestrian path near the property entrance from Route 29. The applicant intends to provide a public access easement on this accessway and additionally, in the future the applicant proposes to construct a pedestrian crossing across Flat Branch to provide pedestrian connections between the property and future neighborhoods to the south. Although, these pedestrian improvements do not directly align with the recommended multi-use path locations outlined in the comprehensive plan, they achieve a general multi-modal connectivity intent of the shared use path in this location. The proposed multi-use path location, as shown on the Places29 Parks and Green Systems Map North is shown adjacent to Route 29 in preserved slopes that, at present, have an approximate 50% grade from the outside edge of the Rt 29 shoulder to the banks of Flat Branch. Although this application does not propose the construction of the multi-use path as shown in the Places29 Master Plan, the pedestrian connections that are provided with this plan provide an initial framework for future connections from this site to future neighborhoods to the south. Further, the proposed pedestrian improvements with this application capitalize on existing infrastructure (i.e. the repurposing of the existing accessway as a pedestrian path) and therefore minimize the land disturbance specifically for the construction of pedestrian connections.

Impacts on Public Facilities & Public Infrastructure

Transportation

ITE's Trip Generation Manual, 10th Edition estimates 35 AM peak hour trips and 43 PM peak hour trips from the development. A total of 543 weekday trips is estimated from this development using ITE code 221 (multifamily housing).

Schools

The property lies within the Baker-Butler Elementary School district, Sutherland Middle School district, and Albemarle High School district. The following numbers have been provided by Albemarle County Public School systems.

Type of Dwelling Unit	Elementary	Middle	High	Total
Multifamily	0.12	0.03	0.05	0.21
100 Units	12	3	5	21

Parks

By focusing the buildable area efficiently, River's Edge is able to allocate 70% of total acreage to open space. Open space will include a system of primitive trails, with recreational fitness facilities along these walkways. The open space surrounds the buildable area, allowing for a sufficient buffer from the Rivanna River which is a

major asset of the property. A public access easement is additionally proposed for future interparcel connectivity between TMP 32-22K1 and River's Edge (TMP 32-5A and TMP 32-5A1), achieving the trail connection within the Places29 North Parks and Green Systems Master Plan. There is ample on-site recreation and outdoor opportunities proposed for future residents. The County's parks may see more users with new residents on the property, but it is not anticipated for new County residents to have negative impacts on shared public space, especially in a development where convenient access to nature is proposed just outside residents' doors.

Safety

The property is within the response district of the Hollymead Fire Station and Hollymead Rescue Squad. The property is patrolled by the Jefferson Police District, Sector 3, Beat 9. According to American Community Survey (ACS) 2017 5-year estimates, there are approximately 2.62 per household in Albemarle County¹. Using this estimate there could potentially be 262 residents on the property. As the proposed development is more similar to multifamily household characteristics in unit size than that of traditional single family detached, it is our position that the household size on this property would be 1.97 people per household, 25% smaller than the County average. With a maximum of 100 units proposed on this site, there could potentially be 197 new residents within the Hollymead Fire Station and Hollymead Rescue Squad District.

Impacts to Public Water & Sewer

The proposed development will connect to public water and sewer. There are minimal anticipated impacts on public facilities and infrastructure from the development. Effluent from the site will be collected in a private pump station that will ultimately connect to public sewer.

Impacts on Environmental Features

As a Planned Residential Development, the design of River's Edge aims to be mindful of the surrounding environmental features. Travel ways and parking will require the most disturbance and have been located strategically to minimize required mass grading into environmentally sensitive features. Currently, the entrance road into the property is insufficient and will require widening of the road to 20' with additional graded shoulders to ensure safety when moving through the site. This will result in approximately 16,000 square feet of steep slopes disturbance and approximately 21,800 square feet of stream buffer disturbance. An additional 23,100 square feet of steep slopes disturbance is proposed for private stormwater facilities. By locating the travel ways and parking as shown in the proposed concept plan and exhibit, we are able to conserve 70% of the development for open space. The small, prefabricated footprint of the residential buildings are intended to minimize the disturbance, as they are retrofitted into the landscape. Mass grading of the road and parking is needed to comply with applicable site design requirements, as well as to ensure safe access for both residents and emergency vehicles.

Proposed Proffers to Address Impacts

The applicant has included certain commitments within the proffered application plan such as:

- Commitment to 15% affordable housing
- Maximum building footprint area
- Maximum unit size

Open Space & Recreation Narrative

The application plan proposes alternatives to recreational facilities and equipment as proposed in Sec. 4.16.2. Please consider the following when evaluating the alternatives proposed in the application plan:

¹ Table "S2501" Occupancy Characteristics. U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates

1. Why natural alternatives?

The River's Edge property sits at a unique location as a property that is virtually surrounded by the North Fork Rivanna River. The presence of the river, mature trees, and sloping landscape from a high point near the center of the property down towards the river create a nature escape while being easily accessible to Route 29 and within close proximity to the University of Virginia Research Park and the National Ground Intelligence Center. The residential community proposed with this development will be comprised of small pre-fabricated units, all less than 1,200 square feet that will be pieced together as multifamily units. These small footprint units are able to be flexible in orientation, allowing for the structures to be set around preserved trees and stepped into the landscape. With this proposal, the intent of the overall development intends to support the enclosed, wooded feel of the property. The proposal seeks to align with the natural character of the site, such as exploring alternative materials other than concrete for pedestrian walkways. Likewise, a traditional playground may not be the most complementary recreational space for this property. Section 4.16 of the Albemarle County Ordinance would require two tot lots for this property, each consisting of 1) one swing, 2) one slide, 3) two climbers, 4) one buckabout or whirl, and 5) two benches. While these tot lot requirements may fulfill playspace and recreational needs in other areas of the county, River's Edge presents a distinct opportunity to encourage play and interaction with the natural environment.

2. Benefits of natural play vs. prescribed play

Play is an integral component of childhood development². Engaging in play encourages children to explore, experiment, learn social dynamics, and make decisions. Active play additionally contributes to healthy bodies, both physically and mentally. With the increases in screen time, sedentary recreational behavior has increased as well, with children often developing unhealthy relationships, or even addictions, to technology³. Simultaneously, children have become more detached from the natural world, due to sedentary lifestyles as well as changes in urban development and perceived safety of outdoor play⁴. The movement towards natural playscapes is an effort to reconnect children with the natural world and nature play that was once prevalent everywhere. Nature play has been proven to “improve moods and reduce stress, anxiety, and levels of attention deficit hyperactivity disorder symptoms in children.”⁵ Access to child-directed play in nature additionally becomes “the most common influence on the development of life-long conservation values.”⁶ Children need access to nature for healthy development and wellbeing, and while the County provides a robust park network in the area, River's Edge could provide access to nature right outside their doorsteps.

Not all play is equal. A playground set is designed to allow for specific functions and uses, and although they do encourage outdoor recreation for children, the play possibilities are given to the children, rather than created by them. Traditional playground sets typically “encourage children to act out familiar scenarios filled with predictability... Premade props for dramatic play do not offer the challenges or opportunities that arise when children must find natural items they can use to represent what they envision.”⁷ Unstructured, child-directed play additionally creates scenarios of risk and challenge, which are critical components of cognitive engagement in understanding and setting limits, while developing a sense of responsibility.⁸ Nature play offers a more flexible design, creating an environment for unstructured, child-directed play that enhances use of creativity, engagement, and social interaction¹⁰.

3. Current Requirements and Nature Alternatives

According to Section 4.16 of the Albemarle County Zoning Ordinance, the River's Edge property would be required to provide two tot lots. Each must consist of 1) one swing (four seats), 2) one slide, 3) two climbers, 4) one buckabout or

² Ginsburg, Kenneth R. “The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bonds.” *Pediatrics*, vol. 119, no. 1, 2007, pp. 182–191., doi:10.1542/peds.2006-2697.

³ Whittle, Imogene. “Nature Play in Early Years Education.” *Nature Play QLD - Getting Our Kids Outdoors*, Nature Play QLD, 16 July 2016, www.natureplayqld.org.au/nature-play-in-early-years-education.

⁴ Louv, Richard. *Last Child in the Woods: Saving Our Children from Nature-Deficit Disorder*. Atlantic Books, 2013.

⁵ *Cities Alive: Designing for Urban Childhoods*. ARUP, 2017, *Cities Alive: Designing for Urban Childhoods*, www.arup.com/perspectives/publications/research/section/cities-alive-designing-for-urban-childhoods.

⁶ Finch, Ken. “A Parent's Guide to Nature Play.” *Green Hearts*, Green Hearts Institute for Nature in Childhood, 2009, www.greenheartsinc.org/uploads/A_Parents_Guide_to_Nature_Play.pdf.

⁷ Kiewra, Christine, and Ellen Veselack. “Playing with Nature: Supporting Preschoolers' Creativity in Natural Outdoor Classrooms.” *The International Journal of Early Childhood Environmental Education*, vol. 4, no. 1, 29 Aug. 2016, pp. 71–96., naturalstart.org/sites/default/files/journal/10_final_kiewra_veselack.pdf.

⁸ *Nature Play in the Built Environment: Design Standards and Guidelines*. Valerian LLC, 2017, *Nature Play in the Built Environment: Design Standards and Guidelines*, valerianllc.com/wp/wp-content/uploads/2017/11/Nature-Play-Design-Guidelines.pdf.

whirl, and 5) two benches. The intent of this requirement is to encourage a range of physical activity in children within an adequate fenced-in space of 2000 square feet. The function of these playground pieces could be broken down into what these children obtain from these particular objects. When considering natural playscapes for River’s Edge, this lens of functional meaning of traditional playgrounds could be significant in understanding how natural alternatives could sufficiently comply with current recreational requirements.

The following table describes specific functions that children could perform with the required equipment. At this stage, these natural alternatives are suggestions for how current regulations could be satisfied through these substitutions and specific implementations will be explored at site plan and under the approval of the Zoning Administrator and Director of Planning.

Required Equipment	What is it used for?	With whom?	Proposed Natural Alternative
Swing	<ul style="list-style-type: none"> • Sit on/swing • Get higher views • Push other children on swing • Encourage teamwork/turn-taking, friendly competition of swing height 	<ul style="list-style-type: none"> • Alone • With other children • With adult 	<ul style="list-style-type: none"> • Swings could still be used with more natural features incorporated (ex: tree swings) • Natural structures that are conducive for climbing/hanging/swinging by arms (ex: fallen log with limbs at varying heights)
Slide	<ul style="list-style-type: none"> • Sit on/slide down • Moving from one location to the other (in a fun way) • Climb up the slide • Hide under • Turn-taking 	<ul style="list-style-type: none"> • Alone • With other children 	<ul style="list-style-type: none"> • Slides could still be used with logs set into natural topography as ‘stairs,’ or slide set on top of boulders (see climber alternatives below) • Hobbit house • Hollowed out tree trunk
Climbers	<ul style="list-style-type: none"> • Climbable surface • Able to see from higher ground • Hide under • Hanging from arms/legs 	<ul style="list-style-type: none"> • Alone • With other children 	<ul style="list-style-type: none"> • Natural mound • Large boulders (“rock landscape”) • Fallen log will limbs at varying heights
Buckabout/whirl	<ul style="list-style-type: none"> • Sit on • Move around in place • Controlling movement of object 	<ul style="list-style-type: none"> • Alone • With other children 	<ul style="list-style-type: none"> • Log steppers or log balancing course • Movable objects (see loose objects below)
Benches	<ul style="list-style-type: none"> • Sit on, used as surface 		Provided typically for parents to directly supervise children within a fenced-in area. Depending on circumstances, benches may not be necessary, especially as the natural playscape may not be confined to a specific area. Benches may be periodically provided along the trail system on the property; exact locations will be explored at site plan.
½ Basketball Court			1 multipurpose court

The described natural alternatives are just a few suggestions for incorporating nature play that sufficiently meets the intent of the current recreational regulations of the Albemarle County Code. Because nature play structures aim to create environments that are open-ended, the varieties in design and implementation are endless. Whereas playground equipment

carries specific prescribed play enactments, these flexible nature playspaces encourage scenarios where the active creativity of the children can direct playtime. Whereas traditional playgrounds are fixed in place and confined within a specific area, nature play can also make use of loose material play. Feelings of ownership and autonomy could be better developed with play with loose parts, as “the joy of play in nature is largely derived from the opportunities it provides to imagine, manipulate, create, and re-create their environments.”¹⁰ Loose material play can also be pulled directly from the surrounding environment, making this relatively low-cost and provide a learning opportunity for children of native flora and fauna. An example of loose material play could include kitchen structures, art stations, or block play areas. In addition to physical functionality, other nature play designs could include other sensory engagement, such as sound emitting or musical play, contributing to overall social and emotional growth.⁹ Play involving the river could also be considered as a development on the ‘River’s Edge.’ As much of the property is within the floodplain, children should be educated on the purposes of the floodplain, while fun and play could take place in designated areas of the community. Children could learn about the history of the Rivanna River and the dynamic qualities and ecology of waterways.

As part of the active recreational area, River’s Edge additionally proposes a trail network throughout the site. Pedestrian walkways will be provided along parking areas, with primitive trail networks providing foot access to dwelling units and surrounding open space. In addition to a minimum of 4,000 square feet of natural play areas, approximately 2,200 (0.4-mile) linear feet of trails is proposed, which will include fitness trail amenities. Fitness trails provide equipment that can build strength, flexibility, and cardio health. As River’s Edge intends to limit disturbance where possible, linear recreational equipment adjacent to the trails is the most appropriate implementation, rather than one specific area dedicated to a tennis court. Typically, a ¼-mile to 1-mile trail network contains about 10 different stations¹⁰, however Pen Park in the City of Charlottesville includes a ½-mile fitness trail with 20 stations. Further details will be negotiated at site plan for an appropriate number of stations.

⁹ “Play.” *Learning By Nature*, Learning By Nature, 16 Jan. 2019, learningbynature.org/.

¹⁰ “10 Station Fit-Trail.” *Fit-Trail*, 2011, www.fittrail.com/10station.html.