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VIA EMAIL

April 30, 2025

Mr. Brent Hackworth
The Highgates Group
119 Glen Park Avenue
Toronto, Ontario, Canada
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**Subject: Environmental Assessment Summary Report
The Reserves at Parklands Phase 2
Jefferson County, Kentucky
RES Project No.: 111811**

Dear Mr. Hackworth:

RES Kentucky, LLC (RES) is pleased to provide The Highgates Group (Highgates) with this Environmental Assessment (EA) Summary Report in support of The Reserves at Parklands Phase 2 residential development project in Jefferson County, Kentucky. The 107.05-acre Phase 2 project site has an address of 8000 Broad Run Road and is located on the west side of Broad Run Road, approximately 0.8 mile south of the Broad Run Road and Seatonville Road intersection. Due to the project being located in the Floyds Fork watershed, an EA Summary Report is required to identify any recognized environmental concerns on the Floyds Fork waterway as a result of the proposed development. This report describes potential environmental impacts resulting from the proposed development and discusses avoidance, minimization, and mitigation measures for these recognized environmental concerns.

BACKGROUND

The Reserves at Parklands Phase 2 residential development consists of 107.05 acres with 356 single family homes, open space, and multiple detention basins and/or water quality control structures (Appendix). Of the 107.05 acres, 45% of the site will remain undeveloped, wooded area (48.19 acres +/-). The site drains east through multiple ephemeral and intermittent streams that connect offsite to Floyds Fork. Floyds Fork is located 525 feet east of the eastern project boundary, on the east side of Broad Run Road. The Floyds Fork watershed in Kentucky is approximately 284 square miles. The watershed includes the 62-mile Floyds Fork creek, which flows from Henry County through Jefferson County and into the Salt River. Floyds Fork at this location has a total drainage area of 190 square miles. The Phase 2 development site has a drainage area of approximately 60 acres which represents less than one percent of the total watershed.

ANALYSIS OF ALTERNATIVES

This EA Summary Report reviewed the potential environmental consequences of the proposed project including an analysis of alternatives that meet the purpose and need of the project. RES reviewed reasonable alternatives including those that are "practical or feasible from the technical and economic standpoint and using common sense." The design for the project has gone through multiple iterations to

limit and minimize impacts to environmental features. For the purpose of this report, a No Action Alternative, Action Alternative 1, and Proposed Action Alternative were assessed and discussed below.

No Action Alternative: The No Action Alternative provides a baseline for comparison in determining potential environmental effects of the Proposed Action. Habitat on site consists mostly of cropped field with medium-age woods in the eastern portion of the site. The site contains a variety of ephemeral and intermittent headwater streams. Currently, during heavy rainfall events and wetter times of the year, the site experiences heavy runoff of stormwater down the steep slopes, which has resulted in some erosion of the headwater streams and sediment entering streams. Under the No Action Alternative, no residential development will occur on the 8000 Broad Run property. Therefore, 352 homes will not be available in the housing market for this area. Additionally, Highgates has a large economic investment in the project in land costs, design, and permitting, which will be a loss if the No Action Alternative was selected. Therefore, this alternative is not a feasible option for the project and was eliminated.

Action Alternative 1: The Action Alternative 1 proposes the same number of housing lots and design as the Proposed Action Alternative (Appendix), but the stormwater system design includes having to pipe the stormwater down the less steep 10% & 20% slopes to avoid the steeper 30% slopes because it will be nearly impossible to trench the stormwater pipeline in on 30% slopes. Along with the pipeline installation, roughly between a 30 to 40 foot wide vegetated area parallel with the pipelines will be cleared to operate the construction machinery safely. The existing bluffs that overlook Floyds Fork will be impacted by the piping and clearing. This will result in more forested vegetation clearing than the Proposed Action Alternative to perform the work. Much of the forested vegetation cleared is considered habitat for the federally-endangered Indiana bat, which may detrimentally affect this species.

Clearing vegetation on steep slopes will likely result in high rates of erosion during the construction phase so a large sediment basin will be needed at the bottom of the clearing limits, resulting in an in-line stream detention basin and stream impacts. This will result in more stream impacts than the Proposed Action Alternative to perform the work. Typically, during construction, these construction areas can't be dressed or stabilized with any netting or grass seed until after the work is finished. Based on the stormwater design plan, the location for the sediment basin will need to be located at the bottom of the project area, at the exiting stormwater confluence above the Broad Run Road existing box culvert. However, the basin will need to at least double in size and result in raising the height of the dam over 25 feet and clearing any trees within the impoundment area. The dam will be reclassified as a High Hazard Dam and it will then need to be permitted through Dam Safety administered by Kentucky Division of Water (KDOW) and monitored for Public Safety.

Another detrimental impact of extensive piping of 45 acres of stormwater from the upper levels of the property, is potentially limiting any recharging of ground water and removing stream flow from headwater channels because all of the natural drainage ways will now have stormwater diverted to a piped system. As described, any construction activities within the sloped areas will be environmentally destructive as well as visually obtrusive. The Action Alternative 1 will have significantly more impacts to streams and forested habitat, be more likely to cause severe erosion issues on steep slopes which would negatively affect water quality, result in higher construction costs to build, and require more extensive permitting than the Proposed Action Alternative. Therefore, this alternative is not a feasible option for the project and was eliminated.

Proposed Action Alternative: The Proposed Action Alternative (Appendix), is the preferred design alternative because it minimizes impacts to streams, tree clearing, sediment erosion, flow velocity and rate, and steep slopes while still allowing the site plan to be economically feasible and practicable. The Proposed Action Alternative will utilize controlled surface runoff to the natural drainage channels, is not proposing any piping down the existing bluffs that overlook Floyds Fork, and will not have any in-line stream detention basin. The detention basins will be proposed on the upper levels/headwaters of the property and the pre-to-post stormwater runoff rates will be matched per the MSD design manual. The rates will help minimize the effects of the 10, 25, and 100-year storm events to the annual and more reduced 2-year storm runoff rates. These basins will also have the required stormwater quality treatments to remove the first flush pollutants and clean the water before reentering the environment, and will allow for some groundwater recharge. Stormwater will outlet from the detention basins to the existing stormwater drainage ways currently handling the 45 acres of

farmland with only a thin grass strip to filter any pollutants or sediments. The 30% slope portions of the natural drainage ways are exposed rock channels which naturally help reduce stormwater velocities and with the new regulated flows, the natural drainage ways should function as they do currently with no catastrophic stormwater events, significant stream impacts, and no addition tree clearing on the slopes resulting in increased impacts to Indiana bat habitat. Based on these reasons, the Proposed Action Alternative is the least economically and environmentally damaging alternative for the project.

ENVIRONMENTAL CONCERNS AND POTENTIAL IMPACTS

Recognized environmental concerns to the Floyds Fork watershed were evaluated and could include erosion and sediment runoff, impacts to wetland and stream tributaries, impacts to threatened/endangered (T/E) species, and impacts to water flow rate and flow velocity.

Sediment and Erosion: The proposed project is located in Jefferson County within the Outer Bluegrass physiographic region. The often rolling or hilly Outer Bluegrass physiographic region typically contains sinkholes, springs, and entrenched rivers, as well as intermittent and perennial streams. The only glacial deposits found in Kentucky occur in the northern portions of the Outer Bluegrass region from Louisville to Covington. The Outer Bluegrass region is mostly underlain by Upper Ordovician limestone and shale. Natural soil fertility is moderately high and, as a result, there is widespread pastureland and cropland that is dissected by wooded areas. Open savanna woodlands were found on most uplands around the time of settlement with less fertile, acidic soils featuring white oak stands and barren openings. Areas of glacial drift supported distinct vegetation, such as woods composed of maple, ash, and oak. Upland streams have moderate to high gradients whose substrates are composed of cobble, boulder, and/or bedrock.

The primary land use in the Outer Bluegrass Region is agriculture, with residential, commercial, and industrial development concentrated in urban areas. Agricultural use includes both pasture for livestock and row crops, including hay, corn, soybeans, tobacco, and wheat. Wooded areas are interspersed throughout these agricultural areas and are typically limited to stream valleys and other drainages, small woodlots, and fencerows. Prior to European settlement, most upland areas were covered with open savanna woodlands.

The U.S. Department of Agriculture (USDA) Soil Survey Geographic Database for Jefferson County, Kentucky maps the project area as being underlain predominately by Beasley silt loam, Crider silt loam, and Faywood-Shrouds-Beasley complex. Faywood-Shrouds-Beasley complex, present in the eastern portion of the site, is listed as having 25 to 50 percent slopes, while the remaining soils have 6 to 12 percent slopes.

No Action Alternative: Under the No Action Alternative, no impacts to sediment or erosion will occur as a result of construction related activities. However, currently, during heavy rainfall events and wetter times of the year, the site experiences heavy runoff of stormwater down the steep slopes, which has resulted in some erosion of the headwater streams and sediment entering streams.

Action Alternative 1: Under Action Alternative 1, soil disruption will likely be significant due to the piping of existing drainage ways resulting in significant tree clearing and exposed soil during construction. Along with the piped drainage ways, roughly between a 30 to 40 foot wide vegetated area parallel with the pipe will be cleared to operate the machinery safely. This will result in significant vegetation clearing and difficulty of preventing high rates of erosion during the construction phase. Typically, during construction, these construction areas can't be dressed or stabilized with any netting or grass seed until after the work is finished. These cleared areas for the piped drainage ways will increase the sediment and erosion into downstream waters, specifically Floyds Fork. A large sediment basin will need to be constructed above the Broad Run Road existing box culvert; however, this large basin will increase the sediment to on-site streams immediately above the basin dam, likely resulting in unwarranted fill to these streams through sediment deposition. This alternative will result in higher sediment and erosion impacts.

Proposed Action Alternative: Under the Proposed Action Alternative, soil disruption will be minimized to the maximum extent possible. Soil Erosion Prevention and Sediment Controls (EPSC) will be addressed through the development and implementation of a Construction Plan and Storm Water Pollution Prevention Plan (SWPPP), which will be submitted to the appropriate local and state personnel for review and approval. The proposed project will result in grading of lots, roads, and multiple basins at the top of the slopes, behind the lots. Temporary sediment basins will be utilized during construction and five or more detention basins will be constructed at the top of slopes. These impacts will be localized to the project area through the use of best management practices (BMPs). A remaining wooded buffer of 400 to 1,300 feet will remain in the eastern portion of the site and along the western bank of Floyds Fork, resulting in minimal exposed soils along the steep slopes and adjacent to streams.

Prior to any construction activities, perimeter protection such as silt fence will be installed along the perimeter of the area of disturbance for the construction of the basins. Perimeter protection will remain in place throughout construction. If construction activity temporarily ceases, the site will be protected with temporary seed and straw as soon as practical. Any soil stockpiles will be kept away from the area of the stream and will be contained through the installation of silt fence. Upon completion of the grading operations and other roadway and utility infrastructure, permanent seeding and mulch will be installed. Once final stabilization has been established, BMP's will be removed. As long as proper BMPs and EPSC measures are utilized during grading and construction, it is anticipated minimal sediment runoff into jurisdictional streams or wetlands in the vicinity of these slopes.

Streams and Wetlands: RES wetland scientists conducted field visits on October 26 and 28, 2020, to delineate jurisdictional waters of the U.S. within the 192 acre project area (Phases 1 and 2). During the field investigation, wetland areas were identified through documentation of the presence/absence of hydric soils, wetland hydrology and hydrophytic vegetation per the guidelines of the *Regional Supplement to the Corps of Engineers Wetland Delineation manual: Eastern Mountains and Piedmont Region – Version 2.0* (April 2012). Jurisdictional waters (streams, lakes and ponds) were identified based on the presence of an ordinary high-water mark (OHWM), defined bed and bank features, and flow regime. Stream quality was evaluated using the Rapid Bioassessment Protocol developed by the EPA (Barbour 1999). Based on the delineation, Phase 2 contains four intermittent streams totaling 2,070 linear feet (0.261 acre), 17 ephemeral streams totaling 3,875 linear feet (0.226 acre), and one wetland measuring 0.006 acre. All of these features are tributaries to Floyds Fork.

No Action Alternative: Under the No Action Alternative, no impacts to streams or wetlands will occur as a result of construction related activities. However, currently, during heavy rainfall events and wetter times of the year, the site experiences heavy runoff of stormwater down the steep slopes, which has resulted in some erosion of the headwater streams and sediment entering streams.

Action Alternative 1: Under this alternative, stream impacts will likely be significantly larger due to the piping of drainage ways into the stormwater management system adjacent to or in stream channels and a downstream detention basin near Broad Run Road. The majority of the intermittent and ephemeral streams will be impacted by the stormwater management system and downstream stormwater basin through loss of stream channels and aquatic habitat, tree clearing, construction equipment, and an in-line stream detention basin. This alternative will either require a Section 404 Nationwide Permit (NWP) or Section 404 Individual Permit (IP) from the U.S. Army Corps of Engineers (USACE) and a Section 401 Individual Water Quality Certification (WQC) from the KDOW. This will also result in stream mitigation being necessary which can only be provided from purchasing from an approved stream mitigation bank within the Service Area or from the Stream and Wetland Restoration Program as administered by the Kentucky Department of Fish and Wildlife Resources (KDFWR). Due to the location of these mitigation sites, the mitigated streams will not be in the Floyds Fork watershed and, therefore, the impacts will not be immediately replaced in the watershed. These headwaters streams are important for water quality to downstream waters and impacting these features this significantly, could impact the water quality of Floyds Fork. Additionally, significant tree clearing along the drainages and at the downstream end for the sediment basin will impact the riparian corridor of on-site and immediately off-site streams, including Floyds Fork.

Another negative effect of piping the 45 acres of stormwater from the upper levels of the property is potentially limiting any recharging of ground water and removing stream flow from headwater channels because all the natural drainage ways will now have its stormwater diverted to a piped system. Ultimately, this alternative will result in a larger amount of detrimental impacts to on-site streams, water quality and forested habitat.

Proposed Action Alternative: Based on a review of the development plan for Phase 2, the project will avoid impacts to approximately 94% of intermittent stream and 91% of ephemeral stream. No wetlands will be impacted for the development. Only the upper headwater portions of these streams will be impacted with the remaining portions being avoided by fill. Any impacts to streams will be coordinated through a NWP with the USACE and likely will not require an Individual WQC from KDOW due to the minimal impacts.

The project will not contribute to development within the FEMA 100-year floodplain and will not affect the functions or values of the FEMA 100-year floodplain within or downstream of the project area. A remaining wooded buffer of 400 to 1,300 feet will remain along the western bank of Floyds Fork. Indirect impacts to downstream floodplains will be prevented using appropriate EPSC measures during construction including silt fences to prevent sediment from exiting the construction site.

Indirect impacts to groundwater through erosion and sedimentation will be controlled and minimized through the implementation of the SWPPP, which will be submitted to the appropriate agencies for review and approval. The SWPPP will propose the use of appropriate BMPs to prevent erosion and control sediment.

Threatened/Endangered Species: The field assessment completed by RES was also used to identify the presence of suitable habitat for T/E species known to occur in Jefferson County in the project vicinity, including the Indiana bat (*Myotis sodalis*), gray bat (*Myotis grisescens*), and Kentucky glade cress (*Leavenworthia exigua laciniata*). There is no critical habitat for T/E species on the project site. Potential impacts to T/E species must be addressed in any federal permitting process.

A Kentucky glade cress survey during the flowering window was completed by RES on April 5, 2021 and April 2, 2025. No Kentucky glade cress individuals were identified on the site during the 2021 and 2025 survey. A Kentucky glade cress survey report has been submitted to Highgates. The major T/E species issue of concern at this site is suitable summer roosting habitat for the Indiana bat. Based on maps released by the USFWS, the project is located in outer-tier "Known Summer 1" habitat zone for the Indiana bat. The Phase 2 site contains approximately 75 acres of suitable summer roosting Indiana bat habitat.

No Action Alternative: Under the No Action Alternative, no impacts to federally listed species will occur as a result of construction related activities.

Action Alternative 1: Under Action Alternative 1, approximately 20 acres of forested habitat will be avoided, and 55 acres will be cleared for the proposed development. Tree clearing impacts will be required for the piping of drainage ways into the stormwater management system and a downstream detention basin near Broad Run Road. Several 30 to 40 foot wide vegetated areas parallel with the stormwater pipelines will need to be cleared to operate the construction machinery safely. Additionally, the required large basin above the Broad Run Road will need to be constructed and the basin dam and basin impoundment area will need to be cleared of trees. Much of the forested habitat that will be cleared for this alternative is considered suitable habitat for the federally endangered Indiana bat and impacts to this habitat will require consultation with the U.S. Fish and Wildlife Service (USFWS). Consultation generally results in a combination of seasonal tree clearing restrictions, presence/absence surveys, and/or mitigation through payments into the Imperiled Bat Conservation Fund (IBCF). Direct impacts to the Indiana bat can be avoided by limiting clearing to the unoccupied season. Indirect impacts to the Indiana bat through tree clearing of summer roosting habitat can be mitigated by the payment to the IBCF. Additionally, the habitat closest to Floyds Fork will be cleared for the basin and the wooded riparian buffer along Floyds Fork and all streams on the site will be reduced. The potential for severe erosion and reduced water quality to downstream waters and Floyds Fork may

also have an impact on federally listed mussel species. Based on these reasons, this alternative will result in larger negative impacts to tree clearing and potentially several listed federal species.

Proposed Action Alternative: Under the Proposed Action Alternative, approximately 35 acres will be avoided, and 40 acres will be cleared for the development. Impacts to this habitat will require consultation with the USFWS. Consultation generally results in a combination of seasonal tree clearing restrictions, presence/absence surveys, and/or mitigation through payments into the IBCF. Direct impacts to the Indiana bat can be avoided by limiting clearing to the unoccupied season. Indirect impacts to the Indiana bat through tree clearing of summer roosting habitat can be mitigated by the payment to the IBCF. Additionally, the habitat closest to Floyds Fork will be avoided and the larger streams that will be used for foraging will be avoided. A remaining wooded buffer of 400 to 1,300 feet will remain along the western bank of Floyds Fork.

Water Flow Rate and Flow Velocity: Water flow rate and velocity are related, with flow rate being the amount of water passing a point per unit of time, and velocity being how fast the water is moving. Flow rate is directly proportional to velocity when the cross-sectional area of the flow is constant. The site should be designed to match pre-to-post stormwater runoff rates per the MSD design manual and minimize the effects of the 10, 25, and 100-year storm event.

No Action Alternative: Under the No Action Alternative, no development impacts to water flow rate or flow velocity will occur as a result of construction related activities. However, currently, during heavy rainfall events and wetter times of the year, the site experiences heavy runoff of stormwater down the steep slopes, which has resulted in some erosion of the headwater streams and sediment entering streams.

Action Alternative 1: Under Action Alternative 1, the stormwater will be piped down the less steep 10% & 20% slopes to avoid the steeper 30% slopes because it will be nearly impossible to trench pipes in on 30% slopes. The stormwater management plan will require a large sediment basin at the bottom of the project area, above the Broad Run Road existing box culvert. This will result in an impoundment of stream in the area and removal of numerous trees which help decrease flow velocity. Additionally, due to the size of this basin and dam, significant monitoring and maintenance will be required to keep the basin functioning properly. Additionally, piping of 45 acres of stormwater from the upper levels of the property, will likely limit any recharging of ground water and removing stream flow from headwater channels because all the natural drainage ways will now have stormwater flows diverted to a piped system.

Proposed Action Alternative: Under the Proposed Action Alternative, the proposed development will include water quality structures and detention basins to mitigate the peak flow rate during 10-year and 100-year return interval storm events from the site to be at or below the pre-developed condition. Additionally, velocity controls will be constructed at the drainage outlets to protect the existing drainage channels from erosion. To the maximum extent practical, flow rate and flow velocity will be managed through the detention basins to minimize the effect increased stormwater has on flooding and stability of Floyds Fork during large storm events. Floyds Fork at this location has a total drainage area of 190 square miles. The Phase 2 development site has a drainage area of approximately 60 acres which represents less than one percent of the total watershed. The 30% slope portions of the natural drainage ways are exposed rock channels which naturally help reduce stormwater velocities and with the new regulated flows the natural drainage ways should function as they do currently with no catastrophic stormwater events, significant stream impacts, and no addition tree clearing on the slopes.

All components of the stormwater system (including piping and the basins) will be part of a regular maintenance program beginning after installation and extending in perpetuity. The responsible party for the maintenance of the basin will be the developer/HOA with oversight by MSD. The maintenance agreement will consist of as needed inspections/repair, quarterly inspections, and annual inspections. As needed inspections/repair consist of inspecting the basins for trash, erosion and debris, repairing inlets, outlets, or other structural features as needed, and inspecting the system after major rain events to ensure it is draining properly. Quarterly inspections include inspecting the system for blockage or build up and

performing cleanout if necessary. Annual inspections include inspecting the inlets, outlets, or other structural features and repairing as needed.

MITIGATION AND MINIMIZATION MEASURES

All local, state, and federal rules and regulations pertaining to the proposed project will be followed. All necessary permits and consultations prior to construction of the proposed project will occur.

The following mitigation measures will be implemented during construction of the proposed project:

1. Obtain and comply with all required local, state and federal permits and approvals.
2. Develop and implement a SWPPP, which includes an EPSC plan, outlining the BMPs to be installed prior to commencement of construction activities.
3. Construct temporary sediment basins, permanent detention basins, and permanent water quality structures and properly maintain these features during and after construction.
4. Following construction, the basins and other disturbed areas will be seeded with an appropriate species of turf grass.
5. Minimize impacts to avoid stream mitigation.
6. Tree clearing will take place in the unoccupied season and a per acre mitigation fee for tree clearing impacts is required prior to any tree clearing occurring, along with USFWS concurrence.

SUMMARY

Based on the review of recognized environmental concerns, the concerns will be avoided, minimized, or mitigated. EPSC measures, BMPs, sediment basins, water quality units, and detention basins will all minimize sediment runoff, erosion, and water flow rate and flow velocity impacts. The majority of on-site streams will be avoided by the development and any impacts will be permitted appropriately. The only T/E issue of concern is clearing of Indiana bat habitat which will be mitigated through an IBCF payment and approximately 47% of habitat will be avoided. Based on the analysis of project alternatives and the current design for the Proposed Action Alternative, the project has been designed to avoid and minimize impacts to on-site tributaries of Floyds Fork as well as Floyds Fork itself.

Please contact Kaitlin Ilnick at (502) 625-3009 with any questions regarding this report or the overall project.

Sincerely,

Kaitlin Ilnick

Kaitlin J. Ilnick
Advisory Services Lead

Kiersten R. Fuchs

Kiersten R. Fuchs (Apr 30, 2025 13:57 EDT)

Kiersten R. Fuchs
Senior Project Manager

APPENDIX

SITE PLAN

GENERAL NOTES:

- DOMESTIC WATER SUPPLY: SUBJECT SITE CAN BE SERVED BY THE LOUISVILLE WATER COMPANY. THE NECESSARY WATER SYSTEM IMPROVEMENTS REQUIRED TO SERVICE THE DEVELOPMENT SHALL BE AT THE OWNER/DEVELOPER'S EXPENSE.
- TREE PRESERVATION: A TREE PRESERVATION PLAN SHALL BE PROVIDED TO THE PLANNING COMMISSION'S STAFF LANDSCAPE ARCHITECT FOR APPROVAL PRIOR TO BEGINNING ANY CONSTRUCTION ACTIVITIES ON THE SITE.
- PROTECTION OF TREES TO BE PRESERVED: CONSTRUCTION FENCING SHALL BE ERECTED PRIOR TO ANY GRADING OR CONSTRUCTION ACTIVITIES—PREVENTING COMPACTION OF ROOT SYSTEMS OF TREES TO BE PRESERVED. THE FENCING SHALL ENCLOSE THE AREA BENEATH THE DRIP LINE OF THE TREE CANOPY AND SHALL REMAIN IN PLACE UNTIL ALL CONSTRUCTION IS COMPLETE. NO PARKING, MATERIAL STORAGE OR CONSTRUCTION ACTIVITIES SHALL BE PERMITTED WITHIN THE FENCED AREA.
- A LANDSCAPE AND TREE CANOPY PLAN PER CHAPTER 10 OF THE LDC SHALL BE PROVIDED AS REQUIRED PRIOR TO ISSUANCE OF BUILDING PERMIT.
- THE DEVELOPMENT LIES IN THE FERN CREEK FIRE DISTRICT.
- IF PROPOSED, SIGNATURE ENTRANCE WALLS SHALL BE SUBMITTED TO AND APPROVED BY THE PLANNING STAFF PRIOR TO CONSTRUCTION PLAN APPROVAL AND THEY SHALL MEET THE REQUIREMENTS OF CHAPTER 3.1.3.1 OF THE LDC. SPECIFICALLY THE REGULATIONS OUTLINED IN THE FLOYDS FORK ZONING OVERLAY DISTRICT.
- ALL LIGHTING SHALL COMPLY WITH CHAPTER 3 PART 1 SECTION 3.1.3.1 OF THE LDC. SPECIFICALLY THE REGULATIONS OUTLINED IN THE FLOYDS FORK ZONING OVERLAY DISTRICT.
- MITIGATION MEASURES FOR DUST CONTROL SHALL BE IN PLACE DURING CONSTRUCTION TO PREVENT FUGITIVE EMISSIONS REACHING EXISTING ROADS AND NEIGHBORHOODS.
- ALL EXISTING STRUCTURES AND EXISTING ENTRANCES SHALL BE REMOVED, EXCEPT AS NOTED ON THE PLAN.
- IN ACCORDANCE WITH CHAPTER 4.9 OF THE LDC, A KARST SURVEY WAS PERFORMED BY EGS ON 12/14/21 AND MULTIPLE KARST FEATURES WERE FOUND. A REVIEW OF PUBLISHED GEOLOGIC INFORMATION FROM THE KY GEOLOGICAL SURVEY CONTAINED NO INDICATION OF SHIMKLES ON THE SUBJECT PROPERTY.
- ALL SIDEWALKS, SHALL CONFORM TO ADA AND METRO PUBLIC WORKS STANDARDS, INCLUDING, BUT NOT LIMITED TO, THOSE THAT CROSS DRIVEWAYS AND CROSSWALKS IN PUBLIC STREETS.
- SIGNATURE ENTRANCES LOCATED ALONG DESIGNATED SCENIC CORRIDORS SHALL NOT EXCEED 6' IN HEIGHT OR 50' IN TOTAL LENGTH.

MSD NOTES:

- CONSTRUCTION PLANS & DOCUMENTS SHALL COMPLY WITH LOUISVILLE AND JEFFERSON COUNTY METROPOLITAN SEWER DISTRICT'S DESIGN MANUAL AND STANDARD SPECIFICATIONS.
- WASTEWATER: SANITARY SEWER BY LATERAL EXTENSION TO THE CEDAR CREEK TREATMENT PLANT. SUBJECT TO FEES. SANITARY SEWER CAPACITY TO BE APPROVED BY MSD.
- PROPOSED LATERAL EXTENSION SHALL BE DESIGNED AND CONSTRUCTED TO SERVE THE RESIDUAL RR SECTION.
- DRAINAGE (STORMWATER DETENTION): DETENTION TO BE PROVIDED ON SITE AS DEPICTED ON THE PLAN. POST-DEVELOPMENT PEAK FLOWS WILL NOT EXCEED PRE-DEVELOPED PEAK FLOWS FROM DEVELOPMENT FOR THE 2, 10, 25, AND 100 YEAR STORMS OR TO DOWNSTREAM CAPACITY, WHICH IS MORE RESTRICTIVE. DRAINAGE PATTERN (DEPICTED BY FLOW ARROWS) IS FOR THE CONCEPT PURPOSES ONLY. FINAL CONFIGURATION AND SIZE OF DRAINAGE PIPES AND CHANNELS SHALL BE DETERMINED DURING THE CONSTRUCTION PLAN DESIGN PROCESS. DRAINAGE FACILITIES SHALL CONFORM TO MSD REQUIREMENTS. IF DOWNSTREAM CAPACITY CAN BE VERIFIED AT THE TIME OF DETAILED CONSTRUCTION PLANS A REGIONAL FACILITY FEE MAY BE PAID IN LIEU OF DETENTION BEING PROVIDED.
- EROSION AND SILT CONTROL: A SOIL AND SEDIMENTATION CONTROL PLAN SHALL BE DEVELOPED AND IMPLEMENTED IN ACCORDANCE WITH MSD AND THE USDA NATURAL RESOURCES CONSERVATION SERVICE RECOMMENDATIONS.
- NO PORTION OF THE SUBJECT PROPERTY LIES WITHIN A FLOOD HAZARD AREA PER FEMA'S FIRM MAPPING (211100088E & 211100115E).
- THE FINAL DESIGN OF THIS PROJECT MUST MEET ALL MS4 WATER QUALITY REGULATIONS ESTABLISHED BY MSD. SITE LAYOUT MAY CHANGE AT DESIGN PHASE DUE TO PROPER SIZING OF GREEN BEST MANAGEMENT PRACTICES.
- MSD DRAINAGE BOND REQUIRED PRIOR TO CONSTRUCTION PLAN APPROVAL.
- ALL RETAIL SHOPS MUST HAVE INDIVIDUAL CONNECTIONS PER MSD'S FATS, OILS, AND GREASE POLICY.

PUBLIC WORKS AND KTC NOTES:

- NO LANDSCAPING AND COMMERCIAL SIGNS SHALL BE PERMITTED IN STATE AND METRO WORKS RIGHT-OF-WAY.
- RIGHT-OF-WAY DEDICATION BY DEED OR MINOR PLAT MUST BE RECORDED PRIOR TO SITE CONSTRUCTION APPROVAL BY PUBLIC WORKS OR WITH ASSOCIATED RECORD PLAT AS REQUIRED BY METRO PUBLIC WORKS.
- COMPATIBLE UTILITY LINES (ELECTRIC, PHONE, CABLE) SHALL BE PLACED IN A COMMON TRENCH UNLESS OTHERWISE REQUIRED BY APPROPRIATE AGENCIES.
- STREET TREES SHALL BE PLANTED IN A MANNER THAT DOES NOT AFFECT PUBLIC SAFETY AND MAINTAINS PROPER SITE DISTANCE. FINAL LOCATION WILL BE DETERMINED DURING CONSTRUCTION APPROVAL PROCESS.
- AN ENCROACHMENT PERMIT AND BOND MAY BE REQUIRED BY METRO PUBLIC WORKS FOR ROADWAY REPAIRS ON ALL SURROUNDING ACCESS ROADS TO THE SITE DUE TO DAMAGES CAUSED BY CONSTRUCTION TRAFFIC ACTIVITIES.
- THE DEVELOPER IS RESPONSIBLE FOR ANY UTILITY RELOCATION ON THE PROPERTY.
- TREES AND SHRUBBERY SHALL BE TRIMMED OR REMOVED TO PROVIDE SITE DISTANCE AS REQUIRED PER METRO PUBLIC WORKS STANDARDS.
- ALL SIDEWALK RAMP SHALL CONFORM TO A.D.A. STANDARD SPECIFICATION, THE "SPECIAL NOTE FOR DETECTABLE WARNING FOR SIDEWALK RAMP" PER KTC STANDARD DRAWING FOR SIDEWALKS AND PER "KENTUCKY STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION", LATEST EDITION.
- THE PORTION OF SIDEWALK REQUIRED PAST STREET "B" ALONG BROAD RUN ROAD SHALL BE FULFILLED THROUGH FEE-IN-LIEU PENDING PUBLIC WORKS APPROVAL.

L1	N 85°04'50" W	34.08'
L2	N 84°27'31" W	183.78'
L3	N 09°29'01" W	155.08'
L4	N 09°08'21" W	171.65'
L5	N 21°56'55" W	275.58'
L6	N 08°22'52" W	215.37'
L7	N 18°03'45" E	63.67'
L8	N 03°49'30" E	72.38'
L9	S 19°30'07" W	42.68'
L10	N 80°28'30" W	20.00'
L11	S 03°01'18" W	56.49'
L12	S 87°40'01" E	20.00'
L13	S 11°42'51" E	44.91'
L14	N 02°36'50" E	111.41'
L15	N 02°43'12" E	211.32'

C1	N 47°07'06" W	56.17'	46.00'
C2	N 08°42'21" W	115.43'	5120.98'
C3	N 18°08'14" W	94.61'	371.71'
C4	N 17°47'55" W	256.75'	1110.88'
C5	N 08°05'31" W	79.88'	516.48'
C6	N 08°14'54" E	151.73'	385.42'
C7	N 06°35'41" E	154.58'	460.91'
C8	N 01°57'02" E	119.63'	696.73'
C9	N 02°15'30" E	165.34'	727.20'
C10	N 09°55'45" W	173.65'	1144.67'
C11	N 02°53'49" E	225.00'	2157.94'
C12	N 04°32'51" E	229.22'	2957.36'

SITE DATA:

FORM DISTRICT: NPD
EXISTING ZONING: RA, RR
PROPOSED ZONING: VACANT
EXISTING LAND USE: SINGLE FAMILY
PROPOSED LAND USE: VACANT
GROSS LAND AREA: 107,054 AC.
NET LAND AREA: 92,302 AC.
BUILDABLE LOTS: 352
NON-BUILDABLE LOTS: 12
GROSS DENSITY: 3.29 D.U./AC.
NET DENSITY: 3.81 D.U./AC.
OPEN SPACE REQUIRED: 634,886± S.F. (14%)
TOTAL OPEN SPACE PROVIDED: 2,109,284± S.F. (450%)*
*OPEN SPACE LOTS LESS THAN 6,000 S.F. ARE NOT INCLUDED IN TOTAL

TREE CANOPY DATA:

GROSS SITE AREA: 4,663,098± S.F.
LAND USE: SINGLE FAMILY
EXISTING TREE CANOPY: 3,103,128± S.F. (66%)
EXISTING TREE CANOPY TO BE PRESERVED: 1,497,703± S.F. (32%)
TOTAL TREE CANOPY REQUIRED: 2,331,549± S.F. (50%)

*TREE CANOPY DEPICTED ON PLAN PER MSD LOGIC MAPPING, AERIAL PHOTO OR FIELD SURVEY. TREE CANOPY CALCULATIONS BASED UPON TREE AREAS SHOWN.

DIMENSIONAL STANDARDS

MINIMUM LOT SIZE: 4,800± S.F.
MINIMUM LOT WIDTH: 40'
FRONT YARD & STREET SIDE YARD: 15' (25' WITH FRONT FACING GARAGES)
SIDE YARD: 5'
REAR YARD: 25'

DETENTION CALCULATIONS

2.9/12 ((0.50 X 120.79) - (0.23 X 107.50 AC)) = 8.62 AC-FT
CALCULATION REFLECTS FLOW DIVERSIONS NEEDED TO DECREASE FLOW TO THE WEST BETWEEN THIS DEVELOPMENT AND THE PREVIOUSLY APPROVED DEVELOPMENT PLAN (22-MSUB-0001)

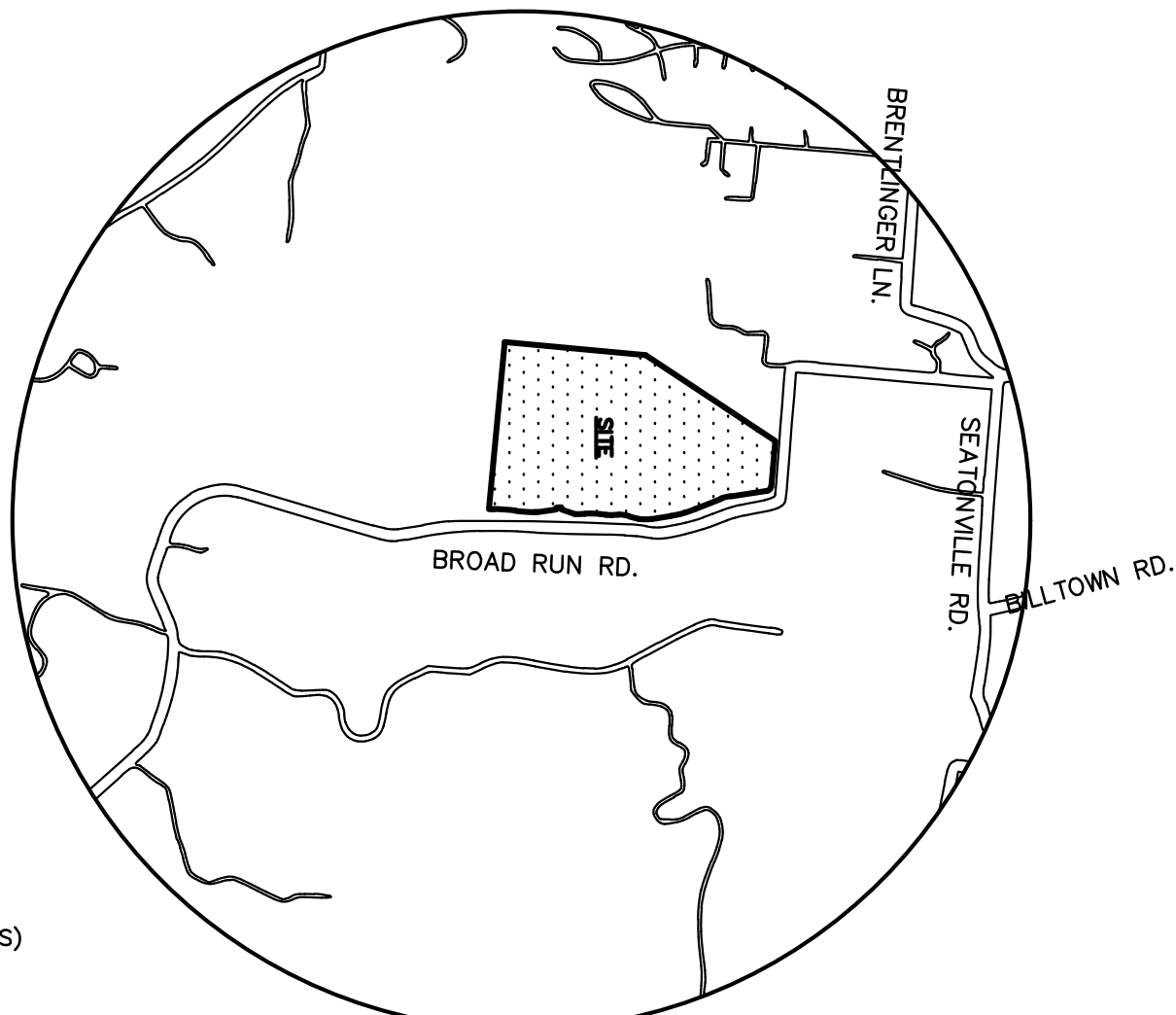
Basin #1=34,680± S.F.
Basin #2=25,030± S.F.
Basin #3=5,247± S.F.
Basin #4=23,497± S.F.
Basin #5=7,566± S.F.

IMPERVIOUS DATA:

GROSS SITE AREA: 4,663,098± S.F.
EXISTING IMPERVIOUS AREA: 0± S.F.
PROPOSED IMPERVIOUS AREA: 1,310,929± S.F. (28%)

WAIVER REQUEST:

A WAIVER OF 31.3% OF THE LDC IS REQUESTED TO ALLOW THE INSTALLATION OF UTILITIES ON AREAS WITH SLOPES GREATER THAN 30%.



LOCATION MAP

NO SCALE

LEGEND

- EXISTING CONTOUR
- EXISTING TREE MASS
- EXISTING FENCE
- EXISTING UNDERGROUND TELEPHONE
- EXISTING CATCH BASIN & YARD DRAIN W/PIPE
- EXISTING TOP OF BANK
- EXISTING TOE OF SLOPE/DITCH
- PROPOSED TREE MASS
- PROPOSED CATCH BASIN & YARD DRAIN W/PIPE
- PROPOSED DOUBLE CATCH BASIN W/PIPE
- PROPOSED STORM MANHOLE W/PIPE
- PROPOSED HEADWALL W/PIPE
- PROPOSED DITCH/SWALE
- PROPOSED SANITARY MANHOLE W/PIPE
- PROPOSED TREE CANOPY CREDIT AREA
- EXISTING SLOPES 20%-30%
- EXISTING SLOPES 30%-100%
- FLOYDS FORK OVERLAY DISTRICT
- DEFINED KARST AREA
- KARST FEATURE
- LIMITS OF DISTURBANCE



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HIGHGATES
MANAGEMENT
7301 MONEY CIRCLE
LOUISVILLE, KY 40219

OWNER
WALTON INVESTMENTS, LLC
2705 AVENUE OF THE WOODS
LOUISVILLE, KY 40241

CHANGE OF ZONING & MAJOR SUBDIVISION PLAN
THE RESERVES AT PARKLANDS
SUBDIVISION PHASE 2
8000 BROAD RUN ROAD, LOUISVILLE, KY 40291
DEED BOOK 1731, PAGE 177

Vertical Scale:	N/A
Horizontal Scale:	1"=100'
Date:	8/05/24
Job Number:	3690-300
Sheet	1

CASE #24-ZONE-0112 & 24-MSUB-0013
RELATED CASE #24-ZONEPA-0094
22-MSUB-0001
MSD W.M. #12203