

**Environmental Assessment  
Determinations and Compliance Findings  
for HUD-assisted Projects  
24 CFR Part 58**

**Project Information**

**Project Name:** Chestnut-Ridge-Knott-County-KY-Team-KY-CDBGDR-HOME

**HEROS Number:** 900000010335454

**Responsible Entity (RE):** KENTUCKY HOUSING CORPORATION, 1231 Louisville Rd  
Frankfort KY, 40601

**RE Preparer:** Curtis A. Stauffer

**State / Local Identifier:** KY DLG is the RE

**Certifying Officer:** Dennis Keene

**Grant Recipient (if different than Responsible Entity):** Kentucky Housing Corporation

**Point of Contact:** Winston Miller

**Consultant (if applicable):**

**Point of Contact:**

**Project Location:** Chestnut Ridge Loop, Leburn, KY 41630

**Additional Location Information:**

Geographic Coordinates of centerpoint of subdivision development area: 37.416736,-  
82.917367

**Direct Comments to:** Kentucky Department for Local Government  
Office of Federal Grants, Attn. Jennifer Peters  
100 Airport Road, 3rd Floor  
Frankfort, KY 40601  
Jennifer.peters@ky.gov.

**Description of the Proposed Project [24 CFR 50.12 & 58.32; 40 CFR 1508.25]:**

The Commonwealth of Kentucky, in partnership with Kentucky Housing Corporation (KHC), will build up to 147 single-family detached housing units and up to 20 multi-family units in the new 106-acre Chestnut Ridge subdivision in Knott County, KY (center point coordinates: 37.416736,-82.917367). The site is near the intersection of KY 80 and Chestnut Ridge Loop, County Route 1442, and Bolen Branch. Knott County is a Most Impacted and Distressed (MID) area for CDBG-DR and CDBG-MIT funding. The surface property consists of previously mined lands under Laurel Mountain Resources LLC Permit No. 860-0519 which obtained bond release in 2014 and has no continuing regulatory jurisdiction under the Surface Mining Control & Reclamation Act. This project will create replacement housing following the July 2022 southeastern Kentucky flood disaster. The subdivision will be divided as follows: \*Area 1 (28 acres): 60-65 single-family detached (center point coordinates: 37.415706, -82.921794); \*Area 2 (15 acres): 83-88 single-family detached units and 9 acres of green space (center point coordinates: 37.417358, -82.913770); \*Area 3 (5.5 acres): up to 20 multi-family units (center point coordinates: 37.418775, -82.919199); and \*a 15-acre park between Areas 1 & 2 that will include a playground, picnic pavilion, a paved looped trail, and other outdoor amenities (center point coordinates: 37.416736, -82.917367). KHC will select developers to build the units to be developed for sale or rent. Because developers have not yet been selected for the project, the specific unit count and the financing, design, sizes, and values of the homes are not yet known. The Commonwealth will acquire the property and will grade the site where needed. The Commonwealth and Knott County will extend road, water, and sewer infrastructure into the project. Kentucky Power will design and construct the electric utilities (with the exception of installation of underground conduit). Access to the site will be through existing public roads. Costs for housing unit underground connections to sewer, water, and electric will be considered part of total housing development costs. The Foundation for Appalachian KY will develop a 22-acre, 58-unit subdivision adjacent to the project site using \$15,715,347 in philanthropic funding that will also benefit from the extension of Chestnut Ridge Loop and utility extensions to be completed by the Commonwealth of Kentucky and Knott County. Specific funded activities may include, but not be limited to: acquisition; soft costs such as construction financing fees, permanent financing fees, application and tax credit fees, appraisals, title searches, professional fees, reserves, syndication costs, property surveys, etc.; fees related to title transfer, recording, closing costs, etc.; preparation of plans, specifications and bid documents; new construction; site utilities and amenities; contingency funds; architectural/engineering design fees and inspection; construction inspection; and planning/administrative/developer fees. Construction activities will include resiliency investments, particularly fortified roofing and buried electrical lines. The funding sources to be used for the estimated total development

cost of \$63,120,573 may include: CDBG-DR (up to \$47,254,114) and CDBG-MIT (up to \$2,412,480) from the KY Dept. for Local Government; HOME (\$1.5M), KY Affordable Housing Trust Fund (\$1M), and KY Rural Housing Trust Fund (\$1M) from KHC; EKSAFE Fund (\$8,225,4798); Broadband Equity, Access, and Development Program (\$300,000), and Land and Water Conservation Fund/Recreational Trails Program (\$1,428,500). Funding is being estimated over future funding award cycles in addition to funds already committed and may include CDBG-DR program income. The Commonwealth is invoking section "IV A.3. Interchangeability of disaster funds" of FR-6393 to deploy 2021 CDBR-DR (\$1,000 of total CDBG-DR) for this project in addition to 2022 funds.

**Statement of Purpose and Need for the Proposal [40 CFR 1508.9(b)]:**

From 7/26-8/11/22, southeastern Kentucky was devastated by torrential rains, flooding, landslides, and mudslides. This caused severe damage in 13 counties with Breathitt, Knott, Letcher, and Perry most impacted. Knott County's infrastructure (water, phones, electricity), bridges, and roads were blocked or collapsed under the debris. Deadly flooding washed away entire homes and damaged many beyond repair. According to the HUD DR-4663-KY Housing Impact Assessment most residents in the disaster area lacked insurance coverage, with 61.2% of homeowners and 98.9% of renters without a private insurance policy and just 6.1% of all households with a flood insurance policy (p. 12). Knott County is a Most Impacted and Distressed area for CDBG-DR funding (FR-6393-N-01). Per the HUD DR-4663-KY Housing Impact Per the HUD DR-4663-KY Housing Impact Assessment: 1) FEMA reported 1,898 Knott County post disaster homeowner registrants and 451 renter registrants. (p. 13) 2) FEMA verified \$17,544,182 in real property loss and \$3,041,758 in personal property loss in Knott County (p. 18). 3) American Red Cross completed 1,763 Knott County housing damage assessments with 75 units destroyed, 336 units with major damage, and 123 units with minor damage. (p. 19) 4) HUD estimates that Knott County has 449 homeowner households and 80 renter households with serious housing damage and unmet need. (p.20) 5) Community engagement found "Stakeholders agree there is lack of consistent regulations and/or lack of compliance and building code enforcement. Current standards do not include building housing in the floodplain with a minimum first floor elevation. When the decision to rebuild homes is made, specific housing standards should be adhered to, and homes should be rebuilt to sustain future flooding events. Homes should be built to a higher standard than they were." (p.31) Additionally, "All interviews and focus groups identified affordable housing as the number one necessity or problem to be solved regarding Eastern Kentucky housing recovery. Specifically, the need for mixed income developments, multifamily housing, and single-family homes was emphasized." (p.37) Chestnut Ridge will help meet these needs. 6) "Due to the topography of the region, there is an overall lack of flat buildable land in the hardest hit areas with most of flat buildable land being reclaimed strip mines." (p.38) Chestnut Ridge takes advantage of available reclaimed mining land. 7) There is a constricted housing market in the disaster region. "In 2021,

the median sales price of homes increased 15.4%. This priced many potential homebuyers out of the ownership market, increased the need for rental housing and drove up rental prices due to demand. Most renters couldn't afford the prices they were paying before the flood. As increased prices are passed on by owners through high rents, the result could be renters choosing to pay less and live in substandard conditions including unsanitary housing, with insufficient heating, a lack of plumbing in units and other similar deplorable living conditions." (p. 30-31) According to the 2017-2021 American Community Survey (ACS) 5-year estimate for Knott County, 28.7% of homeowners with a mortgage, 10.0% of homeowners without a mortgage, and 46.6% of renters are housing cost-burdened, paying more than 30% of household income on housing costs. Median household income for the county is only \$35,583, with 29.5% of Knott County residents with household incomes below the poverty line. The Chestnut Ridge project will construct up to 167 units, and include infrastructure improvements and water, sewer, and utilities access. Construction of these affordable homes will help create housing for people displaced by flooding in Knott County and beyond and ensure replacement housing is out of the flood plain. These new energy-efficient affordable homes will also help meet the great need for affordable housing in Knott County.

**Existing Conditions and Trends [24 CFR 58.40(a)]:**

According to the 2017-2021 American Community Survey (ACS) 5-year estimate, the total population of Knott County is 14,506 persons, with 3,901 (71.5%) owner-occupied and 1,557 (28.5%) renter-occupied housing units. Additionally, Knott County has a much lower median household income (\$35,583) and a much higher poverty rate (29.5%) than the state of Kentucky (\$55,573 and 16.5%). According to the ACS 5-year estimate, 49.8% of Knott County households receive income from Social Security and 18.3% have Supplemental Security income. The Census also reports that 26.7% of residents do not have a High School diploma, and 26.1% of the population is over age 60. The surface property includes previously mined lands that have obtained Phase 3 bond release and have no continuing regulatory jurisdiction under the Surface Mining Control & Reclamation Act of 1977 (SMCRA). In addition to the remarkable amount of downpour, some characteristics specific to Eastern Kentucky made it particularly vulnerable to the devastation. Many residences in the region sit deep in flood plains, along winding creeks and surrounded by the steep Appalachian foothills and rugged topography. Sedimentary rocks typical of the Appalachian Basin coalfield underlie the property. Specifically, the adjacent and underlying strata consist of the Princess Formation that forms the highest elevations in the immediate vicinity of the property. The formation occurs at elevations ranging from greater than 1,400 feet to 1,300 feet above sea level. The Four Corners Formation underlies the Princess Formation and is several hundred feet thick in the area and it outcrops in the lowest elevation drainage in the area of the site. Historically, mining can potentially threaten nearby

communities with air and water pollution and risk of flooding. Even after reclamation, the flow of water is unregulated and the natural course of can be diverted due to mining activities. This situation has been the source and probable cause of flooding in mining communities. As weather patterns continue to be unpredictable, flood prone communities express concern for safer alternatives and sustainable solutions. Using reclaimed mineland to create new affordable housing outside of the special flood hazard area will help mitigate these threats by putting the property to its highest and best use. The pre-disaster housing stock was made up of manufactured housing and/or mobile style homes common in rural areas. Moreso, these structures are particularly susceptible to wind and water damage in a straight-line windstorm or flood. Per the HUD DR-4663-KY Housing Impact Assessment (p.9), the pre-disaster housing stock in Knott County consisted of 7,658 total housing units, of which 58.54% were single-family detached homes, 36.93% were mobile homes, boat RV, van etc., 4.43% were in multi-family structures of 2-19 units, and 0.10% were in multi-family structures of 20 or more units (p. 9). In addition to tight market conditions, due to increasing housing costs and rents tenants may have no other choice but to live in substandard conditions including unsanitary housing, with insufficient heating, a lack of plumbing in units and other similar deplorable living conditions. Perry, Knott, Letcher, and Breathitt counties account for a combined 75% of the homes lost to flood damage. The Chestnut Ridge project will help communities to recover and uplift economic initiatives in an area characterized by decades or more of coal mining and help meet the great need for affordable housing in Knott County. Additionally, this new "higher ground" community will help meet the "need for housing and infrastructure to be developed with consideration of future climate-related natural hazard risks, such as violent storms and floods, and how to increase structural resiliency" identified by the HUD DR-4663-KY Housing Impact Assessment (p.37).

**Maps, photographs, and other documentation of project location and description:**

[Chestnut Ridge Plat Map 2023-8-29.pdf](#)

[Aerial Map-Chestnut Ridge Subdivision.pdf](#)

[Site Photos from ESA Phase 1\\_Chestnut Ridge.pdf](#)

**Determination:**

✓	Finding of No Significant Impact [24 CFR 58.40(g)(1); 40 CFR 1508.13] The project will not result in a significant impact on the quality of human environment
	Finding of Significant Impact

**Approval Documents:**

[HEROS EA Signature Pages Chestnut Ridge 2023-10-10.pdf](#)

**7015.15 certified by Certifying Officer  
on:**

**7015.16 certified by Authorizing Officer  
on:**

**Funding Information**

<b>Grant / Project Identification Number</b>	<b>HUD Program</b>	<b>Program Name</b>
2022 CDBG-DR Allocation	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)
2022 CDBG-MIT	Community Planning and Development (CPD)	Community Development Block Grant Mitigation (CDBG-MIT)
B21DF210001	Community Planning and Development (CPD)	Community Development Block Grant Mitigation (CDBG-MIT)
B21DF210001	Community Planning and Development (CPD)	Community Development Block Grants (Disaster Recovery Assistance)
M22SG210100	Community Planning and Development (CPD)	HOME Program

**Estimated Total HUD Funded, Assisted or Insured Amount:** \$51,166,594.00

**Estimated Total Project Cost [24 CFR 58.2 (a) (5)]:** \$63,120,573.00

**Compliance with 24 CFR §50.4, §58.5 and §58.6 Laws and Authorities**

<b>Compliance Factors:</b> Statutes, Executive Orders, and Regulations listed at 24 CFR §50.4, §58.5, and §58.6	Are formal compliance steps or mitigation required?	Compliance determination (See Appendix A for source determinations)
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.6</b>		
<b>Airport Hazards</b> Clear Zones and Accident Potential Zones; 24 CFR Part 51 Subpart D	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards

		requirements. The project site is 18.39 miles from Wendell H. Ford Airport, the nearest airport.
<b>Coastal Barrier Resources Act</b> Coastal Barrier Resources Act, as amended by the Coastal Barrier Improvement Act of 1990 [16 USC 3501]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is located in a state that does not contain CBRS units. Therefore, this project is in compliance with the Coastal Barrier Resources Act.
<b>Flood Insurance</b> Flood Disaster Protection Act of 1973 and National Flood Insurance Reform Act of 1994 [42 USC 4001-4128 and 42 USC 5154a]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The structure or insurable property is not located in a FEMA-designated Special Flood Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements. The FIRMette Map for the project site demonstrates that it is an area of minimal flood hazard (Panel Number 21119C0125D, eff. 9/16/2015). NOTE: FEMA Preliminary FIRM Panel number 21119C0125E, issued 10/27/2022, also shows that the project site is in an area of minimal flood hazard.
<b>STATUTES, EXECUTIVE ORDERS, AND REGULATIONS LISTED AT 24 CFR §50.4 &amp; § 58.5</b>		
<b>Air Quality</b> Clean Air Act, as amended, particularly section 176(c) & (d); 40 CFR Parts 6, 51, 93	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project's county or air quality management district is in attainment status for all criteria pollutants. The project is in compliance with the Clean Air Act. The project's county or air quality management district is in attainment status for all criteria pollutants. Kott County is not in non-attainment or maintenance status for any criteria pollutants. See EPA's Greenbook county list, found at: <a href="https://www3.epa.gov/airquality/greenbook/ancl.html#KY">https://www3.epa.gov/airquality/greenbook/ancl.html#KY</a> . The project is in compliance with the Clean Air Act.
<b>Coastal Zone Management Act</b> Coastal Zone Management Act, sections 307(c) & (d)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is located in a state that does not participate in the Coastal Zone Management Program. Therefore, this

		project is in compliance with the Coastal Zone Management Act.
<b>Contamination and Toxic Substances</b> 24 CFR 50.3(i) & 58.5(i)(2)]	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<b>Endangered Species Act</b> Endangered Species Act of 1973, particularly section 7; 50 CFR Part 402	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project will have No Effect on listed species because there are no listed species or designated critical habitats in the action area. This project is in compliance with the Endangered Species Act. Kentucky Housing Corporation (KHC) reviewed the US Fish and Wildlife Service IPaC website for a list of species and critical habitats that have potential to occur within the action area on August 23, 2023. According to the endangered species list generated on IPaC (Project Code: 2023-0120465) there are six species that may be present but "there are no critical habitats within your project area under this office's jurisdiction." In a letter sent via email dated August 25, 2023, KHC requested US Fish and Wildlife Service concurrence with the determination that development of the proposed subdivision will have no effect on the Gray Bat ( <i>Myotis grisescens</i> ), the Northern Long-Eared Bat ( <i>Myotis septentrionalis</i> ), the Indiana Bat ( <i>Myotis sodalis</i> ), and the Monarch Butterfly ( <i>Danaus plexippus</i> ) and that the project may affect but is not likely to adversely affect the Kentucky Arrow Darter ( <i>Etheostoma spilotum</i> ) and the big sandy crayfish ( <i>Cambarus callainus</i> ). In a letter dated September 20, 2023, the Kentucky Ecological Services Field Office (KFO) of the US Fish and Wildlife Service stated "Federally Listed Species: The KHC has determined that the proposed project will have "no effect" on the gray bat ( <i>Myotis grisescens</i> ), Indiana bat ( <i>Myotis sodalis</i> ), and northern long-



		<p>eared bat (<i>Myotis septentrionalis</i>) due to lack of suitable habitat within the project area. There is no statutory requirement to request concurrence with a "no effect" determination; however, the KFO acknowledges this determination and has no additional comments or concerns regarding these species. The KHC has also determined that the proposed project has the potential to affect the Kentucky arrow darter (<i>Etheostoma spilotum</i>) and big sandy crayfish (<i>Cambarus callainus</i>).</p> <p>Kentucky arrow darter: There are no streams or bodies of water within the action area. One intermittent stream, Bolen branch, is 630 feet south of the action area boundary and is not expected to be impacted by construction. In addition, a nature-based solution will be constructed for stormwater mitigation to prevent increased downstream flows from construction actions. Based on the lack of suitable habitat with the action area and the implementation of nature-based stormwater management, the KFO agrees the proposed action, 'may affect, but is not likely to adversely affect' the Kentucky arrow darter.</p> <p>Big sandy crayfish: There are no streams or bodies of water within the action area. One intermittent stream, Bolen branch, is 630 feet south of the action area boundary and is not expected to be impacted by construction. In addition, a nature-based solution will be constructed for stormwater mitigation to prevent increased downstream flows from construction actions. Based on the lack of suitable habitat with the action area and the implementation of nature-based stormwater management, the KFO agrees the proposed action, 'may</p>
--	--	---

		affect, but is not likely to adversely affect' the big sandy crayfish."
<b>Explosive and Flammable Hazards Above-Ground Tanks</b> [24 CFR Part 51 Subpart C	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	There are no current or planned stationary aboveground storage containers of concern within 1 mile of the project site. The project is in compliance with explosive and flammable hazard requirements.
<b>Farmlands Protection</b> Farmland Protection Policy Act of 1981, particularly sections 1504(b) and 1541; 7 CFR Part 658	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	The project includes activities that could convert agricultural land to a non-agricultural use, but "prime farmland", "unique farmland", or "farmland of statewide or local importance" regulated under the Farmland Protection Policy Act does not occur on the project site. The project is in compliance with the Farmland Protection Policy Act. The USDA NRCS Web Soil Survey Map shows that the Chestnut Ridge project site consists of "uHfsF- Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony" and "uMgmF- Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky." Both of these soil types are not prime farmland nor farmland of statewide importance.
<b>Floodplain Management</b> Executive Order 11988, particularly section 2(a); 24 CFR Part 55	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project does not occur in a floodplain. The project is in compliance with Executive Order 11988. The FIRMette Map for the project site demonstrates that it is an area of minimal flood hazard (Panel Number 21119C0125D, eff. 9/16/2015). NOTE: FEMA Preliminary FIRM Panel number 21119C0125E, issued 10/27/2022, also shows that the project site is in an area of minimal flood hazard.
<b>Historic Preservation</b> National Historic Preservation Act of 1966, particularly sections 106 and 110; 36 CFR Part 800	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Based on Section 106 consultation there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106. Kentucky Housing Corporation initiated consultation with

		<p>the Kentucky Heritage Council (SHPO). In a letter dated August 28, 2023, the Kentucky Heritage Council stated "Our review indicates that the proposed project will not impact any properties or sites that are listed in or eligible for the National Register of Historic Places. The proposed project should not require cultural resource survey. We would concur with a finding of No Historic Properties Affected." On August 23, 2023, Kentucky Housing Corporation sent letters via email to the tribes identified in a T DAT search for Knott County, KY, the Cherokee Nation and the Eastern Band of Cherokee Indians, to become consulting parties on the Section 106 review of this project. The tribes did not respond within the 30-day comment period established by HUD CPD Notice 12-006.</p>
<p><b>Noise Abatement and Control</b> Noise Control Act of 1972, as amended by the Quiet Communities Act of 1978; 24 CFR Part 51 Subpart B</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>The Preliminary Screening identified no noise generators in the vicinity of the project. The project is in compliance with HUD's Noise regulation. The project site is 18.39 miles from Wendell H. Ford Airport, the nearest airport, 2.40 miles from the nearest railroad (as measured by Google Earth Pro- the FRA measure tool shows the distance inaccurately as 3.80 miles), and 3,147 feet from KY-80, the nearest road with available AADT data from the Kentucky Transportation Cabinet. (The only other nearby road with AADT data is KY-1087-E, which is 3.337 feet away).</p>
<p><b>Sole Source Aquifers</b> Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>The project is not located on a sole source aquifer area. The project is in compliance with Sole Source Aquifer requirements. There are no sole source aquifers in Kentucky.</p>
<p><b>Wetlands Protection</b> Executive Order 11990, particularly sections 2 and 5</p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>	<p>The project will not impact on- or off-site wetlands. The project is in compliance with Executive Order 11990.</p>

		The National Wetlands Inventory Map shows there are no Wetlands on the project site. Bolen Branch, the nearest body of water, is approximately 630 feet from the southern edge of the project development area and should not be impacted by construction. The Commonwealth will employ nature-based solutions for stormwater mitigation to prevent increased downstream flows as a result of construction.
<b>Wild and Scenic Rivers Act</b> Wild and Scenic Rivers Act of 1968, particularly section 7(b) and (c)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	This project is not within proximity of a NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act. The Red River is both the nearest Wild and Scenic River and the nearest Nationwide Rivers Inventory body to the project site. The project site is 25.2 miles from the Nationwide Rivers Inventory portions of the Red River and is 40.74 miles from the Wild and Scenic portions of the Red River.
<b>HUD HOUSING ENVIRONMENTAL STANDARDS</b>		
<b>ENVIRONMENTAL JUSTICE</b>		
<b>Environmental Justice</b> Executive Order 12898	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898.

**Environmental Assessment Factors [24 CFR 58.40; Ref. 40 CFR 1508.8 &1508.27]**

**Impact Codes:** An impact code from the following list has been used to make the determination of impact for each factor.

- (1)** Minor beneficial impact
- (2)** No impact anticipated
- (3)** Minor Adverse Impact – May require mitigation
- (4)** Significant or potentially significant impact requiring avoidance or modification which may require an Environmental Impact Statement.

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
<b>LAND DEVELOPMENT</b>			
Conformance with Plans / Compatible Land Use and Zoning / Scale and Urban Design	1	In an email dated August 29, 2023, Knott County Judge Executive Jeff Dobson stated that Knott County has no zoning requirements. He also stated that the county requires building, plumbing, HVAC and electrical permits, and a septic permit if septic tanks will be installed. The project will be beneficial in that it is providing a significant increase in new affordable housing located out of the flood zone that will help meet Knott County's significant housing need following the disaster. It will also put reclaimed mineland near the city of Hazard to its highest and best use. Buildable land of this size is difficult to find in Knott County.	
Soil Suitability / Slope/ Erosion / Drainage and Storm Water Runoff	2	The surface property includes previously mined lands under Laurel Mountain Resources LLC Permit No. 860-0519 that obtained Phase 3 bond release in 2014. This aspect is seen as complete from a regulatory standpoint and therefore is not considered a recognized environmental condition (REC). Geology: According to the Kentucky Geological Survey, the site is mainly underlain by two main geologic units: the Four Corners Formation (Pfc) and the Princess Formation (Ppr). The Four Corners Formation is a formation of the Breathitt Group with the primary lithology consisting of sandstone, siltstone, shale, underclay, and coal. The top 0 to 40 feet below ground surface is mostly sandstone, siltstone and shale underlain by coal beds. Most commonly, below 40 feet from ground surface, there are coal beds of varying thickness which are separated by numerous shale partings. Coal beds present include the following: the Knob coal zone, the Hindman Coal bed, Francis coal bed, Hazard coal beds, Haddix coal bed, Hamlin	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		<p>coal zone, Fire Clay coal beds, Whitesburg coal beds, and the Amburgy coal bed. The Princess Formation is also a formation of the Breathitt Group, with the primary lithology being comprised of sandstone, siltstone, shale, and coal, with minor limestone and underclay. The lower sandstone forms cliffs up to 60 feet high. There are multiple unnamed coal beds present in this formation, as well as the following coal beds: Hindman, Francis, Hazard, Haddix, Copland, Hamlin, Fire Clay, Whitesburg, and Amburgy. Soil: Per the USDA Web Soil Survey map, the project site consists of "uHfsF-Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony" (66.0%) and "uMgmF-Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky" (34.0%). Per the Geocheck Physical Setting Source Summary attached to the Phase I ESA, the soils evaluated are a "well-drained" soil class. Design of the project and construction methods employed will work to ensure that the project does not negatively affect slope or erosion of the surrounding area, The National Wetlands Inventory Map shows there are no Wetlands on the project site. Bolen Branch, the nearest body of water, is approximately 630 feet from the southern edge of the project development area and should not be impacted by construction. The Commonwealth will employ nature-based solutions for stormwater mitigation to prevent increased downstream flows as a result of construction. The project must obtain a Kentucky Pollution Discharge Elimination System (KPDES) stormwater permit from the Kentucky Surface Water Permits Branch as noted in the attached letter from the Kentucky Energy and</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		Environment Cabinet Department for Environmental Protection dated August 18, 2023. As also noted in the letter, the project must develop a Groundwater Protection Plan.	
Hazards and Nuisances including Site Safety and Site-Generated Noise	2	This project involves new construction, therefore, there is no opportunity for lead-based paint or asbestos to be encountered. There are no above ground storage tanks containing flammable materials within one mile of the project site. A NEPAAssist search (as documented in a NEPAAssist Report, found no EPA-regulated facilities within a 3,000-foot radius of the project site. Given the size of the project site the search radius was expanded and a NEPAAssist search found 4 EPA-regulated facilities within a 1-mile radius of the project site. According to their ECHO Reports, three facilities (surface coal mines) had terminated permits. The ECHO Report 4th mining site, Kentucky Fuel Corp. 860-0505, had Clean Water Act violations in 10 of the last 12 quarters. However, in an email dated July 7, 2023, the Kentucky Energy and Environment Cabinet stated that "The violations at this site near the property development will not pose any risk to Chestnut Ridge residents." "The Site-Specific Phase I Environmental Site Assessment-Chestnut Ridge, Chestnut Ridge Drive, Knott County, KY prepared by the Kentucky Energy and Environment Cabinet Department for Environmental Protection Division of Waste Management Superfund Branch found "no recognized environmental conditions (RECs), HRECs, or CRECs were identified for the site during this assessment." There are no noise generators within the evaluation threshold distances of the project site. Efforts will be made to reduce noise exposure as much as possible during construction though there	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		are no residential units nearby the project site who would be affected.	
<b>SOCIOECONOMIC</b>			
Employment and Income Patterns	1	The creation of up to 180 units of affordable housing should have a positive effect on the Knott County workforce and economic conditions. It will allow residents to remain in the community following the flood disaster and reside in new, safe housing located in an area of minimal flood hazard. Creation of this "higher ground" community will help sustain demand for businesses and services in Knott County and help preserve or enhance the county's economic strength in the aftermath of the disaster. Additionally, the construction of these housing units will provide job opportunities to Knott County residents.	
Demographic Character Changes / Displacement	1	The creation of up to 180 units of affordable housing should have a positive effect on Knott County's demographic character by preventing the permanent displacement/ relocation of households to other regions. The project will provide new, affordable, energy-efficient, resilient housing outside of the flood zone that could encourage residents seeking safer housing to remain in the community.	
Environmental Justice EA Factor	1	No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898. The project will be the highest and best use of previously disturbed reclaimed mineland and will provide residents at risk of future flooding with safe energy-efficient, resilient housing located outside of the flood zone. The "Site-Specific Phase I Environmental Site Assessment-Chestnut Ridge, Chestnut Ridge Drive, Knott County, KY" prepared by the Kentucky Energy and Environment Cabinet Department for Environmental	



Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		<p>Protection Division of Waste Management Superfund Branch found "no recognized environmental conditions (RECs), HRECs, or CRECs were identified for the site during this assessment." This affordable housing development will have a positive impact on environmental justice in Knott County by reclaiming mineland to provide much needed safe, affordable, energy-efficient, resilient housing to Knott County as it recovers from the 2022 flood disaster.</p>	
<b>COMMUNITY FACILITIES AND SERVICES</b>			
<p>Educational and Cultural Facilities (Access and Capacity)</p>	1	<p>The project site is located within the Knott County School District which includes 5 elementary schools (K-8), 1 K-12 school, 1 technical school, and 1 high school. The project site is 2.32 miles from Jones Creek Elementary school and is 6.85 miles from Knott County Central High School. In an email dated August 29, 2023, Knott County Schools Superintendent Brent Hoover stated "Knott County Schools and our community could greatly benefit from an additional 150-200 housing units. We are constantly hearing from families that finding affordable housing is a major challenge to staying in Knott County. A housing development of this nature is greatly needed in Knott County." Cultural facilities that Knott County has to offer include the Alice Lloyd Fine Arts Center at Alice Lloyd College, the Appalachian Artisan's Center, the Appalachian School of Luthiery, Camp Nathaniel, the Hindman Settlement School, the Kentucky School of Craft, the Marie Stewart Craft Shop, the Museum of the Mountain Dulcimer, the Mine Made Adventure Park, and outdoor adventure tourism facilities such as ATV centers and trails, elk viewing stations, and Carr Creek State Park. By offering residents displaced by the flooding an opportunity to</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		stay in Knott County, this project can help sustain demand for these cultural facilities.	
Commercial Facilities (Access and Proximity)	1	This project site is located on reclaimed mineland in rural Knott County in the Appalachian Mountains. It is a primarily rural area that has access to nearby urban facilities. All shopping and service amenities are located in Hindman, with the Holly Hills Shopping Center (grocery, pharmacy, bank, other businesses) located 7.1 miles from the project site. There are smaller groceries located closer to the project site in Mousie and at the intersection of KY 160 and KY 80. Creation of this higher ground community will help sustain demand for commercial facilities in Knott County following the flood disaster.	
Health Care / Social Services (Access and Capacity)	1	This project site is located on reclaimed mineland in rural Knott County in the Appalachian Mountains. It is a primarily rural area. Local practitioners have medical offices nearby. The nearest hospital is the Hazard ARH Regional Medical Center located 19.31 miles from the project site. Social services amenities are located in Hindman. The project site is 6.4 miles from the nearest Cabinet for Health and Family Services Office in Hindman. LKLP Community Action Partnership, the regional Community Action Agency, is located 19.64 miles from the project site. Creation of this higher ground community will help sustain demand for existing medical and social services in Knott County and regionally following the flood disaster.	
Solid Waste Disposal and Recycling (Feasibility and Capacity)	2	The project is located within a rural area with access to adequate solid waste services provided by Rumpke. The project site is 7.42 miles away from the Knott County Transfer Station, which contains a recycling center.	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
Waste Water and Sanitary Sewers (Feasibility and Capacity)	2	The Knott County Fiscal Court will install sanitary sewer infrastructure to serve both the Foundation for Appalachian Kentucky development and the Commonwealth of Kentucky development. The project will initially install 4,000 linear feet of 8" gravity sewer including manholes for connection to the existing infrastructure. The Foundation's development sanitary sewer will include 3,800 linear feet of 8" gravity sanitary sewer with manholes and 6,000 linear feet of service lateral. The Commonwealth's housing development will include 5,000 linear feet of 8" gravity sewer with manholes and service laterals (10,000 linear feet). The project will also include video inspection of the installed gravity sewer.	
Water Supply (Feasibility and Capacity)	2	The Knott County Fiscal Court will install water supply infrastructure to serve both the Foundation for Appalachian Kentucky development and the Commonwealth of Kentucky development. The project will begin with approximately 4,000 linear feet of 6" HDPE waterline extension from the existing water infrastructure. This extension will reach the development area for the Foundation. Within the Foundation's development approximately 4,300 linear feet of 6" waterline will be installed to serve the homes with valves, flush hydrants, meters and service tubing. The next phase of the project will include an additional 5,500 linear feet of 6" waterline installed to serve the Commonwealth's development. The infrastructure to serve the Commonwealth's development will also include valves, flush hydrants, meters and service tubing.	
Public Safety - Police, Fire and Emergency Medical	2	This project site is located on reclaimed mineland in rural Knott County in the Appalachian Mountains. It is a primarily	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		<p>rural area that has access to nearby public safety facilities. The project site is 6.66 miles from the Knott County Sheriff's Office and is 18.65 miles from Kentucky State Police Post 13. It is 2.37 miles from Ball Creek Fire Department, which also provides ambulance services.</p>	
<p>Parks, Open Space and Recreation (Access and Capacity)</p>	<p>1</p>	<p>Open Space: the project site is on reclaimed mineland and provides one of the larger areas of open space in Knott County, which is located in the mountains of Appalachia. Recreation: The project will include the development of a 15-acre park that will include a playground, picnic pavilion, a paved looped trail, and other outdoor amenities. The project site is also close to the Knott County Sportsplex, which offers sports leagues, a fitness center, and indoor track, 5 basketball courts, 5 volleyball courts, 3 baseball fields, a gymnastics center, and event space. Mine Made Adventure Park offers ATV riding, camping horseback riding, and hiking. Carr Creek State Park provides camping, boating, fishing, and swimming. Knott County also has an extensive trail system for hiking and horseback riding, which are celebrated in the annual Spring and Fall Trail Rides. Elk viewing and hunting are also popular activities. Creation of this higher ground community will help sustain demand for existing recreational facilities in Knott County following the flood disaster and will also lead to the addition of new park space in the county.</p>	
<p>Transportation and Accessibility (Access and Capacity)</p>	<p>2</p>	<p>LKLP Community Action Council offers transportation services for a minimal fee. The subdivision will have quick access to KY-80, a major road that provides access to commercial, educational cultural, medical, and social service amenities available in the</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		cities of Hindman (17-minute drive) and Hazard (39-minute drive).	
<b>NATURAL FEATURES</b>			
Unique Natural Features /Water Resources	2	<p>The project site lacks unique natural features because it is reclaimed mineland that has already been disturbed. The project site has already been disturbed as it consists of reclaimed mineland under Laurel Mountain Resources LLC Permit No. 860-0519 that obtained Phase 3 bond release in 2014. Per the Kentucky Energy and Environment Cabinet, the mine reclamation received bond release on February 14, 2014 and "the approved reclamation plan in the Surface Mining Control and Reclamation Act permit for Laurel Mountain Resources LLC required the permittee to: * Backfill, regrade, replace topsoil, and restore drainage patterns consistent with the approximate original contour (AOC) of the land prior to mining; *Revegetate the permit area in accordance with the approved post mining land uses; and * Ensure the reclaimed area was capable of supporting the pastureland post mining land use upon expiration of the 5-year liability period required in 405 KAR Chapter 10." Site inspection by the Energy and Environment Cabinet in May 2023, found no portals, caves or karst on the site. The National Wetlands Inventory Map shows there are no Wetlands on the project site. Bolen Branch, the nearest body of water, is approximately 630 feet from the southern edge of the project development area and should not be impacted by construction. The Commonwealth will employ nature-based solutions for stormwater mitigation to prevent increased downstream flows as a result of construction.</p>	
Vegetation / Wildlife (Introduction,	2	The project site has already been disturbed as it consists of reclaimed mineland under	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
Modification, Removal, Disruption, etc.)		<p>Laurel Mountain Resources LLC Permit No. 860-0519 that received Phase 3 bond release in 2014. Per the Kentucky Energy and Environment Cabinet, the mine reclamation received bond release on February 14, 2014 and "the approved reclamation plan in the Surface Mining Control and Reclamation Act permit for Laurel Mountain Resources LLC required the permittee to: * Backfill, regrade, replace topsoil, and restore drainage patterns consistent with the approximate original contour (AOC) of the land prior to mining; *Revegetate the permit area in accordance with the approved post mining land uses; and * Ensure the reclaimed area was capable of supporting the pastureland post mining land use upon expiration of the 5-year liability period required in 405 KAR Chapter 10." Site inspection by the Energy and Environment Cabinet in May 2023 found no portals, caves or karst on the site and that it does not appear that there is endangered species habitat present on the footprint of the old mine site and no roost trees are present that will be removed. The surface vegetation consists of autumn olive, willow, other immature trees and ground plants. Because this site is previously disturbed land with no critical habitat present it should have minimal disruption of wildlife.</p>	
Other Factors 1			
Other Factors 2			
<b>CLIMATE AND ENERGY</b>			
Climate Change	2	<p>Using data that predates the 2022 flood disaster, the FEMA National Risk Index Community Report for Knott County, KY finds that the Risk Index score of 20.94 is "very low" when compared to the rest of the US and that they community has a "very low" Expected Annual Loss Score of 16.2.</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		<p>However, the Community Report also finds that Knott County has a Social Vulnerability score of 77.3, which demonstrates "Relatively High susceptibility to the adverse impacts of natural hazards when compared to the rest of the U.S." The Community Report also states that "Communities in Knott County, KY have a Very Low ability to prepare for anticipated natural hazards, adapt to changing conditions, and withstand and recover rapidly from disruptions when compared to the rest of the U.S." with a Community Resilience score of only 2.6. The social vulnerability and community resilience ratings largely stem from the high poverty and low median income rates for the county. The FEMA National Risk Index Community Report for Knott County, KY also rates historic loss ratios by hazard type as follows: very low (tornado, earthquake, hurricane, ice storm); relatively low (wildfire, riverine flooding, strong wind, hail, heat wave, lightning, winter weather, cold wave); and relatively high (landslide). The report also states that "in Knott County, KY, expected loss each year due to natural hazards is Very Low when compared to the rest of the US" with an expected annual loss score of 16.25. The Headwaters Institute has developed a county-by-county climate projection tool to estimate changes in heat and precipitation given either higher projected emissions (RCP8.5) or lower projected emissions (RCP4.5). Under the higher emission model, Knott County is expected to experience 36 more days above 95 degrees and a 5-degree increase in average annual temperature by 2073. The model also shows that Knott County will see 0.9 more days of heavy precipitation annually and a</p>	

Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		<p>1-inch increase in annual average precipitation by 2073. Given these risk analyses, Knott County, KY faces fewer climate risks than most of the nation. The new homes to be constructed in Chestnut Ridge will help minimize the impact of climate risk to the homebuyers. First, the project site has minimal risk. It is a flat site on reclaimed mineland that is in an area of minimal flood hazard. Second, the homes to be built will meet energy-efficiency standards. They must meet Kentucky Housing Corporation's Minimum Design Standards for New Construction of Single-Family Units, which require that the building envelope meets or exceeds the 2012 IECC requirements, establish energy standards for building components and systems, and require Energy Star appliances, amongst other energy efficiency requirements. Per "FR-6393 Allocations for Community Development Block Grant Disaster Recovery and Implementation of the CDBG-DR Consolidated Waivers and Alternative Requirements Notice" governing the CDBG-DR funding, they must also meet HUD's Green and Resilient Building Standard for new construction and reconstruction of housing. KHC will also incorporate resilient building standards, including fortified roofs and flood resistant construction techniques in design guidelines for the homes to be built that will also ensure compliance with HUD's Green and Resilient Building Standard.</p>	
Energy Efficiency	1	<p>The Commonwealth of Kentucky requires housing developments to meet the KY Residential Building Code and encourages the use of Green Building Techniques and Energy Efficient Design Components. Kentucky Housing Corporation's Minimum Design Standards for New Construction of</p>	



Environmental Assessment Factor	Impact Code	Impact Evaluation	Mitigation
		<p>Single- Family Units requires that the building envelope meets or exceeds the 2012 IECC requirements, establish energy standards for building components and systems, and require Energy Star appliances, amongst other energy efficiency requirements. Additionally, FR-6393 "Allocations for Community Development Block Grant Disaster Recovery and Implementation of the CDBG-DR Consolidated Waivers and Alternative Requirements Notice" governing the CDBG-DR funding establishes a Green and Resilient Building Standard for new construction and reconstruction of housing. This requires that "all such covered construction must achieve a minimum energy efficiency standard, such as (i) ENERGY STAR (Certified Homes or Multifamily High-Rise); (ii) DOE Zero Energy Ready Home; (iii) EarthCraft House, EarthCraft Multifamily; (iv) Passive House Institute Passive Building or EnerPHit certification from the Passive House Institute US (PHIUS), International Passive House Association; (v) Greenpoint Rated New Home, Greenpoint Rated Existing Home (Whole House or Whole Building label); (vi) Earth Advantage New Homes; or (vii) any other equivalent energy efficiency standard acceptable to HUD." KHC will specify which of these Green and Resilient Building Standards will be used for any building in this subdivision receiving CDBG-DR funding for construction in its CDBG-DR program policies to be developed.</p>	

**Supporting documentation**

[Distance to Kentucky State Police Post 13 Chestnut Ridge.pdf](#)

[MRP map\\_Laurel Mountain\\_860-0519\(1\).pdf](#)

[MIR 860-0519 Chestnut Ridge\(1\).pdf](#)

[Headwaters Institute Climate Projections-Lower Emissions-Knott County KY.pdf](#)

[Headwaters Institute Climate Projections-Higher Emissions-Knott County KY.pdf](#)  
[FEMA National Risk Index Community Report-Knott County KY.pdf](#)  
[KHC Minimum Design Standards New Construction Single Family Dwelling Units.pdf](#)  
[Fed Reg 6393 CDBG-DR 2022 Allocations 2023-5-18.pdf](#)  
[Phase III NOD Laurel Mountain 860-0519 2014-1-27.pdf](#)  
[Chestnut Ridge Mine Reclamation Documentation email-KY EEC 2023-5-10.pdf](#)  
[Distance to Knott County Transfer Station and Recycling Center-Chestnut Ridge.pdf](#)  
[Distance to Ball Creek Fire Department Chestnut Ridge.pdf](#)  
[Knott County Schools Superintendent re project impact 2023-8-29.pdf](#)  
[Knott County Judge Executive Email re Zoning and Permits 2023-8-29.pdf](#)  
[Doctors offices near Chestnut Ridge.pdf](#)  
[Distance to LKLP Chestnut Ridge.pdf](#)  
[Distance to Knott County Central High School from Chestnut Ridge.pdf](#)  
[Distance to Jones Fork Elementary School from Chestnut Ridge.pdf](#)  
[Distance to Holly Hills Shopping Center from Chestnut Ridge.pdf](#)  
[Distance to Hazard ARH Regional Medical Center Chestnut Ridge.pdf](#)  
[Distance to CHFS Office from Chestnut Ridge.pdf](#)  
[USDA Web Soil Survey Map-Chestnut Ridge\(1\).pdf](#)  
[KY DEP Letter Chestnut Ridge 2023-8-18.pdf](#)  
[National Wetlands Inventory Map-Chestnut Ridge\(1\).pdf](#)  
[Distance to Bolen Branch-Chestnut Ridge\(1\).pdf](#)  
[Kentucky Fuel No Risk to Chestnut Ridge EEC email 2023-7-7\(1\).pdf](#)  
[Chestnut Ridge Phase I ESA 2023-5-31\(1\).pdf](#)

**Additional Studies Performed:**

"Site-Specific Phase I Environmental Site Assessment-Chestnut Ridge, Chestnut Ridge Drive, Knott County, KY" prepared by the Kentucky Energy and Environment Cabinet Department for Environmental Protection Division of Waste Management Superfund Branch; "Report of Geotechnical Engineering Subsurface Characterization Evaluation of Mine Spoil Site for Residential and Commercial Development, Chestnut Ridge Site, Leburn (Knott County) Kentucky, Vector Project Number 22.05.0160 SHE" by Vector Engineering, Inc.

[Chestnut Ridge Phase I ESA 2023-5-31\(2\).pdf](#)  
[Vector Engineering Geotechnical Report for Chestnut Ridge.pdf](#)

**Field Inspection [Optional]:** Date and completed

by:

Kenneth Logsdon

5/17/2023 12:00:00 AM

[Site Photos from ESA Phase 1 Chestnut Ridge.pdf](#)

**List of Sources, Agencies and Persons Consulted [40 CFR 1508.9(b)]:**

Kentucky Heritage Council; Eastern Band of Cherokee Indians; Cherokee Nation; Knott County Judge Executive Jeff Dobson; Knott County Schools Superintendent Brent Hoover; Kentucky Energy and Environment Cabinet; HA Spalding Engineers, Inc.; Vector Engineers, Inc.; American Engineers, Inc.; US Fish and Wildlife Service Kentucky Field Office; US Fish and Wildlife Service IPaC; US Fish and Wildlife Service National Wetlands Inventory; FEMA Flood Map Service Center; National Wild and Scenic Rivers System; Nationwide Rivers Inventory; EPA Sole Source Aquifers for Drinking Water Interactive Map; Kentucky Transportation Cabinet Functional Class Mapping Tool; USDA Web Soil Survey; Federal Railroad Administration Pop Up Viewer; Federal Aviation Administration Airport Master Record; EPA Greenbook; EPA NEPAssist Tool; EPA ECHO Report; EPA Facility Reports; US Department of Housing and Urban Development DR-4663 Housing Impact Assessment; US Census Bureau; FEMA National Risk Index Community Report; Headwaters Institute; Google Earth Pro; and Google Maps.

[Knott County Judge Executive Email re Zoning and Permits 2023-8-29\(1\).pdf](#)  
[KY DEP Letter Chestnut Ridge 2023-8-18\(1\).pdf](#)

**List of Permits Obtained:**

There are no zoning regulations in Knott County. Building, plumbing and HVAC permits must be obtained from Knott County for housing units to be constructed, as stated in an email from Knott County Judge Executive Jeff Dobson in an email dated August 25, 2023. The project must obtain a Kentucky Pollution Discharge Elimination System (KPDES) stormwater permit from the Kentucky Surface Water Permits Branch as noted in the attached letter from the Kentucky Energy and Environment Cabinet Department for Environmental Protection dated August 18, 2023. As also noted in the letter, the project must develop a Groundwater Protection Plan.

**Public Outreach [24 CFR 58.43]:**

The public was notified about the Combined Notice of Finding of No Significant Impact (FONSI) and Notice of Intent to Request Release of Funds (NOIRROF) via publication of a classified advertisements in the Troublesome Creek Times, the Louisville Courier-Journal, and the Lexington Herald-Leader on October 12, 2023. Public comment will be accepted for 15 days following the publication of the classified ads with the public comment period ending October 28, 2023. Because this activity is in response to a declared disaster, Kentucky Housing Corporation and the Department for Local Government will invoke 24 CFR 58.33, which allows the Combined Notice of FONSI and Notice of Intent to Request Release of Funds (NOI/RROF) to be published simultaneously with the submission of the RROF to HUD. The Notice invites commenters to submit their comments to both HUD and DLG. The Environmental

Review Record (ERR) for this project will be made available for public review during the comment period via a physical copy at the offices of the Knott County Fiscal Court at 54 West Main Street, Hindman, KY 41822. The physical copy will be made available for public examination and copying, upon request, between the hours of 9 A.M. and 4 P.M. An electronic version will be posted on the Department for Local Government's website at <https://kydlgweb.ky.gov/> and on the HUD Environmental Review Records website at <https://cpd.hud.gov/cpd-public/environmental-reviews> for the duration of the public comment period.

**Cumulative Impact Analysis [24 CFR 58.32]:**

There are no mitigating environmental factors resulting from the proposed project. The project will greatly benefit Knott County by creating up to 167 new, safe, decent, affordable housing units in a "higher ground" community that will help address the community's enormous need for additional affordable housing located out of a special flood hazard area following the devastating 2022 flood disaster. The project will put reclaimed mine land to its highest and best use as affordable housing for Knott County residents. As stated by Knott County Schools Superintendent Brent Hoover in an email dated August 29, 2023, "Knott County Schools and our community could greatly benefit from an additional 150-200 housing units. We are constantly hearing from families that finding affordable housing is a major challenge to staying in Knott County. A housing development of this nature is greatly needed in Knott County." This project helps meet a need identified in the HUD DR-Housing Impacts Assessment, which stated "Due to the topography of the region, there is an overall lack of flat buildable land in the hardest hit areas with most of flat buildable land being reclaimed strip mines." This housing construction project is key to the post-disaster future of Knott County and Southeastern Kentucky. The HUD DR-Housing Impacts Assessment also affirmed that "Without replacement of housing in rural areas, there will be a continued migration of the next generation into more densely populated city centers leaving these isolated areas further neglected. The impacted rural areas were already disproportionately populated with low-income and aging residents. Lack of housing and residents will lead to a lack of business investment as well as lesser opportunities for future generations."

**Alternatives [24 CFR 58.40(e); 40 CFR 1508.9]**

1. No action - leave the area as it is with no corrective action. It is possible that this property would remain undeveloped without the creation of these affordable housing units. Furthermore, Knott County has an enormous need for quality, affordable housing located out of a special flood hazard area following the 2022 flood disaster.
2. Acquire a different piece of property -there are few comparable pieces of land of this size available in Knott County that could support the development of up to 167

units of affordable housing that is out of the flood plain. The location is ideal for the project as this is a relatively flat piece of vacant land within a reasonable drive to commercial, medical, social, educational, cultural, and public safety facilities in the cities of Hindman and Hazard. The project is located in a primarily rural, mountainous area where adequate housing and is a need for the community. Additionally, the project will put a piece of reclaimed surface mine land to its highest and best use. 3. Proceed with Project. This is the best use of the project site and will be a vital to Knott County's efforts to rebuild and retain residents following the 2022 flood disaster.

**No Action Alternative [24 CFR 58.40(e)]**

The "do nothing" alternative is unacceptable as there is a critical need for affordable housing located out of the special flood hazard area in Knott County following the 2022 flood disaster. The move to an alternate site is also unacceptable as there is not a significant amount of vacant, flat land suitable for an affordable housing development project of this scale located out of the floodplain.

**Summary of Findings and Conclusions:**

There are no mitigating environmental factors resulting from the proposed project, which is in compliance with all related laws and authorities. The project site is not located in a wetland or floodplain area. There are no historical preservation concerns. The site is not located close to a Wild and Scenic River or Nationwide Rivers Inventory body. There are no sole source aquifers in Kentucky. The site will not impact endangered species. The land is not comprised of Prime Farmland or Farmland of Statewide Importance. There are no noise generators that exceed the 65 dB threshold nearby to the site. There are no explosive or flammable hazards in aboveground storage tanks within one mile of the project site. Knott County's air quality is in compliance with federal standards. There is no evidence of contamination or toxic substances that would pose a threat to residents at the project site as verified in the Phase I Environmental Site Assessment. There are no airport hazards in proximity to the project site. This "higher ground" project will help meet Knott County's great need for safe, affordable, energy-efficient, and resilient housing located in an area of minimal flood hazard and enhance the community's recovery from the 2022 flood disaster.

**Mitigation Measures and Conditions [CFR 1505.2(c)]:**

Summarized below are all mitigation measures adopted by the Responsible Entity to reduce, avoid or eliminate adverse environmental impacts and to avoid non-compliance or non-conformance with the above-listed authorities and factors. These measures/conditions must be incorporated into project contracts, development agreements and other relevant documents. The staff responsible for implementing and monitoring mitigation measures should be clearly identified in the mitigation plan.

<b>Law, Authority, or Factor</b>	<b>Mitigation Measure or Condition</b>	<b>Comments on Completed Measures</b>	<b>Mitigation Plan</b>	<b>Complete</b>
--	--	---	----------------------------	-----------------

**Project Mitigation Plan**

**Supporting documentation on completed measures**

## APPENDIX A: Related Federal Laws and Authorities

### Airport Hazards

General policy	Legislation	Regulation
It is HUD's policy to apply standards to prevent incompatible development around civil airports and military airfields.		24 CFR Part 51 Subpart D

1. To ensure compatible land use development, you must determine your site's proximity to civil and military airports. Is your project within 15,000 feet of a military airport or 2,500 feet of a civilian airport?

No

Based on the response, the review is in compliance with this section. Document and upload the map showing that the site is not within the applicable distances to a military or civilian airport below

Yes

### Screen Summary

#### Compliance Determination

The project site is not within 15,000 feet of a military airport or 2,500 feet of a civilian airport. The project is in compliance with Airport Hazards requirements. The project site is 18.39 miles from Wendell H. Ford Airport, the nearest airport.

#### Supporting documentation

[Distance to Wendell H Ford County Airport-Chestnut Ridge.pdf](#)

Are formal compliance steps or mitigation required?

Yes

No

### Coastal Barrier Resources

General requirements	Legislation	Regulation
HUD financial assistance may not be used for most activities in units of the Coastal Barrier Resources System (CBRS). See 16 USC 3504 for limitations on federal expenditures affecting the CBRS.	Coastal Barrier Resources Act (CBRA) of 1982, as amended by the Coastal Barrier Improvement Act of 1990 (16 USC 3501)	

**This project is located in a state that does not contain CBRA units. Therefore, this project is in compliance with the Coastal Barrier Resources Act.**

#### Compliance Determination

This project is located in a state that does not contain CBRS units. Therefore, this project is in compliance with the Coastal Barrier Resources Act.

#### Supporting documentation

**Are formal compliance steps or mitigation required?**

Yes

✓ No



## Flood Insurance

General requirements	Legislation	Regulation
Certain types of federal financial assistance may not be used in floodplains unless the community participates in National Flood Insurance Program and flood insurance is both obtained and maintained.	Flood Disaster Protection Act of 1973 as amended (42 USC 4001-4128)	24 CFR 50.4(b)(1) and 24 CFR 58.6(a) and (b); 24 CFR 55.1(b).

**1. Does this project involve financial assistance for construction, rehabilitation, or acquisition of a mobile home, building, or insurable personal property?**

No. This project does not require flood insurance or is excepted from flood insurance.

✓ Yes

**2. Upload a FEMA/FIRM map showing the site here:**

[Preliminary FIRM Panel 21119C0125E\\_Chestnut Ridge.pdf](#)  
[FIRMETTE Map-Chestnut Ridge.pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The [FEMA Map Service Center](#) provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use the best available information to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site. Provide FEMA/FIRM floodplain zone designation, panel number, and date within your documentation.

**Is the structure, part of the structure, or insurable property located in a FEMA-designated Special Flood Hazard Area?**

✓ No

Based on the response, the review is in compliance with this section.

Yes

**4. While flood insurance is not mandatory for this project, HUD strongly recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). Will flood insurance be required as a mitigation measure or condition?**

Yes

✓ No

**Screen Summary**

**Compliance Determination**

The structure or insurable property is not located in a FEMA-designated Special Flood Hazard Area. While flood insurance may not be mandatory in this instance, HUD recommends that all insurable structures maintain flood insurance under the National Flood Insurance Program (NFIP). The project is in compliance with flood insurance requirements. The FIRMette Map for the project site demonstrates that it is an area of minimal flood hazard (Panel Number 21119C0125D, eff. 9/16/2015). NOTE: FEMA Preliminary FIRM Panel number 21119C0125E, issued 10/27/2022, also shows that the project site is in an area of minimal flood hazard.

**Supporting documentation**

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Air Quality

General requirements	Legislation	Regulation
The Clean Air Act is administered by the U.S. Environmental Protection Agency (EPA), which sets national standards on ambient pollutants. In addition, the Clean Air Act is administered by States, which must develop State Implementation Plans (SIPs) to regulate their state air quality. Projects funded by HUD must demonstrate that they conform to the appropriate SIP.	Clean Air Act (42 USC 7401 et seq.) as amended particularly Section 176(c) and (d) (42 USC 7506(c) and (d))	40 CFR Parts 6, 51 and 93

**1. Does your project include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities OR five or more dwelling units?**

Yes

No

### Air Quality Attainment Status of Project's County or Air Quality Management District

**2. Is your project's air quality management district or county in non-attainment or maintenance status for any criteria pollutants?**

No, project's county or air quality management district is in attainment status for all criteria pollutants.

Yes, project's management district or county is in non-attainment or maintenance status for the following criteria pollutants (check all that apply):

### Screen Summary

#### Compliance Determination

The project's county or air quality management district is in attainment status for all criteria pollutants. The project is in compliance with the Clean Air Act. The project's county or air quality management district is in attainment status for all criteria pollutants. Kott County is not in non-attainment or maintenance status for any criteria

pollutants. See EPA's Greenbook county list, found at:  
<https://www3.epa.gov/airquality/greenbook/ancl.html#KY>. The project is in  
compliance with the Clean Air Act.

**Supporting documentation**

[Current Nonattainment Counties for All Criteria Pollutants\\_\\_Green Book\\_\\_US  
EPA\\_2023-6-30.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Coastal Zone Management Act

General requirements	Legislation	Regulation
Federal assistance to applicant agencies for activities affecting any coastal use or resource is granted only when such activities are consistent with federally approved State Coastal Zone Management Act Plans.	Coastal Zone Management Act (16 USC 1451-1464), particularly section 307(c) and (d) (16 USC 1456(c) and (d))	15 CFR Part 930

**This project is located in a state that does not participate in the Coastal Zone Management Program. Therefore, this project is in compliance with the Coastal Zone Management Act.**

### Screen Summary

#### **Compliance Determination**

This project is located in a state that does not participate in the Coastal Zone Management Program. Therefore, this project is in compliance with the Coastal Zone Management Act.

#### **Supporting documentation**

#### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Contamination and Toxic Substances

General requirements	Legislation	Regulations
It is HUD policy that all properties that are being proposed for use in HUD programs be free of hazardous materials, contamination, toxic chemicals and gases, and radioactive substances, where a hazard could affect the health and safety of the occupants or conflict with the intended utilization of the property.		24 CFR 58.5(i)(2) 24 CFR 50.3(i)

**1. How was site contamination evaluated? Select all that apply. Document and upload documentation and reports and evaluation explanation of site contamination below.**

- American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment (ESA)
- ASTM Phase II ESA
- Remediation or clean-up plan
- ASTM Vapor Encroachment Screening
- None of the Above

**2. Were any on-site or nearby toxic, hazardous, or radioactive substances found that could affect the health and safety of project occupants or conflict with the intended use of the property? (Were any recognized environmental conditions or RECs identified in a Phase I ESA and confirmed in a Phase II ESA?)**

No

Yes

### **Screen Summary**

#### **Compliance Determination**

#### **Supporting documentation**

[Phase III NOD Laurel Mountain 860-0519 2014-1-27\(1\).pdf](#)

[MRP map Laurel Mountain 860-0519.pdf](#)

[MIR 860-0519 Chestnut Ridge.pdf](#)

[Chestnut Ridge Mine Reclamation Documentation email-KY EEC 2023-5-10\(1\).pdf](#)

[NEPAssist Report\\_3000 ft radius\\_Chestnut Ridge.pdf](#)  
[NEPAssist Report\\_1 mile radius\\_Chestnut Ridge.pdf](#)  
[Kentucky Fuel No Risk to Chestnut Ridge\\_EEC email\\_2023-7-7.pdf](#)  
[EPA Facility Report\\_KENTUCKY FUEL CORP 860-0505-VIOLATIONS.pdf](#)  
[ECHO Report\\_MILLER BROTHERS COAL LLC 860-0434-Terminated Permit.pdf](#)  
[ECHO Report\\_KENTUCKY FUEL CORP 860-0505-VIOLATIONS.pdf](#)  
[ECHO Report\\_Consol Of Kentucky Inc 860-5117-Terminated Permit.pdf](#)  
[ECHO Report\\_CONSOL OF KENTUCKY INC 860-0430-Terminated Permit.pdf](#)  
[Chestnut Ridge Phase I ESA\\_2023-5-31.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Endangered Species

General requirements	ESA Legislation	Regulations
Section 7 of the Endangered Species Act (ESA) mandates that federal agencies ensure that actions that they authorize, fund, or carry out shall not jeopardize the continued existence of federally listed plants and animals or result in the adverse modification or destruction of designated critical habitat. Where their actions may affect resources protected by the ESA, agencies must consult with the Fish and Wildlife Service and/or the National Marine Fisheries Service (“FWS” and “NMFS” or “the Services”).	The Endangered Species Act of 1973 (16 U.S.C. 1531 <i>et seq.</i> ); particularly section 7 (16 USC 1536).	50 CFR Part 402

**1. Does the project involve any activities that have the potential to affect species or habitats?**

No, the project will have No Effect due to the nature of the activities involved in the project.

No, the project will have No Effect based on a letter of understanding, memorandum of agreement, programmatic agreement, or checklist provided by local HUD office

- ✓ Yes, the activities involved in the project have the potential to affect species and/or habitats.

**2. Are federally listed species or designated critical habitats present in the action area?**

- ✓ No, the project will have No Effect due to the absence of federally listed species and designated critical habitat

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Documentation may include letters from the Services, species lists from the Services’ websites, surveys or other documents and analysis showing that there are no species in the action area.

Yes, there are federally listed species or designated critical habitats present in the action area.



### **Screen Summary**

#### **Compliance Determination**

This project will have No Effect on listed species because there are no listed species or designated critical habitats in the action area. This project is in compliance with the Endangered Species Act. Kentucky Housing Corporation (KHC) reviewed the US Fish and Wildlife Service IPaC website for a list of species and critical habitats that have potential to occur within the action area on August 23, 2023. According to the endangered species list generated on IPaC (Project Code: 2023-0120465) there are six species that may be present but "there are no critical habitats within your project area under this office's jurisdiction." In a letter sent via email dated August 25, 2023, KHC requested US Fish and Wildlife Service concurrence with the determination that development of the proposed subdivision will have no effect on the Gray Bat (*Myotis grisescens*), the Northern Long-Eared Bat (*Myotis septentrionalis*), the Indiana Bat (*Myotis sodalis*), and the Monarch Butterfly (*Danaus plexippus*) and that the project may affect but is not likely to adversely affect the Kentucky Arrow Darter (*Etheostoma spilotum*) and the big sandy crayfish (*Cambarus callainus*). In a letter dated September 20, 2023, the Kentucky Ecological Services Field Office (KFO) of the US Fish and Wildlife Service stated "Federally Listed Species: The KHC has determined that the proposed project will have "no effect" on the gray bat (*Myotis grisescens*), Indiana bat (*Myotis sodalis*), and northern long-eared bat (*Myotis septentrionalis*) due to lack of suitable habitat within the project area. There is no statutory requirement to request concurrence with a "no effect" determination; however, the KFO acknowledges this determination and has no additional comments or concerns regarding these species. The KHC has also determined that the proposed project has the potential to affect the Kentucky arrow darter (*Etheostoma spilotum*) and big sandy crayfish (*Cambarus callainus*). Kentucky arrow darter: There are no streams or bodies of water within the action area. One intermittent stream, Bolen branch, is 630 feet south of the action area boundary and is not expected to be impacted by construction. In addition, a nature-based solution will be constructed for stormwater mitigation to prevent increased downstream flows from construction actions. Based on the lack of suitable habitat with the action area and the implementation of nature-based stormwater management, the KFO agrees the proposed action, 'may affect, but is not likely to adversely affect' the Kentucky arrow darter. Big sandy crayfish: There are no streams or bodies of water within the action area. One intermittent stream, Bolen branch, is 630 feet south of the action area boundary and is not expected to be impacted by construction. In addition, a nature-based solution will be constructed for stormwater mitigation to prevent increased downstream flows from construction actions. Based on the lack of suitable habitat with the action area and the

implementation of nature-based stormwater management, the KFO agrees the proposed action, 'may affect, but is not likely to adversely affect' the big sandy crayfish."

**Supporting documentation**

[USFWS Concurrence Letter-Chestnut Ridge 2023-9-20.pdf](#)

[Distance to Bolen Branch-Chestnut Ridge\(2\).pdf](#)

[National Wetlands Inventory Map-Chestnut Ridge\(2\).pdf](#)

[KHC USFWS Consultation Request Letter\\_Chestnut Ridge 2023-8-25.pdf](#)

[KHC USFWS Consultation Request Email\\_Chestnut Ridge 2023-8-25.pdf](#)

[Species List\\_Kentucky Ecological Services Field Office\\_Chestnut Ridge 2023-8-23.pdf](#)

[NE Consistency Letter\\_NLE Bat Rangewide Determination Key\\_Chestnut Ridge 2023-08-23.pdf](#)

[MA Consistency Letter\\_KY State-wide Determination Key\\_Chestnut Ridge\\_2023-08-23.pdf](#)

[IPaC Indiana Bat Determination Key\\_Chestnut Ridge 2023-8-23.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Explosive and Flammable Hazards

General requirements	Legislation	Regulation
HUD-assisted projects must meet Acceptable Separation Distance (ASD) requirements to protect them from explosive and flammable hazards.	N/A	24 CFR Part 51 Subpart C

1. Is the proposed HUD-assisted project itself the development of a hazardous facility (a facility that mainly stores, handles or processes flammable or combustible chemicals such as bulk fuel storage facilities and refineries)?

No

Yes

2. Does this project include any of the following activities: development, construction, rehabilitation that will increase residential densities, or conversion?

No

Yes

3. Within 1 mile of the project site, are there any current or planned stationary aboveground storage containers that are covered by 24 CFR 51C? Containers that are NOT covered under the regulation include:

- Containers 100 gallons or less in capacity, containing common liquid industrial fuels OR

- Containers of liquified petroleum gas (LPG) or propane with a water volume capacity of 1,000 gallons or less that meet the requirements of the 2017 or later version of National Fire Protection Association (NFPA) Code 58.

If all containers within the search area fit the above criteria, answer "No." For any other type of aboveground storage container within the search area that holds one of the flammable or explosive materials listed in Appendix I of 24 CFR part 51 subpart C, answer "Yes."

No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Yes

**Screen Summary**

**Compliance Determination**

There are no current or planned stationary aboveground storage containers of concern within 1 mile of the project site. The project is in compliance with explosive and flammable hazard requirements.

**Supporting documentation**

[No ASTs 1 Mile Radius Map-Chestnut Ridge.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Farmlands Protection

General requirements	Legislation	Regulation
The Farmland Protection Policy Act (FPPA) discourages federal activities that would convert farmland to nonagricultural purposes.	Farmland Protection Policy Act of 1981 (7 U.S.C. 4201 et seq.)	<a href="#">7 CFR Part 658</a>

**1. Does your project include any activities, including new construction, acquisition of undeveloped land or conversion, that could convert agricultural land to a non-agricultural use?**

Yes

No

**2. Does your project meet one of the following exemptions?**

- Construction limited to on-farm structures needed for farm operations.
- Construction limited to new minor secondary (accessory) structures such as a garage or storage shed
- Project on land already in or committed to urban development or used for water storage. (7 CFR 658.2(a))

Yes

No

**3. Does “important farmland,” including prime farmland, unique farmland, or farmland of statewide or local importance regulated under the Farmland Protection Policy Act, occur on the project site?**

- Utilize USDA Natural Resources Conservation Service’s (NRCS) Web Soil Survey <http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm>
- Check with your city or county’s planning department and ask them to document if the project is on land regulated by the FPPA (zoning important farmland as non-agricultural does not exempt it from FPPA requirements)
- Contact NRCS at the local USDA service center <http://offices.sc.egov.usda.gov/locator/app?agency=nrcs> or your NRCS state soil scientist <https://www.nrcs.usda.gov/wps/portal/nrcs/main/national/contact/states/> for

assistance

No

Based on the response, the review is in compliance with this section. Document and upload all documents used to make your determination below.

Yes

### **Screen Summary**

#### **Compliance Determination**

The project includes activities that could convert agricultural land to a non-agricultural use, but "prime farmland", "unique farmland", or "farmland of statewide or local importance" regulated under the Farmland Protection Policy Act does not occur on the project site. The project is in compliance with the Farmland Protection Policy Act. The USDA NRCS Web Soil Survey Map shows that the Chestnut Ridge project site consists of "uHfsF- Handshoe-Feds creek-Shelocta complex, 30 to 80 percent slopes, very stony" and "uMgmF- Matewan-Gilpin-Marrowbone complex, 12 to 80 percent slopes, very rocky." Both of these soil types are not prime farmland nor farmland of statewide importance.

#### **Supporting documentation**

[USDA Web Soil Survey Map-Chestnut Ridge.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

No

## Floodplain Management

General Requirements	Legislation	Regulation
Executive Order 11988, Floodplain Management, requires federal activities to avoid impacts to floodplains and to avoid direct and indirect support of floodplain development to the extent practicable.	Executive Order 11988	24 CFR 55

**1. Do any of the following exemptions apply? Select the applicable citation? [only one selection possible]**

55.12(c)(3)

55.12(c)(4)

55.12(c)(5)

55.12(c)(6)

55.12(c)(7)

55.12(c)(8)

55.12(c)(9)

55.12(c)(10)

55.12(c)(11)

None of the above

**2. Upload a FEMA/FIRM map showing the site here:**

[Preliminary FIRM Panel 21119C0125E\\_Chestnut Ridge.pdf](#)  
[FIRMETTE Map-Chestnut Ridge.pdf](#)

The Federal Emergency Management Agency (FEMA) designates floodplains. The FEMA Map Service Center provides this information in the form of FEMA Flood Insurance Rate Maps (FIRMs). For projects in areas not mapped by FEMA, use **the best available information** to determine floodplain information. Include documentation, including a discussion of why this is the best available information for the site.

**Does your project occur in a floodplain?**

No

Based on the response, the review is in compliance with this section.

Yes

**Screen Summary**

**Compliance Determination**

This project does not occur in a floodplain. The project is in compliance with Executive Order 11988. The FIRMette Map for the project site demonstrates that it is an area of minimal flood hazard (Panel Number 21119C0125D, eff. 9/16/2015). NOTE: FEMA Preliminary FIRM Panel number 21119C0125E, issued 10/27/2022, also shows that the project site is in an area of minimal flood hazard.

**Supporting documentation**

**Are formal compliance steps or mitigation required?**

Yes

✓ No



## Historic Preservation

General requirements	Legislation	Regulation
Regulations under Section 106 of the National Historic Preservation Act (NHPA) require a consultative process to identify historic properties, assess project impacts on them, and avoid, minimize, or mitigate adverse effects	Section 106 of the National Historic Preservation Act (16 U.S.C. 470f)	36 CFR 800 "Protection of Historic Properties" <a href="https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf">https://www.govinfo.gov/content/pkg/CFR-2012-title36-vol3/pdf/CFR-2012-title36-vol3-part800.pdf</a>

### **Threshold**

#### **Is Section 106 review required for your project?**

No, because the project consists solely of activities listed as exempt in a Programmatic Agreement (PA ). (See the PA Database to find applicable PAs.)

No, because the project consists solely of activities included in a No Potential to Cause Effects memo or other determination [36 CFR 800.3(a)(1)].

- ✓ Yes, because the project includes activities with potential to cause effects (direct or indirect).

### **Step 1 – Initiate Consultation**

#### **Select all consulting parties below (check all that apply):**

- ✓ State Historic Preservation Offer (SHPO) In progress

- ✓ Indian Tribes, including Tribal Historic Preservation Officers (THPOs) or Native Hawaiian Organizations (NHOs)

- ✓ Cherokee Nation In progress

Chestnut-Ridge-Knott-  
County-KY-Team-KY-  
CDBGDR-HOME

Leburn, KY

900000010335454

✓ Eastern Band of Cherokee  
Indians In progress

Other Consulting Parties

**Describe the process of selecting consulting parties and initiating consultation here:**

Kentucky Housing Corporation initiated consultation with the Kentucky Heritage Council (SHPO), who responded with a letter dated August 28, 2023. On August 23, 2023, Kentucky Housing Corporation sent letters via email to the tribes identified in a TDAT search for Knott County, KY, the Cherokee Nation and the Eastern Band of Cherokee Indians, to become consulting parties on the Section 106 review of this project.

Document and upload all correspondence, notices and notes (including comments and objections received below).

**Was the Section 106 Lender Delegation Memo used for Section 106 consultation?**

Yes  
No

**Step 2 – Identify and Evaluate Historic Properties**

1. Define the Area of Potential Effect (APE), either by entering the address(es) or uploading a map depicting the APE below:

Vacant land off Chestnut Ridge Loop Road, Knott County, KY

**In the chart below, list historic properties identified and evaluated in the APE. Every historic property that may be affected by the project should be included in the chart.**

Upload the documentation (survey forms, Register nominations, concurrence(s) and/or objection(s), notes, and photos) that justify your National Register Status determination below.

Address / Location / District	National Register Status	SHPO Concurrence	Sensitive Information
----------------------------------	-----------------------------	------------------	--------------------------

**Additional Notes:**

**2. Was a survey of historic buildings and/or archeological sites done as part of the project?**

Yes

✓ No

***Step 3 –Assess Effects of the Project on Historic Properties***

Only properties that are listed on or eligible for the National Register of Historic Places receive further consideration under Section 106. Assess the effect(s) of the project by applying the Criteria of Adverse Effect. (36 CFR 800.5)] Consider direct and indirect effects as applicable as per guidance on direct and indirect effects.

**Choose one of the findings below - No Historic Properties Affected, No Adverse Effect, or Adverse Effect; and seek concurrence from consulting parties.**

✓ No Historic Properties Affected

Based on the response, the review is in compliance with this section. Document and upload concurrence(s) or objection(s) below.

**Document reason for finding:**

✓ No historic properties present.

Historic properties present, but project will have no effect upon them.

No Adverse Effect

Adverse Effect

**Screen Summary**

**Compliance Determination**

Based on Section 106 consultation there are No Historic Properties Affected because there are no historic properties present. The project is in compliance with Section 106. Kentucky Housing Corporation initiated consultation with the Kentucky

Heritage Council (SHPO). In a letter dated August 28, 2023, the Kentucky Heritage Council stated "Our review indicates that the proposed project will not impact any properties or sites that are listed in or eligible for the National Register of Historic Places. The proposed project should not require cultural resource survey. We would concur with a finding of No Historic Properties Affected." On August 23, 2023, Kentucky Housing Corporation sent letters via email to the tribes identified in a TDAT search for Knott County, KY, the Cherokee Nation and the Eastern Band of Cherokee Indians, to become consulting parties on the Section 106 review of this project. The tribes did not respond within the 30-day comment period established by HUD CPD Notice 12-006.

**Supporting documentation**

[Tribal Memo-Chestnut Ridge\\_2023-9-25.pdf](#)

[SHPO Letter\\_Chestnut Ridge\\_2023-8-28.pdf](#)

[KHC-Chestnut Ridge\\_E Band of Cherokee Indians Consultation EMAIL attempt 2\\_2023-08-23.pdf](#)

[Tribal Consultation Checklist- Chestnut Ridge.pdf](#)

[TDAT Results\\_Knott County\\_2023-8-23.pdf](#)

[Section106CoverSheet-KHC\\_Chestnut Ridge Subdivision\\_2023-08-23.pdf](#)

[KHC-Chestnut Ridge\\_E Band of Cherokee Indians Consultation Letter\\_2023-08-23.pdf](#)

[KHC-Chestnut Ridge\\_Cherokee Nation Consultation Letter\\_2023-08-23.pdf](#)

[KHC-Chestnut Ridge\\_Cherokee Nation Consultation EMAIL\\_2023-08-23.pdf](#)

[KHC Section 106 Consultation Request Email to SHPO\\_2023-8-23.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Noise Abatement and Control

General requirements	Legislation	Regulation
HUD's noise regulations protect residential properties from excessive noise exposure. HUD encourages mitigation as appropriate.	Noise Control Act of 1972  General Services Administration Federal Management Circular 75-2: "Compatible Land Uses at Federal Airfields"	Title 24 CFR 51 Subpart B

**1. What activities does your project involve? Check all that apply:**

- New construction for residential use

NOTE: HUD assistance to new construction projects is generally prohibited if they are located in an Unacceptable zone, and HUD discourages assistance for new construction projects in Normally Unacceptable zones. See 24 CFR 51.101(a)(3) for further details.

Rehabilitation of an existing residential property

A research demonstration project which does not result in new construction or reconstruction

An interstate land sales registration

Any timely emergency assistance under disaster assistance provision or appropriations which are provided to save lives, protect property, protect public health and safety, remove debris and wreckage, or assistance that has the effect of restoring facilities substantially as they existed prior to the disaster  
None of the above

**4. Complete the Preliminary Screening to identify potential noise generators in the vicinity (1000' from a major road, 3000' from a railroad, or 15 miles from an airport).**

**Indicate the findings of the Preliminary Screening below:**

- ✓ There are no noise generators found within the threshold distances above.

Based on the response, the review is in compliance with this section. Document and upload a map showing the location of the project relative to any noise generators below.

Noise generators were found within the threshold distances.

### **Screen Summary**

#### **Compliance Determination**

The Preliminary Screening identified no noise generators in the vicinity of the project. The project is in compliance with HUD's Noise regulation. The project site is 18.39 miles from Wendell H. Ford Airport, the nearest airport, 2.40 miles from the nearest railroad (as measured by Google Earth Pro- the FRA measure tool shows the distance inaccurately as 3.80 miles), and 3,147 feet from KY-80, the nearest road with available AADT data from the Kentucky Transportation Cabinet. (The only other nearby road with AADT data is KY-1087-E, which is 3.337 feet away).

#### **Supporting documentation**

[No Airports 15 Mile Radius Map-Chestnut Ridge.pdf](#)

[KTC Functional Class Map-Chestnut Ridge.pdf](#)

[FRA Map-Chestnut Ridge.pdf](#)

[Distance to Nearest Railroad Chestnut Ridge.pdf](#)

[Distance to KY1087-E Chestnut Ridge.pdf](#)

[Distance to KY 80 Chestnut Ridge.pdf](#)

[Distance to Wendell H Ford County Airport-Chestnut Ridge\(1\).pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

- ✓ No

## Sole Source Aquifers

General requirements	Legislation	Regulation
<b>The Safe Drinking Water Act of 1974 protects drinking water systems which are the sole or principal drinking water source for an area and which, if contaminated, would create a significant hazard to public health.</b>	Safe Drinking Water Act of 1974 (42 U.S.C. 201, 300f et seq., and 21 U.S.C. 349)	40 CFR Part 149

1. Does the project consist solely of acquisition, leasing, or rehabilitation of an existing building(s)?

Yes

✓ No

2. Is the project located on a sole source aquifer (SSA)?

A sole source aquifer is defined as an aquifer that supplies at least 50 percent of the drinking water consumed in the area overlying the aquifer. This includes streamflow source areas, which are upstream areas of losing streams that flow into the recharge area.

✓ No

Based on the response, the review is in compliance with this section. Document and upload documentation used to make your determination, such as a map of your project (or jurisdiction, if appropriate) in relation to the nearest SSA and its source area, below.

Yes

### Screen Summary

#### Compliance Determination

The project is not located on a sole source aquifer area. The project is in compliance with Sole Source Aquifer requirements. There are no sole source aquifers in Kentucky.

**Supporting documentation**

[KY Sole Source Aquifers Map.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

No



## Wetlands Protection

General requirements	Legislation	Regulation
Executive Order 11990 discourages direct or indirect support of new construction impacting wetlands wherever there is a practicable alternative. The Fish and Wildlife Service's National Wetlands Inventory can be used as a primary screening tool, but observed or known wetlands not indicated on NWI maps must also be processed. Off-site impacts that result in draining, impounding, or destroying wetlands must also be processed.	Executive Order 11990	24 CFR 55.20 can be used for general guidance regarding the 8 Step Process.

**1. Does this project involve new construction as defined in Executive Order 11990, expansion of a building's footprint, or ground disturbance? The term "new construction" shall include draining, dredging, channelizing, filling, diking, impounding, and related activities and any structures or facilities begun or authorized after the effective date of the Order**

No

Yes

**2. Will the new construction or other ground disturbance impact an on- or off-site wetland? The term "wetlands" means those areas that are inundated by surface or ground water with a frequency sufficient to support, and under normal circumstances does or would support, a prevalence of vegetative or aquatic life that requires saturated or seasonally saturated soil conditions for growth and reproduction. Wetlands generally include swamps, marshes, bogs, and similar areas such as sloughs, potholes, wet meadows, river overflows, mud flats, and natural ponds.**

**"Wetlands under E.O. 11990 include isolated and non-jurisdictional wetlands."**

No, a wetland will not be impacted in terms of E.O. 11990's definition of new construction.

Based on the response, the review is in compliance with this section. Document and upload a map or any other relevant documentation below which explains your determination

Yes, there is a wetland that be impacted in terms of E.O. 11990's definition of new construction.

**Screen Summary**

**Compliance Determination**

The project will not impact on- or off-site wetlands. The project is in compliance with Executive Order 11990. The National Wetlands Inventory Map shows there are no Wetlands on the project site. Bolen Branch, the nearest body of water, is approximately 630 feet from the southern edge of the project development area and should not be impacted by construction. The Commonwealth will employ nature-based solutions for stormwater mitigation to prevent increased downstream flows as a result of construction.

**Supporting documentation**

[National Wetlands Inventory Map-Chestnut Ridge\(1\).pdf](#)  
[Distance to Bolen Branch-Chestnut Ridge.pdf](#)

**Are formal compliance steps or mitigation required?**

Yes

✓ No

## Wild and Scenic Rivers Act

General requirements	Legislation	Regulation
The Wild and Scenic Rivers Act provides federal protection for certain free-flowing, wild, scenic and recreational rivers designated as components or potential components of the National Wild and Scenic Rivers System (NWSRS) from the effects of construction or development.	The Wild and Scenic Rivers Act (16 U.S.C. 1271-1287), particularly section 7(b) and (c) (16 U.S.C. 1278(b) and (c))	36 CFR Part 297

### 1. Is your project within proximity of a NWSRS river?

✓ No

Yes, the project is in proximity of a Designated Wild and Scenic River or Study Wild and Scenic River.

Yes, the project is in proximity of a Nationwide Rivers Inventory (NRI) River.

### Screen Summary

#### **Compliance Determination**

This project is not within proximity of a NWSRS river. The project is in compliance with the Wild and Scenic Rivers Act. The Red River is both the nearest Wild and Scenic River and the nearest Nationwide Rivers Inventory body to the project site. The project site is 25.2 miles from the Nationwide Rivers Inventory portions of the Red River and is 40.74 miles from the Wild and Scenic portions of the Red River.

#### **Supporting documentation**

[NWSRS Website Red River KY.pdf](#)

[Distance to NRI Red River-Chestnut Ridge.pdf](#)

[Distance to Wild and Scenic Red River-Chestnut Ridge.pdf](#)

#### **Are formal compliance steps or mitigation required?**

Yes

✓ No

## Environmental Justice

General requirements	Legislation	Regulation
Determine if the project creates adverse environmental impacts upon a low-income or minority community. If it does, engage the community in meaningful participation about mitigating the impacts or move the project.	Executive Order 12898	

**HUD strongly encourages starting the Environmental Justice analysis only after all other laws and authorities, including Environmental Assessment factors if necessary, have been completed.**

**1. Were any adverse environmental impacts identified in any other compliance review portion of this project's total environmental review?**

Yes

No

Based on the response, the review is in compliance with this section.

### **Screen Summary**

#### **Compliance Determination**

No adverse environmental impacts were identified in the project's total environmental review. The project is in compliance with Executive Order 12898.

#### **Supporting documentation**

**Are formal compliance steps or mitigation required?**

Yes

No