

FEMA PUBLIC NOTICE OF AVAILABILITY
SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT
WEST AND EAST BROOKSIDE DEMOLITION AND CHERRY HILL DEVELOPMENT PROJECT
HUMPHREYS COUNTY, TENNESSEE

The Federal Emergency Management Agency (FEMA) hereby gives notice to the public of its intent to reimburse eligible applicants for eligible costs to repair or replace facilities damaged by Tennessee Severe Storms and Flooding occurring during the incident period of August 21, 2021. This notice applies to the Public Assistance (PA) project for the Waverly Housing Authority proposed demolition of the West and East Brookside Drive residential housing units and construction of the Cherry Hill Development in the City of Waverly, Humphreys County, Tennessee, implemented under the authority of the Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C. §§ 5121-5207.

Under a major disaster declaration, FEMA-DR-4609-TN, signed by President Biden on **August 23, 2021**, Humphreys County was designated as adversely affected by the disaster and eligible for PA funding.

This public notice concerns activities pertaining to the Waverly Housing Authority proposed demolition of the West and East Brookside Drive residential housing units and construction of the Cherry Hill Development in the City of Waverly, Humphreys County, Tennessee. The proposed demolition of thirty-three (33) one-story brick buildings comprised of sixty-two (62) residential units, installation of erosion/sediment control, and cutting/capping of existing underground utilities would occur at two (2) noncontiguous sites—a 9.9-acre parcel at 20-35 West Brookside Drive [GPS coordinates: (36.086161, -87.804332)] and 7.9-acre parcel at 1-17 East Brookside Drive, [GPS coordinates: (36.086597, -87.799177)]. Direct demolition impacts within the two (2) sites are anticipated to occur over approximately 4.9 acres combined, with seventeen (17) buildings to be removed at the East Brookside site and sixteen (16) buildings from West Brookside. The proposed Cherry Hill Development will be constructed on three (3) parcels totaling 18.81 acres between Washington Circle and Sycamore Avenue, north of Highway 70 in Waverly [GPS coordinates: (36.089353, -87.783527)]. The new residential housing project will consist of sixteen (16) two-story buildings comprising sixty-two (62) total housing units, one (1) office, and one (1) maintenance building, with infrastructure to include new roads, utilities, sidewalks, one hundred twenty-one (121) total parking spaces, landscaping, a playground, two (2) stormwater detention ponds, and a screened refuse area. Direct impacts associated with site preparation activities, such as tree clearing/stump removal and grading/soil compaction, and new construction are anticipated over thirteen (13) acres.

In accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969; DHS Directive 023-01, DHS Instruction Manual 023-01-001-01, FEMA Directive 108-1, and FEMA Instruction 108-1-1, to the extent they are consistent with NEPA; National Historic Preservation Act, Executive Order 11988, Executive Order 11990, and 44 CFR Part 9, FEMA has prepared a Supplemental Environmental Assessment (SEA). An alternatives analysis was performed, which included the evaluation of the Proposed Action and the No Action alternative.

Further detailed descriptions of all alternatives may be reviewed in the SEA conducted by FEMA or by contacting fema-r4ehp@fema.dhs.gov for a copy. The draft SEA is available for public comment and can be viewed on FEMA's and the Waverly Housing Authority's websites at the following locations:

FEMA WEBSITE LOCATION: <https://www.fema.gov/emergency-managers/practitioners/environmental-historic/nepa/supplemental-environmental-29>

WAVERLY HOUSING AUTHORITY WEBSITE LOCATION: <https://waverlytn.org/>

A hard copy of the SEA is available for review at the Waverly City Hall located at 101 East Main Street, Waverly, TN, during the following hours: Monday to Friday from 8AM to 4:30PM.

The Endangered Species Act (ESA) requires federal agencies to consult with the United States Fish and Wildlife Service (USFWS) and National Marine Fisheries Service (NMFS) for effects to federally listed threatened and endangered species. FEMA has determined that the proposed project will have no effect on any federally listed endangered or threatened species and will not result in the destruction or adverse modification of designated critical habitats. This determination is supported by an internal file-to-memo developed in accordance with Section 7 of the Endangered Species Act (ESA), and it incorporates findings from an Information for Planning and Consultation (IPaC) report. Per ESA; 16 U.S.C. §1536, ESA Section 7 consultation for prospective agency actions is only required when there is "reason to believe that an endangered species or a threatened species may be present in the area affected by [a] project and that implementation of such action will likely affect such species" or the agency action "is likely to jeopardize the continued existence of any species proposed to be listed under section 1533 of this title or result in the destruction or adverse modification of critical habitat proposed to be designated for such species."

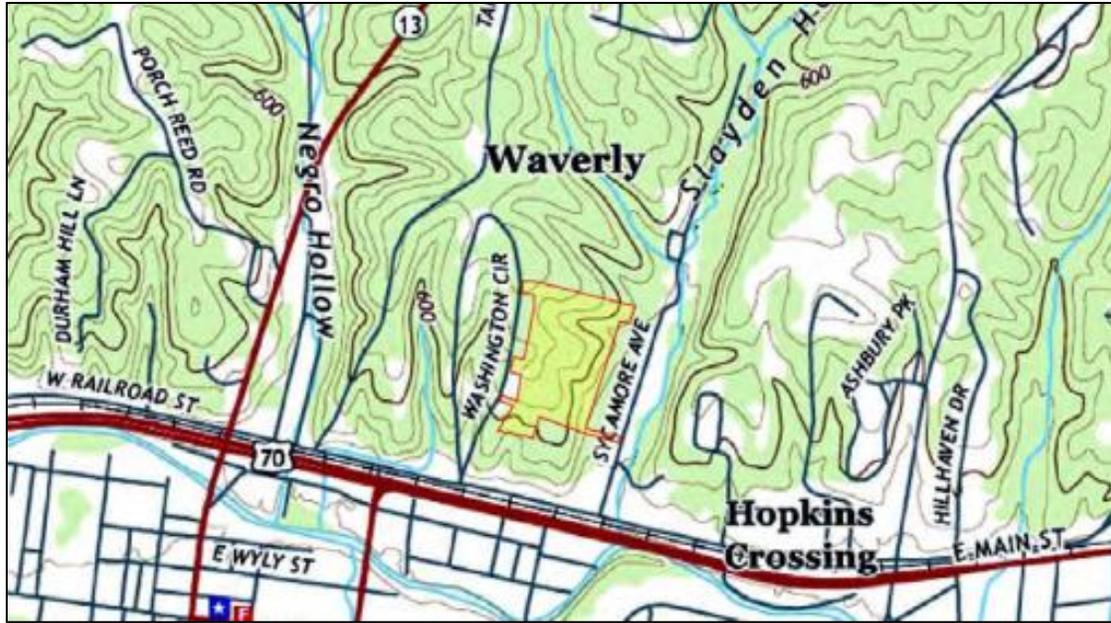
The no effect determination is based, in part, on specific conditions and protective measures incorporated into the project scope to avoid impacts on aquatic species potentially present in the adjacent Trace Creek. These conditions include best management practices (BMPs) for erosion and sediment control, which will prevent runoff, turbidity, and other disturbances that could otherwise impact aquatic species.

The National Historic Preservation Act (NHPA) requires federal agencies to take into account the effect of their undertakings on historic properties. FEMA consulted with the Tennessee State Historic Preservation Officer (SHPO) and nine (9) federally recognized Tribes with current and ancestral interest in Humphreys County, Tennessee. A consultation letter and copy of the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee* report was submitted to the Tennessee SHPO, while Tribal consultation letters and copies of the referenced Phase I archaeological survey report were submitted to nine (9) federally recognized Tribes with current and ancestral interest in Humphreys County, Florida. FEMA received concurrence with the determination of No Historic Properties Affected from the Tennessee SHPO and Chickasaw Nation. No objections to the proposed project were expressed by the remaining eight (8) federally recognized Tribes with current and ancestral interest in Humphreys County.

Presidential Executive Orders 11988 and 11990 require that all federal actions in or affecting the floodplain or wetlands be reviewed for opportunities to relocate and evaluated for social, economic, historical, environmental, legal, and safety considerations. The proposed demolition of residential housing units on West and East Brookside Drive will occur within Zone AE, a Special Flood Hazard Area (SFHA) also referred to as the 100-year floodplain, per City of Waverly FIRM Panel # 47085C0158D, dated 9/25/2009. Demolition and subsequent removal of these vulnerable structures from the SFHA will reduce future risks to life and property, while eliminating repetitive loss. The proposed Cherry Hill Development site is mapped within an unshaded X zone, which is defined as the 500-year floodplain, or an area of minimal flood risk per City of Waverly FIRM panel # 47085C0158D dated 09/25/2009. Based on the location of proposed demolition activities within the 100-year floodplain, FEMA completed the full 8-Step Decision-Making Process, as required under Executive Order 11988 (Floodplain Management) and 44 CFR Part 9. The results of the 8-step analysis confirmed that the proposed relocation avoids adverse effects to floodplain functions and values and supports long-term community resilience. Therefore, no short-term or long-term impacts to floodplains associated with proposed demolition activities are anticipated.

This notice serves as the final public notice regarding the above-described action proposed for funded by the FEMA PA Program. Interested persons may obtain information about these actions by writing to the Federal Emergency Management Agency, Region 4, 3005 Chamblee Tucker Road, Atlanta, Georgia 30341, or by emailing fema-r4ehp@fema.dhs.gov. Comments should be sent in writing with the subject line, "PA 4609-00132 and 00135, West and East Brookside Demolition and Cherry Hill Development Project" at the above address within 15 days of the date of this notice.

Posted: 06/17/2025



Supplemental Environmental Assessment

436901 and 436706 - West and East Brookside Demolition and Cherry Hill Development

FEMA-DR-4609-TN

Waverly, Humphreys County, Tennessee

June 13, 2025



FEMA

U.S. Department of Homeland Security
Federal Emergency Management Agency
Region 4 - Atlanta, GA

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LIST OF ACRONYMS

| | |
|----------------------------------------------------|-------------------------------------------------------------------|
| AADT – Average Annual Daily Traffic | ESA – Endangered Species Act |
| ACM – Asbestos Containing Materials | FEMA - Federal Emergency Management Agency |
| ASTM - American Society for Testing and Materials | FIRM - Flood Insurance Rate Map |
| APHIS - Animal and Plant Health Inspection Service | FONSI - Finding of No Significant Impact |
| ARAP - Aquatic Resource Alteration Permits | HMGP - Hazard Mitigation Grant Program |
| BMP – Best Management Practice | HUD - Housing and Urban Development |
| CBIA – Coastal Barrier Improvement Act of 1990 | IA - Individual Assistance |
| CEQ - Council on Environmental Quality | ICIS - Integrated Compliance Information System |
| CFR - Code of Federal Regulations | IPaC - Information for Planning and Consultation |
| CGP - Construction Stormwater General Permit | LAeq – A-weighted equivalent continuous sound level |
| CWA – Clean Water Act | LIHTCs - Low Income Housing Tax Credits |
| CZMA – Coastal Zone Management Act | MBTA - Migratory Bird Treaty Act |
| CZMP – Coastal Zone Management Plan | NAAQS - National Ambient Air Quality Standards |
| DAPC - Division of Air Pollution Control | NEPA – National Environmental Policy Act |
| dBA - A-weighted Decibels | NESHAP - National Emission Standards for Hazardous Air Pollutants |
| DNL – Day/Night Noise Level | NHL – National Historic Landmark |
| EA - Environmental Assessment | NHPA – National Historic Preservation Act |
| EO - Executive Order | NMFS – National Marine Fisheries Service |
| EPA – Environmental Protection Agency | NOAA – National Oceanic and Atmospheric Administration |
| EPSC - Erosion Prevention and Sediment Control | |

LIST OF ACRONYMS, CONTINUED

| | |
|-----------------------------------------------------------------|---------------------------------------------------------------|
| NOI – Notice of Intent | SHPO – State Historic Preservation Officer |
| NPDES - National Pollutant Discharge Elimination System | SWPPP – Stormwater Pollution Prevention Plan |
| NPS – National Park Service | TDAT – Tribal Directory Assessment Tool |
| NRCS - Natural Resources Conservation Service | TDEC - Tennessee Department of Environmental and Conservation |
| NRHP – National Register of Historic Places | TDOA - Tennessee Division of Archaeology |
| NWP - Nationwide Permit | TDOT – Tennessee Department of Transportation |
| OEHP - Office of Environmental Planning & Historic Preservation | THC - Tennessee Historic Commission |
| ONAC – Office of Noise Abatement and Control | THDA – Tennessee Housing Development Agency |
| OSHA - Occupational Safety and Health Administration | THPO – Tribal Historic Preservation Officer |
| PPQ - Plant Protection and Quarantine | USACE – United States Army Corps of Engineers |
| PA - Public Assistance | USCB – United States Census Bureau |
| PL - Public Law | USDA – United States Department of Agriculture |
| PNP – Private Nonprofit | USDOT - U.S. Department of Transportation |
| RAD – Rental Assistance Demonstration | USFWS – United States Fish and Wildlife Service |
| REC – Record of Environmental Consideration | WOTUS – Waters of the U. S. |
| RROF – Request for Release of Funds | WHA - Waverly Housing Authority |
| SEA - Supplemental Environmental Assessment | WWC – Wet Weather Conveyance |
| SFHA - Special Flood Hazard Area | |

1. Introduction

Tennessee Severe Storm and Flooding impacted Tennessee on August 21, 2021, bringing heavy rain and flooding. President Biden signed a disaster declaration (FEMA-4609-DR-TN) on August 23, 2021, authorizing the Department of Homeland Security's Federal Emergency Management Agency (FEMA) to provide federal assistance to the designated areas of Tennessee. This assistance is provided pursuant to the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act), and Public Law (PL) 93-288, as amended. Section 406 of the Stafford Act authorizes FEMA's Public Assistance (PA) Program to repair, restore, and replace state and local government and certain private nonprofit facilities damaged as a result of the event.

Humphreys County, Tennessee was designated in Tennessee Severe Storms and Flooding to receive federal assistance. Humphreys County has applied through the PA Program to receive funding to 1) demolish and dispose of existing structures on West Brookside Drive and East Brookside Drive in the City of Waverly that were damaged beyond salvageability by the August 2021 flood disaster and 2) construct sixty-two (62) new residential dwelling units on a nearby new site which will replace the dwelling units on West and East Brookside Drive severely damaged by the flood disaster.

Accordingly, the Waverly Housing Authority (WHA) and the United States Department of Housing and Urban Development (HUD) prepared two (2) Environmental Assessments (EA). *Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects, 24 CFR Part 58, West Brookside and East Brookside Demolition and Disposition of Existing Structures* was completed for the West Brookside and East Brookside Demolition and *Environmental Assessment Determinations and Compliance Findings for HUD-assisted Projects, 24 CFR Part 58, Cherry Hill Development* was prepared for the proposed Cherry Hill Development. HUD issued a Finding of No Significant Impact (FONSI) for the demolition sites in October 2022 and a FONSI for the Cherry Hill Development in November 2023.

A federal agency may adopt another federal or state agency's EA providing the original document satisfies the agency's National Environmental Policy Act (NEPA) requirements (42 U.S.C. 4336a(b)). FEMA has adopted HUD's EAs and has also provided supplemental information through the preparation of a Supplemental Environmental Assessment (SEA). HUD's EAs and FONSI are included as Appendix E of this document. This SEA has been prepared in accordance with Section 102 of the National Environmental Policy Act (NEPA) of 1969, DHS Directive 023-01, DHS Instruction Manual 023-01-001-01, FEMA Directive 108-1, and FEMA Instruction 108-1-1, to the extent they are consistent with NEPA. As a federal agency FEMA is required to comply with NEPA and all other applicable laws and regulations. To achieve this level of compliance, FEMA is required to consider reasonably foreseeable environmental impacts before funding or approving actions and projects. or approving actions and projects. By preparing this SEA, FEMA has analyzed the potential environmental impacts associated with the alternatives described in this SEA.

The purpose of this SEA is to meet FEMA's responsibilities under NEPA and to analyze the potential environmental impacts of the proposed action. FEMA will use the findings in this SEA to determine whether to prepare an Environmental Impact Statement for the proposed undertaking or to issue a Finding of No Significant Impact (FONSI).

2. Purpose and Need

As a result of the Tennessee Severe Storm and Flooding disaster in 2021, sixty-two (62) residential housing units in Waverly, Humphreys County, Tennessee were substantially damaged. The Waverly Housing Authority may be eligible for funding through the FEMA PA Program pursuant to Title 44 of the CFR § 206.223(a)(3). The purpose of the proposed undertaking is to demolish and properly dispose of sixty-two (62) existing flood-damaged residential structures and associated improvements, including foundations, footings, sidewalks, and utilities, located on West Brookside Drive and East Brookside Drive. These properties, managed by the Waverly Housing Authority, were severely damaged during the August 2021 Tennessee Severe Storm and Flooding disaster, rendering them uninhabitable and unsafe. The project also aims to develop sixty-two (62) new residential dwelling units at a nearby site located outside of a special flood hazard area (SFHA) to replace the lost housing stock. By constructing new housing in a safer location with lessened chance of annual flooding, the project will provide displaced residents with secure, affordable housing while ensuring long-term resilience against future flood events.

The Waverly Housing Authority has provided affordable housing to low- and moderate-income families and individuals since 1961, operating seventy (70) public housing units within the Waverly, Tennessee community. The loss of sixty-two (62) housing units due to the flood has exacerbated an already existing shortage of affordable housing, further straining local resources and intensifying the social and economic challenges faced by displaced residents. The need for affordable housing in Waverly was significant even before the disaster, but the destruction of these homes has made it even more urgent. Without intervention, the housing deficit will persist, limiting access to stable housing for vulnerable populations and impeding the community's long-term recovery. This project directly addresses these challenges by replacing lost housing in a safer location, supporting community resilience, and contributing to Waverly's ongoing recovery efforts.

The objective of FEMA's PA Program is to provide funding assistance to state, tribal and local governments, and certain types of Private Nonprofit (PNP) organizations so that communities can quickly respond to and recover from major disasters or emergencies declared by the President. Through the PA Program, FEMA provides supplemental federal disaster assistance for debris removal, emergency protective measures, and the repair, replacement, or restoration of disaster- damaged, publicly owned facilities and the facilities of certain PNP organizations. The PA Program also encourages protection of these damaged facilities from future events by providing funding assistance for hazard mitigation measures during the recovery process.

In accordance with federal laws and FEMA regulations, the EA process for a proposed federal action must include an evaluation of alternatives and a discussion of the reasonably foreseeable environmental impacts. This SEA was prepared in accordance with FEMA's regulations as required under NEPA. As part of this NEPA review, the requirements of other environmental laws and executive orders are addressed.

3. Project Location and Background

West and East Brookside Demolition - The proposed demolition project is located on two (2) noncontiguous sites located within the city limits and commercial business district of the City of Waverly, Humphreys County, Tennessee.

The East Brookside site (East Site), located at 1-17 E Brookside Drive, Waverly, TN (36.086597, -87.799177) is comprised of one parcel (064H A 001.00) totaling 7.9 acres.

The West Brookside site (West Site), located at 20-35 W Brookside Drive, Waverly, TN (36.086161, -87.804332) is comprised of one parcel (065E A 003.00) totaling 9.9 acres.

Collectively, both sites constitute and are referred to as the “demolition site”. The demolition site contains thirty-three (33) one-story brick buildings, which make up sixty-two (62) residential units, that were damaged in the August 2021 flood. Refer to Appendix A1 for exhibits developed from publicly available sources that depict the West Site and the East Site.

The property comprising the demolition site is owned by the Waverly Housing Authority and is zoned high density residential (R-6). Between the 1960s and August 2021, the use of the demolition site was residential with duplex dwelling units. Prior to the August 2021 flood, Waverly Housing Authority operated a sixty-two (62)-unit low-income development on the demolition site. Since being extensively damaged during the flood of August 2021, the demolition site has been vacant, and the need for affordable housing within Waverly has grown. Existing conditions of the demolition site and its buildings are shown in the site photographs attached as Appendix B1.

Cherry Hill Development - The proposed Cherry Hill Development project is located on three (3) parcels of land lying within the city limits of Waverly, Humphreys County, Tennessee. The property is located near Washington Circle and Sycamore Avenue (36.089353, -87.783527), on parcels known in the records of the Assessor for Humphreys County as Parcels 064B D 001.00, 064B C 017.00, and 064B C 011.00 (the “development site”) totaling 18.81 acres. Refer to Appendix A3 for drawings showing the surveyed limits of each of the parcels comprising the development site.

The portion of the development site that is planned for residential housing is zoned high density residential (R-6). The development site is mainly wooded and has never been developed. The property was previously platted, including public right-of-way for a public road (“Cherry Road”) that currently is unconstructed. The nearest water, sewer, and electrical utilities lie in the right-of-way of Washington Circle and Sycamore Avenue. Existing conditions of the development site are shown in the site photographs attached as Appendix B2.

4. Alternatives

Two (2) alternatives are considered in addressing the purpose and need of the West and East Brookside Demolition and Cherry Hill Development project. Alternative 1 is the No Action Alternative and Alternative 2 would relocate the flood damaged housing developments to a new site located outside of the floodplain. Reasonable alternatives are those that meet the underlying purpose of, and need for, the Proposed Action; are feasible from both technical and economic standpoints; and meet

reasonable screening criteria (selection standards) that are suitable to a particular action. An alternative that was determined to not meet the purpose and need was eliminated from detailed analysis in this SEA and is discussed below.

4.1. Alternative 1: No Action Alternative

Under the “no action” alternative, the damaged, vacant buildings would be left in place, as-is. The planned affordable housing re-development to replace the housing lost to the storm would not be completed. The “no action” alternative would result in the continued deterioration of the damaged and vacant buildings. These buildings would become a hazard to the community and would negatively impact the health and safety of Waverly residents. The “no action” alternative would not address the growing need for affordable housing in Waverly. Waverly already had insufficient affordable housing stock before the flood disaster. Waverly Housing Authority lost sixty-two (62) affordable housing units as a result of the flood event. Many families were displaced as a result.

4.2. Alternative 2: Relocate Waverly Housing Authority Units to New Site (Preferred Alternative)

The Waverly Housing Authority (subrecipient) proposes demolition of the residential housing of East Brookside located at 1 - 17 E Brookside Drive, Waverly, TN (36.086597, -87.799177) and West Brookside located at 20 - 35 W Brookside Drive, Waverly, TN (36.086161, -87.804332) to clear the two (2) noncontiguous sites for disposition. The proposed project does not involve new construction for residential use or rehabilitation of an existing residential property at these locations. The buildings were heavily damaged, many beyond repair, in a flood disaster that occurred on August 21, 2021. The scope of work includes asbestos abatement, demolition, and site stabilization for a total of thirty-three (33) one-story brick buildings across the two (2) sites, along with their foundations, utilities, driveways, pavilions, portable buildings, and playgrounds on a combined 17.8 acres. Direct demolition impacts within the two (2) sites is approximately 4.9 acres combined, with seventeen (17) buildings being removed at East Brookside and sixteen (16) buildings removed from West Brookside. Anticipated depths of ground disturbance range from minimal for activities such as the installation of erosion/sediment control and up to three (3) feet deep for activities including the cutting/capping underground utilities (water/sewer) within five (5) feet of the buildings. Demolishing and disposing of the existing buildings comprise an area measuring approximately 61,650 SF at a depth of two (2) feet.

The Waverly Housing Authority proposes constructing a new, flood-resilient multi-family housing development at another location that is currently undeveloped, to be known as Cherry Hill and located between Washington Circle and Sycamore Avenue, north of Highway 70 in Waverly, TN (36.089353, -87.783527). The proposed Cherry Hill Residential Housing project will include new roads, utilities, sidewalks, one hundred twenty-one (121) total parking spaces, 85,180 SF of new building construction, landscaping, a playground, two (2) stormwater detention ponds, and a screened refuse area, comprising thirteen (13) acres of ground disturbance on the eighteen (18)-acre new development tract. Anticipated new ground disturbance includes tree clearing/stump removal, grading/soil compaction, and the installation of stormwater/utilities infrastructure at depths ranging

from one (1) foot to twelve (12) feet deep. The new residential housing project consists of sixteen (16) two-story buildings providing sixty-two (62) total housing units, one (1) office and one (1) maintenance building. The residential housing project will be accessed from Washington Circle via the proposed Cherry Hill Lane. The new Cherry Hill Residential Housing will provide sixteen (16) 1-bedroom dwelling units and twenty-four (24) 2-bedroom dwelling units in five (5) residential buildings; twenty (20) 3-bedroom dwelling units in ten (10) townhouse buildings; and two (2) 4-bedroom dwelling units in one townhouse building.

The development would use Low Income Housing Tax Credits (LIHTCs), a below market rate mortgage, and, potentially, funding from programs such as the National Housing Trust Fund (NHTF), the Tennessee Housing Trust, and the Federal Home Loan Bank. WHA has not yet determined whether any Capital Funds will be expended on this Project. Some units may be developed and operated as Rental Assistance Demonstration (RAD) units, some units will be developed and operated as Project Based Voucher units, and some units will be developed and operated as LIHTC-only units.

4.3. Alternatives Considered and Dismissed

4.3.1. REPAIR/REBUILD AT EXISTING LOCATION

Rebuilding the flood damaged dwellings on their original respective parcels as an alternative was determined to be not feasible nor prudent and dismissed from further consideration. Many structures were damaged beyond repair and rebuilding the existing units is not permissible per Section 14-311(2)(a) of the City of Waverly's Municipal Code which requires new construction and substantial improvement of any residential building to be elevated to no lower than one foot above the base flood elevations. Elevating the existing masonry and concrete block building is infeasible and was dismissed from consideration.

4.4. Impact Evaluation

NEPA requires agencies to consider "reasonably foreseeable environmental effects of the proposed agency action" and "any reasonably foreseeable adverse environmental effects which cannot be avoided should the proposal be implemented" (42 U.S.C. 4332(C)). When possible, quantitative information is provided to establish potential impacts; otherwise, the potential qualitative impacts are evaluated based on the criteria listed in Table 4.0.1:

Table 4.0.1: Impact Significance and Context Evaluation Criteria for Potential Impacts

| Impact Scale | Criteria |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| None/Negligible | The resource area would not be affected and there would be no impact, OR changes or benefits would either be non-detectable or, if detected, would have effects that would be slight and local. Impacts would be well below regulatory standards, as applicable. |
| Minor | Changes to the resource would be measurable, but the changes would be small and localized. Impacts or benefits would be within or below regulatory standards, as applicable. Mitigation measures would reduce any potential adverse effects. |
| Moderate | Changes to the resource would be measurable and have either localized or regional scale impacts/benefits. Impacts would be within or below regulatory standards, but historical conditions would be altered on a short-term basis. Mitigation measures would be necessary, and the measures would reduce any potential adverse effects. |
| Major | Changes to the resource would be readily measurable and would have substantial consequences/benefits on a local or regional level. Impacts would exceed regulatory standards. Mitigation measures to offset the adverse effects would be required to reduce impacts, though long-term changes to the resource would be expected. |

The impact analysis in this EA evaluates the potential direct and indirect impact of the No Action and Proposed Action alternatives on environmental, cultural, and social resources. A summary table of the potential impacts of the No Action and Proposed Action alternatives is provided here:

Table 4.0.2: Environmental Consequence by Alternatives

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|------------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| 5.1 | Physical Resources | | | | |
| | Land Resources and Topography | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 13-14), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 14).</p> <p><i>None</i></p> | <p>Updated– See Cherry Hill Development EA Environmental Assessment Factors Table (page 13-14), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 14).</p> <p><i>Minor</i></p> <p>Short-term, minor adverse impacts to the Cherry Hill Development Site due to clearing and grading required for construction equipment accessibility and creation of new roadways, residencies, and new recreational area. Other minor impacts include the use of onsite stormwater detention ponds for drainage capture.</p> | Not applicable. | <p>Not applicable.</p> <p>Grading and clearing plans will be in compliance with standard engineering practices and applicable state and local regulations. Stormwater detention and natural site drainage will be done in accordance with a Tennessee Department of Environmental and Conservation (TDEC) approved Stormwater Pollution Prevention Plan (SWPPP).</p> |
| | Geology and Soils | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 14), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 14)</p> <p><i>None</i></p> | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 14), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 14)</p> <p><i>None</i></p> | Not applicable. | <p>Not applicable.</p> <p>Soil data was gathered using the Web Soil Survey compiled by the US Department of Agriculture (USDA). See Appendix C Subsection C8 for this data. The Waverly Housing Authority also engaged a geotechnical engineering firm to provide limited geotechnical study of certain areas on the</p> |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|---------|---------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | | | | | buildable portion of the site, in order to confirm suitability of the soil for development. |
| | Farmlands Protections | <p>Updated – West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9)</p> <p><i>Negligible</i></p> <p>Short-term negligible, adverse impacts due to underutilization of prime farmland soil contained on the West and East Brookside sites.</p> | <p>Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 8-9)</p> <p><i>Negligible</i></p> <p>Short-term negligible, adverse impacts due to new development on 0.2 acres of prime farmland contained on the Cherry Hill site.</p> | No applicable. | <p>Not applicable.</p> <p>Less than 1 acre of prime farmland is being developed on, no consultation with USDA NRCS is required.</p> |
| | Air Quality | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 5), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 5-6)</p> <p><i>None</i></p> | <p>Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 5), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 5-6)</p> <p><i>Negligible</i></p> <p>Short-term adverse impacts due to exhaust and dust from construction activity and equipment use at demolition and development sites.</p> | <p>Not applicable.</p> <p>Dust will be controlled by the contractor in accordance with normal industry standards and City requirements. Site safety will be maintained by the demolition contractor utilizing normal construction safety measures.</p> <p>Condition addressing compliance with state air quality regulations and removal and disposal of asbestos containing materials (ACMs) shall be adhered to, as detailed in section 7.1. A copy of the ACMs is located Appendix C Subsection C2.</p> | <p>Not applicable.</p> <p>Dust will be controlled by the contractor in accordance with normal industry standards and City requirements. Site safety will be maintained by the construction contractor utilizing normal construction safety measures.</p> |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|------------|-------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| 5.2 | Water Resources | | | | |
| | Water Quality | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 18-19), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 17) <i>None</i> | Updated –See Cherry Hill Development EA Environmental Assessment Factors Table (page 18-19), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 17) <i>Minor</i> | Erosion Prevention and Sediment Control (EPSC) measures will be implemented during demolition as required by State regulations. The Proposed Project will comply with Tennessee Department of Environmental and Conservation (TDEC) regulations. A State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities will be obtained prior to commencing demolition activities. A copy of this permit is located in Appendix C Subsection C9. | A Notice of Intent and Stormwater Pollution Prevention Plan (SWPPP) will be submitted for approval by the Tennessee Department of Environment and Conservation. An erosion prevention and sediment control (EPSC) plan will be followed during construction activities. A State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities will be obtained prior to commencing development of the Cherry Hill project. |
| | Floodplains (Executive Order 11988) | Updated - See Cherry Hill Development EA Environmental Assessment Factors Table (page 9), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9) <i>None</i> | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9) <i>None</i> | An 8-step checklist as required by 44 CFR Part 9 was completed, see Appendix C1. Conditions addressing the timing of public notice and obligation of funds and local floodplain administrator permitting/coordination shall be adhered to, as addressed in section 7.1. | Not applicable. The proposed development area is not located within a FEMA-designated special flood hazard area (SFHA). |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|------------|----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | Wetland (Executive Order 11990) | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 11-12), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 11-12) <i>None</i> | Updated –See West and East Brookside Demolition EA Environmental Assessment Factors Table (page 11-12) <i>Minor</i> Potential short-term, adverse impacts due to sediment movement into onsite aquatic resources as a result of demolition and development activities. | During demolition activities, erosion prevention and sediment control (EPSC) measures will be implemented as required by State regulations. The Proposed Project will comply with TDEC regulations regarding permitting. Condition addressing avoidance of construction activities and staging of equipment within or in a manner that impacts wetlands shall be adhered to, as addressed in section 7.1. | Not applicable. In a Jurisdictional Determination (JD) dated 05/29/2024, the U. S. Army Corps of Engineers (USACE) determined the five (5) watercourses on site were non-jurisdictional and do not constitute significant water resources or waters of the U.S. (WOTUS); no 404 or 401 Clean Water Act (CWA) permitting is required. |
| 5.3 | Coastal Resources | | | | |
| | Coastal Zone Management Act (CZMA) | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 5), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 6) <i>None</i> | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 5), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 6) <i>None</i> | Not applicable. The proposed project is not located in and does not affect a coastal zone. Tennessee is a landlocked state without a sea coastline. | Not applicable. The proposed project is not located in and does not affect a coastal zone. Tennessee is a landlocked state without a sea coastline. |
| | Coastal Barrier Resources Act (CBRA) and Coastal Barrier | No change – See Cherry Hill Development EA Environmental Assessment Factors | No change – See Cherry Hill Development EA Environmental Assessment Factors | Not applicable. The proposed project is not located in and does not affect a coastal zone. Tennessee is a | Not applicable. The proposed project is not located in and does not affect a coastal zone. Tennessee is a |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | Improvement Act of 1990 (CBIA) | Table Page 4), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 5) <i>None</i> | Table (page 4), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 5) <i>None</i> | landlocked state without a sea coastline. | landlocked state without a sea coastline. |
| 5.4 | Biological Resources | | | | |
| | Vegetation | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 19), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 17) <i>None</i> | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 19), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 17) <i>None</i> | All state restrictions regarding the spread of harmful insects, diseases, and other pests through the movement of construction equipment or materials regulated by the Tennessee Department of Agriculture and USDA Animal and Plant Health Inspection Service Plant Protection and Quarantine (APHIS-PPQ) will be observed and upheld during the demolition process. | All state restrictions regarding the spread of harmful insects, diseases, and other pests through the movement of construction equipment or materials regulated by the Tennessee Department of Agriculture and USDA-APHIS-PPQ will be observed and upheld during the demolition process. Additionally, the project will comply with project-specific conditions designed to minimize or eliminate potential effects on sensitive habitat features. |
| | Threatened and Endangered Species | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 7-8), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 7-8) <i>None</i> | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 7-8), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 7-8) <i>Negligible</i> Temporary, short-term minor impacts to aquatic species potentially occupying the reach of Trace | Specific conditions and protective measures will be incorporated into the development scope to avoid impacts on aquatic species potentially present in the adjacent Trace Creek. Conditions requiring the implementation of construction/demolition best management practices (BMPs), including erosion control measures, shall be adhered to, as | Specific conditions and protective measures will be incorporated into the development scope as well as additional project-specific conditions designed to minimize or eliminate potential effects on sensitive habitat features. Conditions requiring the implementation of construction/demolition BMPs, including erosion control measures, shall |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|---------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | | | <p>Creek adjacent to the Brookside sites may occur during construction activities. Similarly, any impacts to habitat features on the Cherry Hill site are expected to be minor and short-lived, with no long-term adverse effects.</p> <p>Implementation of best management practices (BMPs) and protective measures will ensure that these temporary disturbances are minimized and do not result in lasting harm.</p> | addressed in section 7.1. | be adhered to, as addressed in section 7.1. |
| | Migratory Bird Treaty Act | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 19), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 17)</p> <p>None</p> | <p>Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 19)</p> <p>Minor and temporary impacts to migratory birds could occur during vegetation clearing at the Cherry Hill Site due to increased activity and noise. However, the project footprint is limited in scale, and the proximity to development reduces the likelihood that the site provides optimal nesting or foraging habitat for sensitive species. Considering the limited scope of disturbance, the site’s proximity to the City of Waverly and adjacent residential areas, FEMA has determined that</p> | Not applicable. | Specific conditions and protective measures will be incorporated into the development’s scope as well as additional project-specific conditions designed to minimize or eliminate potential effects on sensitive habitat features. |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|-----------------|
| | | | | Demolition | Development |
| | | | the proposed action will have no effect on migratory bird species. <i>Negligible</i> | | |
| 5.5 | Cultural Resources | | | | |
| | Visual Quality and Aesthetics | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9-10), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9-10) <i>Minor</i> Minor, long-term adverse impacts could result from the future dilapidation of any standing flood damaged buildings within the flood zone. | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9-10), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9-10) <i>Minor</i> Minor short-term adverse impact on the aesthetic quality of the surrounding landscape in the immediate vicinity of construction and demolition associated with construction equipment. Longer-term, minor beneficial effect associated with the removal of the blighted existing structures and subsequent construction of the proposed new housing units. | Not applicable. | Not applicable. |
| | Historical Standing Structures | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9-10), West and East Brookside Demolition EA | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9-10), West and East Brookside Demolition EA Environmental | Not applicable. | Not applicable. |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|------------|--------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | | Environmental Assessment Factors Table (page 9-10) <i>None</i> | Assessment Factors Table (page 9-10) <i>None</i> | | |
| | Archaeological Resources | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9-10), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9-10) <i>None</i> | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 9-10), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 9-10) <i>None</i> | Conditions addressing fill source and inadvertent archaeological discoveries and requiring the implementation of Demolition Best Management Practices for Tennessee shall be adhered to, as detailed in section 7.1. State of Tennessee BMPs are located in Appendix D Subsection D3. | Conditions addressing fill source and inadvertent archaeological discoveries shall be adhered to, as detailed in section 7.1. |
| 5.6 | Socioeconomic Resources | | | | |
| | Socioeconomics | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 12-13), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 12-13) | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 12-13), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 12-13) | Not applicable. | Not applicable. |
| | Land Use and Planning | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 13-14), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 14) | Updated – See Cherry Hill Development EA Environmental Assessment Factors Table (page 13-14), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 14) <i>Minor</i> | Not applicable. | The proposed project will go through normal City of Waverly review and approval process for development. Rezoning to a high-density residential zoning district was approved in Fall 2022. The urban design of the Site will be done in accordance with the requirements of the |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|---------|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | | <p><i>Minor</i></p> <p>Minor, long-term adverse effects associated with the inability to integrate the plots of land containing the flood-damaged buildings into future planning. No open space or development can occur on the West and East brookside sites without the demolition activities proposed in Alternative 2.</p> | <p>Minor, long-term beneficial effects associated with the development of the proposed housing will result in the construction of a landscaped buffer and wooded area within the existing residential zone, resulting in access to aesthetic and functional green space.</p> | | <p>Zoning Ordinance and Subdivision Regulations.</p> |
| | Noise | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 15), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 15)</p> <p><i>None</i></p> | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 15), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 15)</p> <p><i>Negligible</i></p> <p>Minor, short-term adverse impacts during demolition and development activities associated with an increase in noise pollution as a result of construction equipment use.</p> | <p>During demolition, nuisances such as construction noise will be controlled by the contractor in accordance with normal industry standards and City requirements. Any increase in ambient noise levels would be temporary.</p> | <p>During construction, nuisances such as construction noise will be controlled by the contractor in accordance with normal industry standards and City requirements. Any increase in ambient noise levels would be temporary.</p> |
| | Transportation | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 18), West and East</p> | <p>No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 18), West and East Brookside</p> | <p>Not applicable.</p> | <p>The proposed project will adhere to certain design criteria required by Tennessee Housing Development Agency (THDA) and HUD, including the Fair</p> |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|---------|------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | | | | Demolition | Development |
| | | Brookside Demolition EA Environmental Assessment Factors Table (page 16-17) <i>None</i> | Demolition EA Environmental Assessment Factors Table (page 16-17) <i>None</i> | | Housing Act, which will require accessible routes within certain portions of the development site. |
| | Public Services and Utilities | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 17-18), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 16) <i>None</i> | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 17-18), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 16) <i>None</i> | Not applicable. | The City of Waverly has confirmed that it has capacity to support the proposed development, per the letter of Water and Sewer Availability sent on 4/4/2023. The proposed project will not adversely or beneficially impact public safety. The city maintains two fire stations. The Police Station is located in the center of downtown at 103 East Main Street, to the southwest of the Project Site |
| | Hazardous, Toxic, and Radioactive Waste. | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 5-6), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 6-7) <i>None</i> | No change – See Cherry Hill Development EA Environmental Assessment Factors Table (page 5-6), West and East Brookside Demolition EA Environmental Assessment Factors Table (page 6-7) <i>Minor</i> Potential for minor, short-term adverse impacts during development due to the presence of hazardous materials present on the Cherry Hill Site. Additional potential for minor, short-term adverse | An asbestos survey was performed by an approved contractor on 06/09/2022. An asbestos abatement plan was developed based on these results. All asbestos will be taken by the demolition contractor to an approved landfill. A notification of demolition and/or asbestos renovation will be submitted by contractor 10 days prior to demolition activity. A waste shipment record will be provided by the waste transporter contracted to deliver hazardous materials to an approved landfill. | An environmental services contractor was hired to safely remove and dispose of the potentially hazardous material identified on the project site. The removal was completed on 05/30/2023 and 05/31/2023. See Appendix C3 for a copy of the Phase 1 survey report. Conditions addressing the removal, staging, and disposal of hazardous materials and solid waste, including asbestos-containing materials, shall be adhered to, as addressed in section 7.1. . |

| Section | Area of Impact Evaluation | Impact Analysis for Alternative 1: No Action | Impact Analysis for Alternative 2: Demolition and Development of Waverly Housing Units | Environmental Protection Measures and Required Permits for Alternative 2 | |
|---------|---------------------------|----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|
| | | | | Demolition | Development |
| | | | impacts during demolition due to the presence of ACMs within the existing buildings on the West and East Brookside Sites. | See Appendix C Subsection C2 for a copy of the asbestos survey and abatement plan. Conditions addressing the removal, staging, and disposal of hazardous materials and solid waste, including asbestos-containing materials, shall be adhered to, as addressed in section 7.1. | |

5. Affected Environment and Potential Impacts

5.1. PHYSICAL RESOURCES

5.1.1. LAND RESOURCES AND TOPOGRAPHY

The proposed project includes two separate sites: the West Brookside and East Brookside demolition area, and the Cherry Hill development area.

West Brookside and East Brookside Demolition Area

The proposed project is located on two (2) noncontiguous sites lying within the city limits of Waverly, Humphreys County, Tennessee. One site is located at West Brookside Drive, on a parcel known in the records of the Assessor for Humphreys County as Parcel 065E A 003.00 (the “West Site”) and is comprised of approximately 9.9 acres of land. The other side is located at East Brookside Drive, on a parcel known as Parcel 064H A 001.00 (the “East Site”) and is comprised of approximately 7.9 acres of land. The West Site is situated on a developed plot bordered by a small, forested corridor on the south and east boundaries of the parcel. The northern terminus connects directly to Highway 70 east and the southern terminus abuts Trace Creek. The East Site is situated on a developed plot bordered by a small, forested corridor running east to west immediately adjacent to Trace Creek. The eastern terminus connects directly into North Clydenton Road, and the western terminus connects directly into Mytle Avenue. Refer to Appendix A for exhibits developed from publicly available sources that depict the West Site and the East Site.

Cherry Hill Development Area

The proposed project is located on three (3) parcels of land separated by a right-of-way corridor running east to west within the city limits of Waverly, Humphreys County, Tennessee. The property is located east of Washington Circle and west of Sycamore Avenue, on parcels known in the records of the Assessor for Humphreys County as Parcels 064B D 001.00, 064B C 017.00, and 064B C 011.00. The combined acreage of each parcel totals approximately 18.81 acres. The proposed development area is approximately 0.90 miles from the East Brookside Drive demolition site and 1.01 miles from the West Brookside demolition site. The parcel is set approximately 0.20 miles off Highway 70 East and is currently a forested area bordered by residential development on the eastern, western, and southern boundaries. Refer to Appendix A for drawings showing the surveyed limit of each of the parcels comprising the Project Site.

Existing Conditions

Both Brookside demolition sites and the Cherry Hill development site are located in the Western Highland Rim of the Interior Plateau physiographic region of Tennessee. Physiographic provinces are categorized based on the shared characteristics of the region that include geology, topography, and groups of vegetation and wildlife. The Interior Plateau province is characterized by interspersed, rolling hills that vary in elevation between 400 – 1,000 feet. General area topography can be seen in the United State Geological Survey (USGS) 7.5-minute topographic map of the Waverly quadrangle. The elevation of the West and East Brookside Demolition sites are approximately 503 and 509 feet above sea level, respectively. The elevation of the Cherry Hill Development site is approximately 602 feet above sea level and is relatively flat along the hilltop portion in the west-central and north-central portion of the land and gradually slopes to the south and east. The Brookside demolition sites are located within the regulated flood zone of Trace Creek. The Cherry Hill Development site is located outside of the regulated flood zone of Trace Creek. See Appendix A for USGS 7.5-minute topographic maps.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No-Action alternative would not affect local topographic features.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

The proposed demolition project only includes disposition activities with no plans for construction; thus, no significant impacts to site topography will occur due to the actions proposed in Alternative 2. No mitigation or further action is required.

Cherry Hill Development Area

The proposed development project would have minor impact on site topography. Some amount of clearing and grading would need to be performed to create an accessible site for construction equipment. Grading plans will be in compliance with standard engineering practices and applicable state and local regulations. The hillside portions of the property will be utilized to provide natural site drainage, in conjunction with onsite detention, and will introduce long-term beneficial impact to the topography. The proposed development project also includes plans to integrate open, recreational space for residents that include areas for sitting and a playground that would offer long-term, beneficial impact for the surrounding community. In order to accommodate this aspect of the development project, preparing the landscape by tree clearing, paving, and other construction activities will be required and will permanently alter the existing topography. Minor topographic changes may also result from the grading necessary to create foundations for new roadways and residencies but will not result in any significant, negative impact due to the actions proposed in Alternative 2. No mitigation or further action is required.

5.1.2. GEOLOGY AND SOILS

Existing Conditions

The physiographic province of both demolition and development sites contains bedrock characterized by Mississippian-age limestone, chert, and Devonian shale covered by soils that are generally cherty, acidic, with low-moderate fertility levels.

West Brookside East Brookside Demolition Area

A soil survey of the proposed demolition sites shows the area as being primarily underlain by six (6) soil types: Ennis silt loam (En), Ennis gravelly silt loam (Eg), Humphreys gravelly silt loam with 2 -5% slopes (Hg), Humphreys silt loam (Hm), Melvin silt loam (Ml), and Riverwash (Rv). One (1) soil type within the West Brookside Demolition Area is considered hydric within Humphreys County. Tables 5.0.1 and 5.0.2 below give a detailed description of the six (6) soil types found within the two (2) demolition sites.

| Symbol | Soil Type | Drainage Classification | Percent Hydric | Landform | Depth to Water table | Farmland Rating | Revised Status | Acres in Project Area | Project Area Percent |
|--------|---------------------------------------------|-------------------------|----------------|-------------------|-----------------------|--------------------------|----------------|-----------------------|----------------------|
| En | Ennis silt loam | Well drained | 0 | Flood plains | About 48 to 72 inches | All areas prime farmland | Not hydric | 4.8 acres | 68.4% |
| Hg | Humphreys gravelly silt loam, 2 – 5% slopes | Well drained | 0 | Stream Terrace | >80 inches | All areas prime farmland | Not hydric | 0.4 acres | 6.2% |
| MI | Melvin silt loam | Poorly drained | 100 | No available data | 0 inches | Not prime farmland | Hydric | 1.8 acres | 25.3% |

| Symbol | Soil Type | Drainage Classification | Percent Hydric | Landform | Depth to Water table | Farmland Rating | Revised Status | Acres in Project Area | Project Area Percent |
|--------|--------------------------|-------------------------|----------------|-------------------|-----------------------|-------------------------------------------------------------------------------------------|----------------|-----------------------|----------------------|
| Eg | Ennis gravelly silt loam | Well drained | 0 | Flood plains | >80 inches | All areas prime farmland | Not hydric | 0.2 acres | 3.1% |
| En | Ennis silt loam | Well drained | 0 | Flood plains | About 48 to 72 inches | Prime farmland if protected from flooding or not frequently flooded during growing season | Not hydric | 2.0 acres | 28.7% |
| Hm | Humphreys silt loam | Well drained | 0 | Stream terraces | >80 inches | All areas prime farmland | Not hydric | 4.2 acres | 58.7% |
| Rv | Riverwash | Excessively drained | 0 | No available data | 0 to 24 inches | Not prime farmland | Not hydric | 0.7 acres | 9.5% |

Cherry Hill Development Area

A soil survey of the proposed development site shows the area as being primarily underlain by three (3) soil types: Bodine gravelly silt loam with 12-20% slopes, Dickson silt loam, shallow (DIs), and Humphreys silt loam with 2 -5% slopes (Hg). None of the identified types are classified as hydric within the Cherry Hill Development Area. Table 5.0.3 gives a detailed description of the three (3) soil types found in the development site.

| Table 5.0.3. Soil Types Found in Cherry Hill Development Area | | | | | | | | | |
|----------------------------------------------------------------------|--------------------------------------------|--------------------------------|-----------------------|-----------------|-----------------------------|------------------------------|-----------------------|------------------------------|-----------------------------|
| Symbol | Soil Type | Drainage Classification | Percent Hydric | Landform | Depth to Water table | Farmland Rating | Revised Status | Acres in Project Area | Project Area Percent |
| Bc | Bodine gravelly silt loam, 12 – 20% slopes | Somewhat excessively drained | 0 | Hillslopes | >80 inches | Not prime farmland | Not hydric | 12.2 acres | 64.6% |
| DIs | Dickson silt loam, shallow | Moderately well drained | 0 | Hillslopes | >80 inches | Not prime farmland | Not hydric | 6.5 acres | 34.4% |
| Hg | Humphreys silt loam, 2 - 5% slopes | Well drained | 0 | Stream terraces | >80 inches | All areas are prime farmland | Not hydric | 0.2 acres | 1.0% |

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No-Action alternative would not affect the existing soil or geologic composition.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

The proposed demolition project will result in minimal land disturbance activities to remove existing foundations, pavements, or other utilities. No significant impacts to the site’s soil or geologic composition will occur due to the actions proposed in Alternative 2. The proposed project is in compliance, and mitigation is not required.

Cherry Hill Development Area

Land disturbance activities would occur due to the proposed construction activities in Alternative 2. The Waverly Housing Authority engaged a geotechnical engineering firm to provide limited geotechnical study of certain areas on the buildable portion of the site, in order to confirm suitability of the soil for

development. See Appendix C4 for the full report. Soil data was also gathered using the Web Soil Survey compiled by the U.S. Department of Agriculture (USDA). See Appendix C5 for this data. Disturbance to the soil will be temporary and best management practices for erosion and sedimentation control will be implemented during construction. Bare soil exposed during construction will be stabilized as soon as practical and in accordance with state and local regulations. Implementation of the mitigation measures will limit any potential negative impacts to the site's soil and geology to be less than significant. Based on these measures, no further mitigation or action is required.

5.1.3. FARMLANDS PROTECTIONS

The Farmland Protection Policy Act was enacted in 1981 (P.L. 98-98) to minimize the unnecessary conversion of farmland to non-agricultural uses as a result of federal actions. In addition, the Act seeks to ensure that federal programs are administered in a manner that will be compatible with state and local policies and programs that have been developed to protect farmland. The policy of the Natural Resources Conservation Service (NRCS) is to protect significant agricultural lands from conversions that are irreversible and result in the loss of an essential food and environmental resource. The Service has developed criteria for assessing the effects of federal actions on converting farmland to other uses, including a Farmland Conversion Impact Rating form AD-1066 that documents a site-scoring evaluation process to assess its potential agricultural value.

Existing Conditions

West Brookside East Brookside Demolition Area

The Site is located within the limits of the City of Waverly in a residential/urban area. According to a soil map prepared using the USDA Web Soil Survey resource, both West and East Brookside Sites contain soil types that have been designated as "prime farmland." The West Brookside site is comprised of Ennis silt loam (En), considered a "prime farmland if protected from flooding or not frequently flooded during the growing season", Humphrey's gravelly silt loam with 2 to 5% slopes (Hg), considered a prime farmland, and Melvin silt loam (MI), also considered a prime farmland. See above Tables 5.0.1 and 5.0.2 for further information.

Cherry Hill Development Area

The Site is located within the limits of the City of Waverly in a residential subdivision area that has been in residential use since the 1950s and 1960s. According to a soil map prepared using the USDA Web Soil Survey resource, the Cherry Hill Site contains a mixture of soil types that have been designated as either prime farmland or not prime farmland. The soil at this site is comprised of Bodine gravelly silt loam (Bc) with 12 to 20% slopes considered "not prime farmland", Shallow Dickson silt loam (Dis), considered not prime farmland, and Humphreys gravelly silt loam (Hg) with 2 to 5% slopes, considered a prime farmland. See above Table 5.0.3 for further information.

Alternative 1: No Action

Under the No Action alternative, demolition and disposition activities would not occur at the West and East Brookside sites. As a result, neither of these parcels would be cleared for future development or potential utilization of the site's prime farmland and thus poses minor, long-term negative effects due to the underutilization of this important local soil resource.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)**West Brookside East Brookside Demolition Area**

The proposed activities in Alternative 2 are for demolition and disposition purposes. The Proposed alternative does not include any activities that could convert agricultural land to a nonagricultural use. Considering the current land use of the demolition area, and the proposed demolition activities in Alternative 2, no mitigation measures are required, and the project is found to be in compliance.

A Soil Map generated through the USDA NRCS Web Soil Survey and a HUD worksheet was used to test compliance with the Farmland Protection Policy Act of 1981 and 7 CFR Part 658. See Appendix C5 for the soil map and completed worksheet.

Cherry Hill Development Area

The Cherry Hill Development Area contains 0.2 acres of Humphreys gravelly silt loam with 2 to 5% slopes, a soil type designated by the USDA NRCS as a prime farmland of local importance. Though the proposed development activities in Alternative 2 would convert the existing land use from farmland to residential/suburban, per the Farmland Protection Policy, no consultation with USDA NRCS is required because the loss of prime farmland is less than one (1) acre.

A Soil Map generated through the USDA NRCS Web Soil Survey and a HUD worksheet was used to test compliance with the Farmland Protection Policy Act of 1981 and 7 CFR Part 658. See Appendix C5 for the soil map and completed worksheet

5.1.4. AIR QUALITY

The Clean Air Act of 1970 (42 USC 7401–7661 [2009]) is a comprehensive federal law that regulates air emissions from area, stationary, and mobile sources. The act authorized the U.S. Environmental Protection Agency (EPA) to establish National Ambient Air Quality Standards (NAAQS) to protect public health and the environment. The NAAQS includes standards for six criteria air pollutants: lead, nitrogen dioxide, ozone, carbon monoxide, sulfur dioxide, and particulate matter (including both particulate matters less than 10 micrometers in diameter [PM10], and fine particulate matter less than 2.5 micrometers in diameter [PM2.5]). Areas where the monitored concentration of a criteria pollutant exceeds the applicable NAAQS are designated as being in non-attainment of the standards; while areas where the monitored concentration of a criteria pollutant is below the standard are classified as in attainment. Non-attainment areas can be re-designated as a maintenance area if monitoring data demonstrates that a non-attainment area meets the NAAQS and a 10-year plan for continuing to meet and maintain such standards is implemented.

Existing Conditions

The proposed demolition and development sites are located in Humphrey's County, Tennessee, which, according to the U.S. EPA's 'Green Book Nonattainment Areas for Criteria Pollutants', is not considered a county in non-attainment or maintenance status for any criteria pollutants.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No-Action alternative would not affect the area's existing air quality.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside and East Brookside Demolition Area

The proposed project is for demolition and disposition of existing improvements. It does not include new construction or conversion of land use facilitating the development of public, commercial, or industrial facilities or five (5) or more dwelling units, so this project is found to be in compliance with The Clean Air Act of 1970 (42 USC 7401-7661 [2009]).

Demolition activities will be short-term in duration and will not have a significant negative impact on air quality. Local air quality in the immediate vicinity of the proposed development project could potentially be affected by nuisance dust generated from site construction activities and emissions from construction activities. To avoid nuisance impacts from dust and particulates, the contractor agrees to implement best management control measures in accordance with normal industry standards and City requirements. Following these measures, the proposed project will not exceed regulatory thresholds that would result in significant impacts to air quality and is in compliance; therefore, no mitigation or further action is required.

One (1) State Air Quality (SAQ) condition shall be adhered to for Alternative 2. See Section 7.1.

A HUD worksheet was used to test compliance and the EPA's NEPAAssist application was used to check the attainment status of Humphrey's County. See Appendix C6 for the completed HUD worksheet and a map taken from the EPA NEPAAssist application.

Cherry Hill Development Area

The proposed project involves new construction of more than five (5) dwelling units, but the project Site does not fall within a district or county in non-attainment or maintenance status for any criteria pollutants and is therefore found to be in compliance with The Clean Air Act of 1970 (42 USC 7401-7661 [2009]).

Local air quality in the immediate vicinity of the proposed development project could incur short-term negative impacts by nuisance dust generated from site construction activities and emissions from

construction activities. To avoid impacts from nuisance dust or particulates, the contractor agrees to implement best management control measures in accordance with normal industry standards and City requirements. Following these measures, the proposed project will not exceed regulatory thresholds that would result in significant negative impacts to air quality and is in compliance; therefore, no mitigation or further action is required.

5.2. WATER RESOURCES

The proposed sites are located in the Kentucky Lake Subbasin HUC 06040005, and the Trace Creek Subwatershed HUC 060400050403. This watershed encompasses over 24,533 acres and stretches across Tennessee.

5.2.1. WATER QUALITY

The Federal Water Pollution Control Act was enacted by Congress in 1948 to address water pollution. The Act was amended in 1972 and became commonly known as the Clean Water Act (CWA). The CWA regulates discharge of pollutants into waters of the United States (WOTUS), and it sets water quality standards for all contaminants in surface waters. Section 401 of the CWA requires certification of all Federal licenses and permits in which there is a “discharge of fill material into navigable waters.” The certification process is used to determine whether an activity, as described in the Federal license or permit, would impact established site-specific water quality standards. A water quality certification from the Tennessee Department of Environment and Conservation (TDEC) is required prior to the issuance of the relevant Federal license or permit. Section 404 of the CWA was established to regulate the discharge of dredged or fill materials into WOTUS, including wetlands. Activities in WOTUS regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into WOTUS, unless the activity is exempt from Section 404 regulation (e.g., certain farming and forestry activities). The most common Federal license or permit requiring certification is the USACE CWA Section 404 permit.

The National Pollutant Discharge Elimination System (NPDES) was established under the CWA to regulate point source and stormwater discharges that release pollutants into WOTUS. Tennessee’s NPDES stormwater program requires a permit from TDEC for any proposed project that would disturb at least one acre of land and those that discharge stormwater to surface waters of the state. As part of this permit, the proponent of the project is required to prepare and implement a Stormwater Pollution Prevention Plan (SWPPP), which outlines Best Management Practices (BMPs) and engineering controls to be used to prevent and minimize erosion, sedimentation, and pollution during construction.

The threshold level for a significant impact to surface water would be a violation of state water quality criteria, a violation of federal or state discharge permits, or an unpermitted dredge or fill within the boundary of a jurisdictional waterbody or wetland.

The Environmental Protection Agency (EPA) assesses the water quality of waterbodies in the United States utilizing compiled state, territorial, and authorized tribal water quality standards. Information

about the water quality of each waterbody is made available through the interactive online How's My Waterway? Waterbody Report.

Section 1424(e) of the Safe Drinking Water Act of 1974 [PL 93-523] authorizes EPA to designate an aquifer for special protection under the sole source aquifer program if the aquifer is the sole or principal drinking water resource for an area (i.e., it supplies 50 percent or more of the drinking water in a particular area) and if its contamination would create a significant hazard to public health. No commitment for federal financial assistance may be provided for any project that EPA determines may contaminate a sole source aquifer such that a significant hazard to public health is created.

Existing Conditions

West Brookside East Brookside Demolition Area

The perennial stream, Trace Creek (State Waterbody ID: TN06040005050_2000), flows east to west through the city of Waverly and drains directly into the Tennessee River. According to 2024 data collected by TDEC Division of Water Resources available through the USEPA MyWaterWay online tool, the portion of Trace Creek that runs adjacent to the two (2) proposed demolition sites within the City of Waverly is reported to have "impaired" conditions for swimming and boating recreation due to issues related to the presence of bacteria and other microbes. The same dataset reported that metrics considered for aquatic life and 'other' uses for this section of Trace Creek were considered "good". Additionally, the demolition sites do not lie within a sole source aquifer area.

Cherry Hill Development Area

The proposed Cherry Hill Development site does not sit adjacent to any designated waters of the United States or traditional navigable waterways, nor does it lie within a sole source aquifer area or bodies of water designated for recreational use.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect local water quality.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

The proposed project includes demolition activities that would require land disturbance anticipated to result in sediment discharge and stormwater runoff that could impact Trace Creek. At the current schematic phase of planning, the amount of land to be disturbed during demolition is estimated to be approximately 3.5 acres at the West Brookside site and approximately 3.75 acres at the East Brookside site.

Erosion Prevention and Sediment Control (EPSC), SWPPP, and Notice of Intent (NOI) will be submitted to TDEC for approval in conjunction with finalizing construction plans. EPSC plans will be included in the construction plan set. Any demolition activities executed will be done in compliance with any given TDEC recommendations and limitations set forth in the EPSC and SWPPP.

As stated above, the demolition project does not lie within a designated sole source aquifer area. The USEPA's Sole Source Aquifers ArcGIS map was consulted for this determination and can be found in Appendix C7. No mitigation is required to remain in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149.

Following mitigation measures set forth in the EPSC, SWPPP, and other recommendations made by TDEC, the USACE, and the USEPA, adverse impacts as a result of the proposed demolition activity to the water quality of any bodies of water protected under the Clean Water Act or the Safe Water Drinking Act would be less than significant. As the proposed West Brookside and East Brookside demolition sites do not contain any designated waters of the United States or traditional navigable waterways and mitigation measures to minimize erosion and sedimentation will be implemented, no CWA 404 or 401 permitting will be required for demolition activities.

A HUD worksheet was used to test compliance. See Appendix C7 for the completed worksheet, map from NEPAassist, consultation request to TDEC dated 8/3/2022, and letter response from TDEC dated 8/19/2022.

Cherry Hill Development Area

As the proposed Cherry Hill Development site does not contain nor sit adjacent to any designated waters of the United States or traditional navigable waterways, no CWA 404 or 401 permitting will be required for construction activities.

The proposed project includes construction activities that would require land disturbance activities anticipated to result in sediment movement and deposition into the natural drainage areas surrounding the hillside of the proposed construction area.

An EPSC plan will be developed to comply with state and local regulations to minimize the transport of sediment and erosion of soils. The sediment and erosion control plan will contain methods and techniques designed specifically to address the issues the proposed site alternative presents and will require the maintenance of these measures at an operating level throughout the construction activities. An NOI and SWPPP will be submitted for approval by the Tennessee Department of Environment and Conservation. A grading and drainage plan will be reviewed and approved by the City of Waverly Planning Commission as part of the Site plan. Onsite detention will be utilized during site design to control release of stormwater into natural drainage patterns on the hillside of the land (eastern and southern portions). Following mitigation requirements set forth by EPSC and USEPA, adverse impacts to water quality would be less than significant.

As stated above, the proposed project does not lie within a designated sole source aquifer area. The USEPA's Sole Source Aquifers ArcGIS map was consulted for this determination and can be found in Appendix C7. No mitigation is required to remain in compliance with the Safe Drinking Water Act of 1974, as amended, particularly section 1424(e); 40 CFR Part 149.

Following mitigation measures set forth by TDEC, the USACE, and the USEPA, adverse impacts as a result of the proposed construction activity to the water quality of any bodies of water protected under the Clean Water Act or the Safe Water Drinking Act would be less than significant. The proposed project is in compliance, and mitigation is not required.

A HUD worksheet was used to test compliance. See Appendix C7 for the completed worksheet and other information including portions of the Wetland Delineation and Hydrologic Determination Report (dated 7/10/2023), prepared by EnviroScience.

5.2.2. FLOODPLAINS

Executive Order 11988, Floodplain Management (EO 11988), amended January 29, 2015, and as implemented in 44 CFR Part 9, requires federal agencies to “avoid to the extent possible the long and short-term adverse impacts associated with the occupancy and modification of floodplains and to avoid direct or indirect support of floodplain development wherever there is a practicable alternative.” Special Flood Hazard Areas (SFHAs) are areas that have special flood, mudflow, or flood-related erosion hazards and will be inundated with water in the event of a 100-year (base) flood, which is a flood that has a 1 percent chance of being equaled or exceeded in magnitude in any given year. The 500-year floodplain is the area covered by water in the event of a 500-year flood, which is a flood that has a 0.2 percent annual chance of being equaled or exceeded in magnitude in any given year. The 100- and 500-year floodplains are mapped on FEMA Flood Insurance Rate Maps (FIRMs). Moderate flood hazard areas are those areas between the limits of the 100- and 500-year floodplains. Areas of minimal flood hazard fall outside of the SFHA (100-year floodplain) and are higher than the elevation of the 0.2-percent-chance annual flood (500- year floodplain). SFHAs, moderate flood hazard areas, areas of minimal flood hazard, and both the 100- and 500-year floodplains are mapped on FEMA Flood Insurance Rate Maps (FIRMs).

Existing Conditions

Based on the current FEMA FIRMs that covers the City of Waverly, all West Brookside and East Brookside structures occur within a flood zone—Zone AE (Appendix B). AE zones are SFHAs, as they fall within the limits of the 100-year floodplain. The proposed relocation site (preferred alternative) is identified on the FEMA FIRM as being within Flood Zone X (un-shaded), which is defined as an area of minimal flood risk.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action Alternative, the Waverly Housing Authority would neither rebuild nor relocate the existing publicly assisted housing units damaged by the disaster. As a result, displaced residents would continue to face housing instability, and the community would lack critical affordable housing infrastructure. Additionally, the extant, damaged housing units and adjacent improved properties would remain at risk from future flooding events.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

Under Alternative 2, the Waverly Housing Authority would relocate and construct new residential units at the Cherry Hill Development site, following the demolition of the former Brookside complexes. This action would replace the damaged housing with modern, energy-efficient units and significantly increase the useful life of the facilities while better serving the needs of residents.

The existing East and West Brookside residential complexes are located within the Special Flood Hazard Area (SFHA) associated with the 100-year floodplain. Demolition of these structures will occur at their current location, removing the vulnerable development from the floodplain. This action will reduce future risks to life and property and eliminate repetitive loss structures.

The proposed site is located outside of both the 100-year and 500-year floodplains, minimizing the risk of future flood damage. As part of this alternative, FEMA completed the full 8-Step Decision-Making Process, as required under Executive Order 11988 (Floodplain Management) and 44 CFR Part 9. This process ensures that federal actions in or affecting floodplains are only taken after a rigorous evaluation of practicable alternatives, public involvement, and measures to minimize harm.

Because the Cherry Hill site is located outside of mapped flood hazard areas, the 8-step analysis confirmed that the relocation avoids adverse effects to floodplain functions and values and supports long-term community resilience. Therefore, no short-term or long-term impacts to floodplains are anticipated under this alternative.

Two (2) EO 11988 conditions shall be adhered to for Alternative 2. See Section 7.1.

5.2.3. WETLANDS

Executive Order (EO) 11990 Wetlands Management requires Federal agencies to avoid funding activities that directly or indirectly support occupancy, modification, or development of wetlands, whenever there are practicable alternatives. FEMA uses the eight (8)-step decision-making process to evaluate potential effects on, and mitigate impacts to, wetlands and floodplains in compliance with EO 11990 and EO 11988.

The USACE, along with the USEPA, administers federal wetlands protections under the Clean Water Act which set measures to regulate the discharge of dredged or fill material into wetlands that maintain a year-round surface connection to rivers, lakes, and other navigable waters of the United States. The USACE, for the purposes of regulation, defines a wetland as, “those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.” Using the criteria in this definition, the USACE conducts Jurisdictional Determinations to identify and delineate wetlands to determine which waterbodies are protected under Section 404 of the CWA.

The Tennessee Department of Environment and Conservation administers state wetlands protections through measures set forth in its Section 401 Water Quality Certification efforts. These measures include protections for wetlands with year-round surface water connections in addition to protections for isolated wetlands that lack perennial surface water connections. The Tennessee Water Quality Control Act of 1977 defines waters of the state as, “any and all water, public or private, on or beneath the surface of the ground, which are contained within, flow through, or border upon Tennessee or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership which do not combine or effect a junction with natural surface or underground waters.” The TDEC uses the USACE’s methodology to delineate the boundaries and quality of state wetlands and holds jurisdictional authority under state power to regulate these wetlands.

Both USACE and TDEC maintain jurisdictional authority to regulate wetlands with neither taking precedence over the other. The wetlands subject to regulation under TDEC authority may eclipse or differ from those regulated under USACE authority, and, in certain circumstances, require specific permits from one or both agencies to maintain federal and state compliance. Impacts to federally jurisdictional wetlands through fill or dredging activities require specific Nationwide Permits (NWP) or approved mitigation measures administered by the USACE under Section 404 of the CWA. Impacts to state regulated wetlands through fill or dredging activities require application for Aquatic Resource Alteration Permits (ARAP).

Existing Conditions

West Brookside East Brookside Demolition Area

The proposed demolition sites are situated directly adjacent to Trace Creek, a state watercourse, and its correlated floodplain and riparian zone. Trace Creek runs along the southern boundary of the West Site and the northern boundary of the East Site. According to the USFWS National Wetland Inventory Map, both East and West sites have riverine wetland habitat adjacent to the property’s riverside boundaries due to their proximity to the Trace Creek floodplain and riparian zone. However, no impacts to Trace Creek or other potentially jurisdictional waters subject to Sections 401 and 404 of the CWA are anticipated. Therefore, no Sections 401 and 404 permitting will be required to complete the demolition phase of the project. In order to protect adjacent water resources, an Erosion Prevention

and Sediment Control (EPSC), SWPPP, and Notice of Intent (NOI) will be submitted to TDEC for approval in conjunction with finalizing demolition plans. EPSC plans will be included in the demolition plan set. Any demolition activities executed will be done in compliance with any given TDEC recommendations and limitations set forth in the EPSC and SWPPP. A copy of this map can be found in Appendix C8.

Cherry Hill Development Area

In order to determine the presence or absence of aquatic resources within the boundaries of the proposed development site, various consultants and the Waverly Housing Authority conducted multiple field reconnaissance visits. Additionally, a Wetland Delineation and Hydrologic Determination (dated 07/10/2023) was conducted by the environmental consultancy firm EnviroScience, Inc. Due to overlapping state and federal agency regulatory authorities, a watercourse can be considered a stream, a Wet Weather Conveyance (WWC), or both stream and WWC. Four (4) linear watercourses jointly considered ephemeral streams and a WWC were identified within the project area (per USACE and TDEC definition), and one (1) WWC that transitions into a combination WWC/ephemeral stream was also identified. No wetlands were identified within property boundaries, and no ponds or lakes were observed. A wetland delineation report was generated based on these results and submitted to the USACE for jurisdictional determination of the onsite aquatic resources. USACE issued a response on 05/29/2024. The response contained an approved jurisdictional determination for the aquatic resources onsite. The five (5) watercourses were determined to be non-jurisdictional and do not constitute significant water resources or WOTUS protections, per USEPA, USACE, definition under the CWA and TDEC definition under the Water Quality Control Act. As such, no CWA Section 404 or 401 permitting for construction activities will be required; however, during the design and construction process, the wet weather conveyances and ephemeral streams will be taken into account during the final site design process and impacts will be minimized to the most practicable extent. USACE correspondence and the approved jurisdictional determination are included in Appendix D1.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect protected water resources.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

The proposed project will include demolition activities which will involve some degree of ground disturbance from removing remnant building foundations and footings, utility conduits, and pavement and sidewalk remnants that could potentially result in impacts to onsite water resources. Erosion and sediment control measures will be put into place during demolition to prevent adverse impacts to Trace Creek. Formal consultation was made with the Tennessee Department of Environment and Conservation (TDEC), Water Resources Division. Information was sent to TDEC with a request to review the proposed project for impacts related to water resources and any areas over which TDEC has regulatory authority pursuant to the Clean Water Act. TDEC responded with a letter dated 8/19/2022,

stating, “As you noted in your review request, this will make erosion control measures necessary, and a construction stormwater general permit (CGP) will be required.” TDEC did not specify any impacts or additional requirements.

To receive coverage under provisions contained within a CGP, the construction project operators (as defined in Subpart 2.1 of the Tennessee General NPDES Permit No. TNR100000 Stormwater Discharges from Construction Activities) must provide a completed and signed Notice of Intent for Construction Activity – Stormwater Discharges to TDEC prior to any construction activities that produce soil disturbances of one (1) or more acre which result in stormwater point source discharges. Additionally, a site-specific SWPPP must be developed and submitted in tandem with the NOI. The SWPPP must be developed, implemented, and updated according to part 5 of the CGP. In order to be considered for coverage under a CGP, a site map and permit fee (determined according to acreage of land use disturbance) must be contained within the NOI application package and received at the time of NOI submission. A copy of the State of Tennessee NPDES General Permit for Discharges of Stormwater Associated with Construction Activities (PN TNR100000) is located in Appendix C9.

In order to mitigate any potential impacts to onsite wetland habitat, erosion prevention and sediment control measures will be implemented as required by state regulations. The proposed project will adhere to such control measures throughout construction activities, as well as complying with TDEC regulations regarding permitting. Following these adherences, impacts due to the proposed activities in Alternative 2 will be less than significant and the proposed project will remain in compliance with EO 11990. No further mitigation is required.

One (1) EO 11990 condition shall be adhered to for Alternative 2. See Section 7.1.

Cherry Hill Development Area

The proposed project will include development activities which will involve ground disturbances that could potentially impact any protected onsite water resources. During field reconnaissance conducted by the environmental consultancy firm EnviroScience Inc., no wetlands and/or streams that fall under the jurisdiction of the USACE and the TDEC were identified onsite. Results from the wetland delineation conducted for the Cherry Hill property can be found in Appendix C10. Accordingly, any impacts that occur due to the actions proposed in Alternative 2 would avoid protected bodies of water and the proposed project is found to be in compliance with EO 11990. No further mitigation is required.

5.3. COASTAL RESOURCES

5.3.1. COASTAL ZONE MANAGEMENT ACT (CZMA) / COASTAL BARRIER RESOURCES ACT (CBRA) / COASTAL BARRIER IMPROVEMENT ACT (CBIA) OF 1990

The Coastal Zone Management Act (CZMA), administered by states with shorelines in coastal zones, requires those states to have a Coastal Zone Management Plan (CZMP) to manage coastal development. Projects falling within designated coastal zones must be evaluated to ensure they are consistent with the CZMP. Projects receiving federal assistance must follow the procedures outlined in 15 CFR 930.90 – 930.101 for federal coastal zone consistency determinations.

The Coastal Barrier Resources Act of 1982 created designated areas under the jurisdiction of the USFWS that are ineligible for both direct and indirect federal expenditures. This act was amended by the Coastal Barrier Improvement Act of 1990, which added a new category of coastal barriers called Otherwise Protected Areas.

Existing Conditions

West Brookside East Brookside Demolition Area

The proposed project is not located in, nor does it affect, a coastal zone. Tennessee is a landlocked state with no sea coastline, bordering no Great Lakes. Tennessee contains no Coastal Barrier Resources System (CBRS) units nor Otherwise Protected Areas (OPAs); as such, CBRA is not applicable in Tennessee.

Cherry Hill Development Area

The proposed project is not located in, nor does it affect, a coastal zone. Tennessee is a landlocked state with no sea coastline, bordering no Great Lakes. Tennessee contains no Coastal Barrier Resources System (CBRS) units nor Otherwise Protected Areas (OPAs); as such, CBRA is not applicable in Tennessee. Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect coastal zones protected under the CZMA, CBRA, or CBIA.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

West Brookside East Brookside Demolition Area

The proposed demolition action would not affect coastal zones protected under the CZMA, CBRA, or CBIA. The proposed project is in compliance, and mitigation is not required.

Cherry Hill Development Area

The Development action would not affect coastal zones protected under the CZMA, CBRA, or CBIA. The proposed project is in compliance, and mitigation is not required.

5.4. BIOLOGICAL RESOURCES

5.4.1. VEGETATION

Executive Order 13112, Invasive Species, requires federal agencies, to the extent practicable, to prevent the introduction of invasive species and provide for their control and to minimize the economic, ecological, and human health impacts that invasive species cause. Invasive species prefer disturbed habitats and generally possess high dispersal abilities, enabling them to out-compete native species.

This section analyzes the potential impacts associated with vegetation removal proposed as part of the development plan within Alternative 2.

Existing Conditions

West Brookside East Brookside Demolition Area

Land use here consists of developed, maintained lawn with residential buildings occupying the majority of the properties open space. The structures are unoccupied due to extensive flood damage. A small, forested corridor containing a mix of young shrub and tree species borders the southern and eastern boundaries of the site.

Cherry Hill Development Area

According to various mapping sources and field identification efforts, the current land use of the project area is undeveloped forest surrounded by suburban development and roadways along the eastern, southern, and western boundaries. The project area consists primarily of an upland forest vegetative community. Dominant species identified within the project area were southern red oak (*Quercus falcata*), northern red oak (*Quercus rubra*), and American beech (*Fagus grandifolia*).

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not have an effect on site vegetative communities.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

The clearing/removal of existing vegetation and/or plant material is not necessary for the proposed demolition project; therefore, no mitigation is required. All state restrictions regarding the spread of harmful insects, diseases, and other pests through the movement of construction equipment or materials regulated by the Tennessee Department of Agriculture and USDA Animal and Plant Health Inspection Service Plant Protection and Quarantine (USDA-APHIS-PPQ) will be observed and upheld during the demolition process. Following compliance measures set forth by USDA-APHIS-PPQ, no significant negative impacts will occur due to actions proposed in Alternative 2. No mitigation or further action is required.

Cherry Hill Development Area

The clearing/removal of existing vegetation and/or plant material is necessary for the proposed development project. All state restrictions regarding the spread of harmful insects, diseases, and other pests through the movement of construction equipment or materials regulated by the Tennessee Department of Agriculture and USDA-APHIS-PPQ will be observed and upheld during the demolition process. Additionally, the project will comply with project-specific conditions designed to minimize or

eliminate potential effects on sensitive habitat features. Potential impacts to threatened and endangered species and their respective habitats will be discussed further in section 5.4.2. Following compliance measures set forth by USDA-APHIS-PPQ, and project-specific conditions, no significant negative impacts will occur due to the actions proposed in Alternative 2. No mitigation or further action is required.

5.4.2. THREATENED AND ENDANGERED SPECIES

The Endangered Species Act (ESA) of 1973 provides for the conservation of threatened and endangered plants and animals and the habitats in which they are found. The lead Federal agencies for implementing ESA are the United States Fish and Wildlife Service (USFWS) and the U.S. National Oceanic and Atmospheric Administration (NOAA) National Marine Fisheries Service (NMFS). The law requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of designated critical habitat of such species. The law also prohibits any action that causes a “taking” of any listed species of endangered fish or wildlife.

Existing Conditions

West Brookside East Brookside Demolition Area

Through an IPaC (Information for Planning and Consultation) review, seven (7) federally listed species were identified within the vicinity of the proposed demolition area. As no vegetation or tree clearing is planned for the site, FEMA has determined the project will have no effect on the three (3) listed bat species: the gray bat (*Myotis grisescens*), northern long-eared bat (*Myotis septentrionalis*), and tricolored bat (*Perimyotis subflavus*).

Additionally, three (3) aquatic species were identified: two (2) freshwater mussels—the longsolid (*Fusconaia subrotunda*) and pink mucket (*Lampsilis abrupta*) – and the alligator snapping turtle (*Macrochelys temminckii*). FEMA has determined the project will have no effect on these species, as no in-water work is planned and sedimentation and turbidity control measures designed to prevent runoff into nearby waterways will be implemented.

Lastly, the monarch butterfly (*Danaus Plexippus*) was also identified. As the site lacks suitable habitat, FEMA has determined the demolition activities will have no effect on this species as well.

Cherry Hill Development Area

Through an IPaC (Information for Planning and Consultation) review, seven (7) federally listed species were identified within the vicinity of the relocation area. FEMA has determined the project will have no effect on the three (3) listed bat species – the gray bat, northern long-eared bat, and tricolored bat- as confirmed by USFWS during a phone call, due to the lack of suitable habitat.

Three (3) aquatic species were also identified: two (2) freshwater mussels—the longsolid and pink mucket—and the alligator snapping turtle. FEMA has determined the project will have no effect on these aquatic species, as no work will occur within or adjacent to any waterways.

Lastly, the monarch butterfly was identified. As the relocation site lacks suitable habitat, FEMA has determined the project will have no effect on this species as well.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action Alternative, the Waverly Housing Authority would not rebuild nor relocate their existing publicly assisted housing units. Alternative 1 would not involve any construction activities; therefore, there would be no impact to threatened or endangered species.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

West Brookside East Brookside Demolition Area

Under Alternative 2, the demolition of the original housing unit facilities at their original locations would not result in any impacts to any species protected under ESA.

FEMA has determined that the proposed project will have no effect on any federally listed endangered or threatened species and will not result in the destruction or adverse modification of designated critical habitats. This determination is supported by an internal file-to-memo developed in accordance with Section 7 of the Endangered Species Act (ESA), and it incorporates findings from an Information for Planning and Consultation (IPaC) report. Per ESA; 16 U.S.C. §1536, ESA Section 7 consultation for prospective agency actions is only required when there is “reason to believe that an endangered species or a threatened species may be present in the area affected by [a] project and that implementation of such action will likely affect such species” or the agency action “is likely to jeopardize the continued existence of any species proposed to be listed under section 1533 of this title or result in the destruction or adverse modification of critical habitat proposed to be designated for such species.”

The no effect determination is based, in part, on specific conditions and protective measures incorporated into the project scope to avoid impacts on aquatic species potentially present in the adjacent Trace Creek. These conditions include best management practices (BMPs) for erosion and sediment control, which will prevent runoff, turbidity, and other disturbances that could otherwise impact aquatic species.

Fifteen (15) Endangered Species Act (ESA) condition shall be adhered to for Alternative 2. See Section 7.1.

Cherry Hill Development Area

Under Alternative 2, the damaged housing units would be relocated to a new parcel, and a new complex would be constructed to replace those lost during the disaster event.

FEMA has determined that the proposed project will have no effect on any federally listed endangered or threatened species, nor on their designated critical habitats. This determination is supported by an

internal file-to-memo (Appendix C11) developed in accordance with Section 7 of the Endangered Species Act (ESA), and it incorporates findings from an Information for Planning and Consultation (IPaC) report (Appendix C12).

This no effect determination is based on adherence to project-specific conditions designed to minimize or eliminate potential effects on sensitive habitat features. These conditions may include limitations on preservation of native vegetation buffers, and proper staging of equipment to avoid habitat encroachment.

Fifteen (15) Endangered Species Act (ESA) conditions shall be adhered to for Alternative 2. See Section 7.1.

5.4.3. MIGRATORY BIRDS

The Migratory Bird Treaty Act (MBTA) of 1918 provides a program for the conservation of migratory birds that fly through lands of the United States. The lead Federal agency for implementing the MBTA is the United States Fish and Wildlife Service (USFWS). The law requires Federal agencies to ensure that actions they authorize, fund, or carry out are not likely to jeopardize the continued existence of any migratory birds or result in the destruction or adverse modification of designated critical habitat of such species. The law makes it illegal for anyone to “take,” possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or their parts, feathers, nests, or eggs. “Take” is defined as “to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or any attempt to carry out these activities.”

The entire state of Tennessee is considered a flyway zone for migratory birds. Tennessee serves as a vital stopover, wintering ground, and breeding habitat within the Atlantic Flyway for millions of migratory birds, including shorebirds and waterfowl.

Existing Conditions

West Brookside East Brookside Demolition Area

For the demolition area, an official species list generated through the USFWS IPaC system identified six (6) migratory bird species with potential to occur in the region: bald eagle (*Haliaeetus leucocephalus*), chimney swift (*Chaetura pelagica*), field sparrow (*Spizella pusilla*), Kentucky warbler (*Geothlypis formosa*), prairie warbler (*Setophaga discolor*), and wood thrush (*Hylocichla mustelina*). The West and East Brookside demolition areas are located within the urban core of the City of Waverly, in a highly developed setting characterized by existing infrastructure, paved surfaces, and minimal natural vegetation.

Due to the urbanized nature of the site and the lack of suitable nesting or foraging habitat, these areas are not expected to support migratory birds. Additionally, the scope of work is limited to demolition, with no tree clearing or alteration of natural habitat anticipated.

Based on these factors, FEMA has determined that the proposed demolition activities will have no effect on migratory bird species.

Cherry Hill Development Area

For the development area, an official species list generated through the USFWS IPaC system identified six (6) migratory bird species with potential to occur in the region: bald eagle (*Haliaeetus leucocephalus*), chimney swift (*Chaetura pelagica*), field sparrow (*Spizella pusilla*), Kentucky warbler (*Geothlypis formosa*), prairie warbler (*Setophaga discolor*), and wood thrush (*Hylocichla mustelina*).

The project area is forested but is located near the City of Waverly and is adjacent to existing residential development, which introduces regular human presence, noise, and light disturbance to the surrounding environment.

Minor and temporary impacts to migratory birds could occur during vegetation clearing due to increased activity and noise. However, the project footprint is limited in scale, and the proximity to development reduces the likelihood that the site provides optimal nesting or foraging habitat for sensitive species.

Considering the limited scope of disturbance, the site's proximity to the City of Waverly and adjacent residential areas, FEMA has determined that the proposed action will have no effect on migratory bird species.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action Alternative, the Waverly Housing Authority would not rebuild nor relocate their housing units. Alternative 1 would not involve any construction activities; therefore, there would be no potential for effects and a "take" would not occur since there would be no destruction or adverse modification of the surrounding habitat.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

West Brookside East Brookside Demolition Area

Under Alternative 2, minor short-term impacts to species within the demolition areas could potentially occur due to increased human disturbance, and noise. However, there is already an established level of human presence and activity in the area, so wildlife would likely be acclimated to low levels of disturbance. Migratory bird species are highly mobile and are thus unlikely to be impacted by project activities. In addition, the project areas were previously developed and are not suitable for nesting habitat, are not optimal for foraging, and are not located within a designated critical habitat, therefore take of a migratory bird species is not anticipated with this alternative.

Cherry Hill Development Area

Under Alternative 2, minor and temporary impacts to wildlife could occur due to increased human presence and construction-related noise. However, the areas surrounding the proposed project sites

are already developed and lie just outside the city limits of Waverly, reflecting an existing baseline of human activity. As such, any wildlife in the area is likely acclimated to low levels of disturbance.

Migratory bird species, which are highly mobile, are unlikely to be affected by these activities. Furthermore, the project areas were previously developed and do not provide suitable nesting habitat, are suboptimal for foraging, and are not located within designated critical habitat. Therefore, take of migratory bird species is not anticipated under this alternative, and impacts to listed species or their habitat are not expected.

5.5. CULTURAL RESOURCES

As a Federal agency, FEMA must consider the potential effects of its actions upon cultural resources prior to engaging in any undertaking. This obligation is defined in Section 106 of the National Historic Preservation Act (NHPA), as amended and implemented by 36 CFR Part 800. The NHPA of 1966 defines a historic property as “any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion on the National Register.” Eligibility criteria for listing a property on the National Register of Historic Places (NRHP) are found at 36 C.F.R. Part 60.

As defined in EO 13007, Indian Sacred Sites. Tribal resources are protected under the Native American Graves Protection and Repatriation Act (NAGPRA) and the American Indian Religious Freedom Act (AIRFA) on federal lands. NAGPRA directs federal agencies to provide written summaries, initiate tribal consultation, and either repatriate or dispose through other measures any discovered Native American human remains or funerary objects from federal lands or utilizing federal funds to Federally Recognized Tribes. AIRFA directs federal agencies to protect tribal rights of religious freedom, including access to and use of sites and sacred objects on federal lands. The Archaeological Resources Protection Act (ARPA) was signed into law in 1979. ARPA, as amended, provides tools to protect archaeological resources on public and Native American lands. These tools include (but are not limited to): permitting for archaeological investigations on federal or public lands; identification of prohibited activities, enforcement, and criminal prosecution for violations; prohibition of the sale, purchase, or transport of any archaeological resource or artifact; and prohibition of public disclosure of any information about archaeological resources (including location).

While tribal consultation is included under Section 106 of the NHPA, EO 13175 further specifies that federal agencies must consult with Federally Recognized Tribal Nations during decision-making processes that have the potential to impact tribal communities.

The Tennessee Historic Commission (THC) and Tennessee Division of Archaeology (TDOA) maintain databases of Tennessee’s historic properties and archaeological sites. These databases are regularly updated, in part, on the basis of reports prepared by cultural resources professionals in advance of construction projects that are subject to State Historic Preservation Officer (SHPO) and federal agency review, as well as by FEMA’s Office of Environmental Planning & Historic Preservation (OEHP). Requirements for review include the identification of significant cultural resources that may be impacted by the undertaking. Cultural resources are defined as prehistoric and historic sites, structures, districts, buildings, objects, artifacts, or any other physical evidence of human activity

considered important to a culture, subculture, or community for scientific, traditional, religious, or other reasons.

Only those cultural resources determined to be potentially significant under NHPA are subject to protection from adverse impacts resulting from an undertaking. To be considered significant, a cultural resource must meet one or more of the criteria established by the National Park Service that would make that resource eligible for inclusion in the National Register of Historic Places (NRHP). The term “eligible for inclusion in the NRHP” includes all properties that meet the NRHP listing criteria, which are specified in the Department of Interior regulations Title 36, Part 60.4 and NRHP Bulletin 15. Sites that have not been evaluated at the time of the undertaking may be considered potentially eligible for inclusion in the NRHP and, as such, are afforded the same regulatory consideration as nominated properties.

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect cultural resources. Within the APE, impacts to cultural resources are evaluated prior to the undertaking for both Standing Structures (above ground resources) and Archaeology (below ground resources).

In its 2022 EA for the demolition and disposition of the extant East Brookside and West Brookside residential housing developments, James + Associates Engineers and Planners, Inc., initiated Section 106 consultation with the Tennessee Historical Commission (Tennessee SHPO) on 07/18/2022, on behalf of Waverly Housing Authority. James + Associates Engineers and Planners, Inc., used HUD’s Tribal Directory Assessment Tool (TDAT) to identify Tribal Historic Preservation Offices (THPOs) with which to consult based on those listed as having current and ancestral interests in Humphreys County, Tennessee. Accordingly, Section 106 consultation was initiated with the Cherokee Nation, Coushatta Tribe of Louisiana, Eastern Band of Cherokee Indians, and Muscogee (Creek) Nation on 07/15/2022, on behalf of Waverly Housing Authority. While James + Associates Engineers and Planners, Inc., made no formal determination of effects for the proposed demolition and disposition of the extant East Brookside and West Brookside residential housing developments, it did state that no known historic properties were present within the APE or surrounding vicinity based on its review of NEPAassist.

The Tennessee SHPO responded on 08/01/2022, stating that it determined the Waverly Public Housing Complexes to be eligible for listing in the NRHP at the local level of significance under Criterion A in the area of Government based on their direct association with the creation of the Waverly Housing Authority and the City of Waverly’s efforts to provide housing assistance to residents in need. Further, the Tennessee SHPO determined that the proposed East Brookside and West Brookside demolition and disposition project would adversely affect the NR-eligible Waverly Public Housing Complexes and requested further consultation for the resolution of adverse effects. James + Associates Engineers and Planners, Inc., provided additional information and photographs documenting the condition of the Waverly Public Housing Complexes and event-related damages on 08/30/2022. The Tennessee SHPO reviewed the additional information documenting the integrity of the Waverly Public Housing Complexes and responded on 08/31/2022, requesting additional information on the number of buildings damaged and photographs of all the buildings to fully assess whether the building complex as a whole retained the degree of integrity required for eligibility for listing in the NRHP. James +

Associates Engineers and Planners, Inc., provided additional information, including Damage Description and Dimensions reports submitted to FEMA, further analysis, and photographs documenting the condition of the Waverly Public Housing Complexes and event-related damages on 09/19/2022. On 09/21/2022, the Tennessee SHPO determined, based on the additional information and photographs, the Waverly Public Housing Complexes to be ineligible for listing in the NRHP due to major structural damage and a loss of integrity and, accordingly, that no historic properties listed or eligible for listing in the NRHP would be affected by the undertaking. No responses from the Cherokee Nation, Coushatta Tribe of Louisiana, Eastern Band of Cherokee Indians, and Muscogee (Creek) Nation were received.

In preparation for the construction of the proposed Cherry Hill development, Dr. J. Scott Jones of Midsouth Cultural Resource Consultants conducted the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee* for James + Associates on behalf of Waverly Housing Authority. In January of 2023, Dr. Jones subjected the 18.5-acre project area (APE) to a Phase I archaeological survey consisting of pedestrian survey and systematic subsurface sampling through the excavation of sixteen (16) shovel test pits (STPs) at 30-meter intervals in areas of less than 15% slope. No archaeological materials were encountered during the Phase I archaeological survey of the Cherry Hill development APE, and Midsouth Cultural Resource Consultants did not recommend any further archaeological investigations of the Cherry Hill development APE.

In its 2023 EA for the proposed Chery Hill development, James + Associates Engineers and Planners, Inc. initiated Section 106 consultation with the Tennessee SHPO on 03/22/2023, on behalf of Waverly Housing Authority. James + Associates Engineers and Planners, Inc., used HUD's Tribal Directory Assessment Tool (TDAT) to identify Tribal Historic Preservation Offices (THPOs) with which to consult based on those listed as having current and ancestral interests in Humphreys County, Tennessee. Accordingly, Section 106 consultation was initiated with the Cherokee Nation, Chickasaw Nation, Coushatta Tribe of Louisiana, and Muscogee (Creek) Nation on 10/18/2023 and the Eastern Band of Cherokee Indians on 10/20/2023, on behalf of Waverly Housing Authority. James + Associates Engineers and Planners provided the Tennessee SHPO and referenced THPOs with a copy of the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee* survey report and, based on a review of local government records, site visits, and survey results, recommended that the proposed Cherry Hill development project would have no effect to historic properties. The Tennessee SHPO responded on 03/27/2023, with a determination of No Historic Properties Affected by the undertaking. The Chickasaw Nation responded on 10/31/2023, requesting government-to-government consultation with HUD and declining to consult with James + Associates Engineers and Planners on behalf of Waverly Housing Authority. HUD did not directly initiate Section 106 consultation with the Chickasaw Nation in response to this request. No responses from the Cherokee Nation, Coushatta Tribe of Louisiana, Eastern Band of Cherokee Indians, and Muscogee (Creek) Nation were received.

FEMA, the Tennessee SHPO, the Tennessee Emergency Management Agency (TEMA), and Participating Tribes have executed a Statewide Programmatic Agreement dated January 23, 2017, and amended February 29, 2024, to streamline the Section 106 review process. Per the guidelines outlined in the Programmatic Agreement, the undertaking does not meet the allowances agreed upon in Appendix B and, therefore, required consultation with interested parties.

FEMA determined that the APE for the East and West Brookside project is the two (2) noncontiguous 17.8-acre parcels comprising the extant East Brookside (36.086597, -87.799177) and West Brookside (36.086161, -87.804332) residential housing developments slated for disposition and the 18.5-acre proposed Cherry Hill development site (36.089353, -87.783527). FEMA identified potential historic properties in the APE utilizing the National Park Service (NPS) National Register of Historic Places (NRHP) GIS resource, data from the THC and TDOA site files, historic aerial imagery and topographic maps, and information from previously conducted cultural resource investigations.

FEMA's review found there are no historic properties listed or eligible for listing in the NRHP, National Historic Landmarks (NHLs), or known archaeological sites eligible for listing in the NRHP in the proposed project's APE. One (1) previously recorded archaeological site whose eligibility for listing in the NRHP has not been evaluated was identified within a half-mile radius of the extant East and West Brookside residential housing development APE and one (1) additional previously recorded archaeological site reported destroyed was identified within a half-mile radius of the proposed Cherry Hill development APE. FEMA determined that both the East Brookside and West Brookside APEs have a low potential to contain intact archaeological resources due to previous disturbance from prior land use and development for multi-housing residential use. Further, project activities associated with the proposed demolition of the existing buildings and associated infrastructure will be confined to previously disturbed soils. The proposed Cherry Hill development APE was subjected to the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee* and no intact subsurface deposits, surface features, or cultural resources were encountered as a result of this survey, with the APE described as highly eroded due to logging. Previous correspondence between the Waverly Housing Authority and the Tennessee SHPO, dated 03/22/2023 (Project # SHPO0002787), resulted in a determination that no historic properties eligible for listing in the NRHP would be affected by this undertaking. FEMA concurred with this finding.

A review of TN Historical Commission (SHPO) online viewer revealed that no previously identified historic resources are located within the viewshed of the proposed demolition project. FEMA concurred with the Tennessee SHPO's previous determination that the Waverly Public Housing Complexes are ineligible for listing in the NRHP due to contemporary renovation work completed in 2004 and event-related damages that cumulatively detracted from their integrity. Based on FEMA's additional desktop research, including historic aerial imagery and property assessment data in the TN online property viewer, no historic resources were identified within the viewshed of the West Brookside APE, and multiple historic resources forty-five (45) years old or older within the viewshed of the East Brookside APE. No historic resources were identified during FEMA's desktop assessment of the viewshed to the west and north of the East Brookside APE. However, to the immediate south of the East Brookside Drive Community is a circa 1970 commercial strip mall known as Waverly Plaza (36.085760, -87.800098). This single-story strip mall is comprised of two (2) disconnected buildings. This strip mall has a flat roof, brick and concrete block exterior, large aluminum-framed store front windows and doors, and houses multiple independent businesses. A large, paved parking lot is located between each building. While this strip mall appears to have remained relatively intact since 1970, this resource lacks significance. This strip mall appears to have been constructed during a time when American cities were transitioning from small multi-retail commercial buildings to larger strip malls that housed more businesses; however, research of this strip mall did not indicate if it was a part of that commercial trend. Additionally, research did not indicate if the businesses housed in this strip mall are unique or

significant to the commercial development in Waverly or Humphreys County. This resource appears to be a typical and late example strip mall. Therefore, FEMA has determined that Waverly Plaza strip mall is not eligible for listing in the NRHP under Criteria A and C.

To the east and within the viewshed of the East Brookside Drive Community are individual houses along Carroll Avenue that were built starting in the 1930s through the 1940s to 1970s (36.085220, -87.798023). Modern infill, including houses constructed in the 1990s-2000s and vacant lots, is also present. Many of the historic resources appear to have been heavily modified, with material alterations including vinyl-framed windows and vinyl siding. Overall, the neighborhood along Carroll Avenue appears to lack integrity due to a lack of cohesiveness. FEMA recommends that the Carroll Avenue neighborhood is not eligible for listing in the NRHP.

A review of TN Historical Commission (SHPO) online viewer revealed that no previously identified historic resources are located within the viewshed of the proposed new residential housing development project. Based on FEMA's additional desktop research, including historic aerial imagery, the Cherry Hill APE was cleared of vegetation and logged in 1958 imagery. In 1981, a field road and cleared plots are visible until 1998 within the project area. By 2006, additional cleared areas are visible, with what appears to be staging areas for gravel or other materials along the southern and western edges of the project area. Secondary forest regenerated over the years, with the dirt road becoming less visible on the most recent aerials.

According to historic aerial imagery and property assessment data in the TN online property viewer, Sycamore Avenue to the east of the proposed project area was developed by 1958. A 1936 topographic map shows a dirt road roughly following the current alignment of Sycamore Avenue, and the area is labeled Slayden Hollow. Property assessment data show that the houses in the neighborhood along Sycamore Avenue, referred to as the Slayden No 1 Subdivision, were constructed starting in 1944 through the 1950s to 1970s. Modern infill of houses constructed in the 1990s-2000s, and mobile homes are also present. The proposed project area is located on a ridge above Sycamore Avenue, so it is unlikely that the proposed Cherry Hill residential development will be visible from the historic resources below. Additionally, project plans show the woods will remain as a vegetative buffer along the ridgeline between the Cherry Hill APE and Sycamore Avenue. Therefore, it is FEMA's opinion that the majority of the historic resources within the Slayden No 1 Subdivision are located outside of the proposed project's viewshed. Overall, the Slayden No 1 Subdivision along Sycamore Avenue is a residential street of post-World War II homes that have been collectively modified and do not represent intact examples of Minimal Traditional or Ranch House types. The subdivision does not appear to have been cohesively planned in such a way that would convey significance for post-World War II planning practices. Therefore, FEMA recommends that the Slayden No 1 Subdivision is not eligible for listing in the NRHP.

The Modern Acres Subdivision along Washington Circle to the west of the proposed project's APE was developed between 1958 and 1981 according to available imagery; the alignment of Washington Circle is depicted on the 1970 topographic map. FEMA has identified multiple historic resources that are forty-five (45) years old or older along Washington Circle, which is within the viewshed of the proposed project area. According to property assessment data in the TN online property viewer, the historic resources along the eastern outer parcels of Washington Circle were constructed in 1971-72

and 1978 and are predominantly Ranch Houses. Modern Acres Subdivision consists of houses constructed from the early 1970s through the early 1980s. Houses constructed in the 2000s and vacant lots are also present. Overall, the Modern Acres Subdivision along Washington Circle is a 1970s Ranch House neighborhood that does not appear to have been developed as a cohesive subdivision and does not convey significance common to mid-twentieth (20th) century planning practices. Based on FEMA's desktop assessment, it appears that the late examples of Ranch Houses in this neighborhood have collective modifications, such as replacement windows and siding, and do not convey significance as intact examples of the type. FEMA recommends that the Modern Acres Subdivision is not eligible for listing in the NRHP.

Based on the results of FEMA's historic property identification efforts, no properties listed in or considered eligible for listing in the National Register were located within the APE of the extant East Brookside and West Brookside residential housing developments or the proposed Cherry Hill residential housing project. Therefore, there is a finding of No Historic Properties Affected for this undertaking in accordance with 36 CFR 800.4(d)(1) for the proposed demolition of the East Brookside and West Brookside residential housing developments and the proposed new development of the Cherry Hill residential housing project. To ensure that FEMA-funded activities will not adversely affect archaeological resources, FEMA placed two (2) special conditions on the project for the treatment of inadvertent archaeological discoveries during ground disturbing activities within the project area, which are explicitly mentioned below in Section 5.5.2 Archaeological Resources.

While tribal consultation is included under Section 106 of the NHPA, EO 13175 further specifies that federal agencies must consult with Federally Recognized Tribal Nations during decision-making processes that have the potential to impact tribal communities. There are 9 Federally Recognized Tribes either in, or with interests within the proposed project area. On February 19, 2025, FEMA initiated consultation with the Tennessee SHPO and nine (9) THPOs: Alabama-Quassarte Tribal Town, Chickasaw Nation, Eastern Band of Cherokee Indians, Eastern Shawnee Tribe of Oklahoma, Muscogee (Creek) Nation, Poarch Band of Creek Indians, Seminole Tribe of Florida, Shawnee Tribe, and United Keetoowah Band of Cherokee Indians. FEMA received concurrence with the determination of No Historic Properties Affected from the Tennessee SHPO on 03/03/2025 and Chickasaw Nation on 03/24/2025. No objections to the proposed project were expressed by the remaining eight (8) THPOs.

5.5.1. VISUAL QUALITY AND AESTHETICS

Consideration is given to the loss of, or impact to, any aesthetic resources or viewshed. A viewshed is an area of land, water, or other environmental element that is visible to the human eye from a fixed vantage point. Viewsheds are areas of particular scenic or historic value that have been deemed worthy of preservation against development or other change. They are spaces that are readily visible from public areas and thoroughfares, such as from public roadways, public parks or high-rise buildings. If the viewshed is integral to the setting of a landmark building or part of the NHPA Evaluation Criterion for a building's eligibility, it must be considered for any new development or renovation proposal.

Existing Conditions

West Brookside East Brookside Demolition Area

A review of TN Historical Commission (SHPO) online viewer revealed that no previously identified historic resources are located within the viewshed of the proposed demolition project. FEMA concurred with the Tennessee SHPO's previous determination that the Waverly Public Housing Complexes are ineligible for listing in the NRHP due to contemporary renovation work completed in 2004 and event-related damages that cumulatively detract from their integrity. Based on FEMA's additional desktop research, including historic aerial imagery and property assessment data in the TN online property viewer, no historic resources were identified within the viewshed of the West Brookside APE, and multiple historic resources forty-five (45) years old or older were identified within the viewshed of the East Brookside APE. No historic resources were identified during FEMA's desktop assessment of the viewshed to the west and north of the East Brookside APE. One (1) building constructed circa 1970, the Waverly Plaza strip mall, was identified to the immediate south of the East Brookside residential development. FEMA determined Waverly Plaza to be ineligible for listing in the NRHP under Criteria A or C based on a lack of significance. In addition to Waverly Plaza, FEMA identified numerous individual houses along Carroll Avenue that were constructed between the 1930s and 1940s-1970s. Due to modern infilling of the neighborhood and contemporary alterations to individual houses that are forty-five (45) years or older that detract from the neighborhood's collective integrity and cohesiveness, FEMA recommends the Carroll Avenue neighborhood as ineligible for listing in the NRHP.

FEMA determined that both the East Brookside and West Brookside APEs have a low potential to contain intact archaeological resources due to previous disturbance from prior land use and development for multi-housing residential use. Further, project activities associated with the proposed demolition of the existing buildings and associated infrastructure will be confined to previously disturbed soils. Previous correspondence between the Waverly Housing Authority and the Tennessee SHPO, dated 03/22/2023 (Project # SHPO0002787), resulted in a determination that no historic properties eligible for listing in the NRHP, including their respective viewsheds, would be affected by this undertaking. FEMA concurred with this finding.

The current state of the West Brookside and East Brookside demolitions areas are detrimental to the visual qualities and aesthetics of the neighborhood. The flood-damaged structures are vacant and deteriorating, with boarded windows and doors. The neighborhood streets are closed to traffic and blockaded by temporary signage. The demolition and disposition of these sites will improve the visual aesthetics of the neighborhood. If the flood-damaged structures were to remain in place, they would deteriorate further and continue to be a detriment to the visual quality and aesthetics of the area.

The West and East Brookside Demolition areas are non-forested. Following demolition and disposition of the site, no change in vegetative communities would occur that would affect the visual quality and aesthetics of the area. Presently, the viewshed of Trace Creek and the forested riparian corridor of Trace Creek is obstructed by the West and East Brookside developments. The demolition and disposition of these sites will improve the viewshed of the waterway and the adjacent forested areas.

Cherry Hill Development Area

A review of TN Historical Commission (SHPO) online viewer revealed that no previously identified historic resources are located within the viewshed of the proposed new residential housing development project. According to historic aerial imagery and property assessment data in the TN online property viewer, Sycamore Avenue to the east of the proposed project area was developed by

1958. Property assessment data show that the houses in the neighborhood along Sycamore Avenue, referred to as the Slayden No 1 Subdivision, were constructed between 1944 through the 1950s to 1970s. Based on modern infilling of the neighborhood, collective contemporary modifications to homes that do not represent intact examples of Minimal Traditional or Ranch House types, and a lack of cohesive planning that would convey significance for post-World War II planning practices, FEMA recommends the Slayden No 1 Subdivision as ineligible for listing in the NRHP. Further, the proposed Cherry Hill residential development project area is located on a ridge above Sycamore Avenue, so it is unlikely that the proposed Cherry Hill residential development will be visible from the historic resources below. Project plans show the woods will remain as a vegetative buffer along the ridgeline between the Cherry Hill APE and Sycamore Avenue. Therefore, it is FEMA's opinion that a majority of the historic resources within the Slayden No 1 Subdivision are located outside of the proposed project's viewshed. One (1) additional neighborhood constructed between 1958 and 1981, the Modern Acres Subdivision, was identified along Washington Circle to the west of the proposed Cherry Hill residential development's APE. Multiple historic resources that are forty-five (45) years old or older are located along Washington Circle, which is within the viewshed of the proposed project area. While houses in the Modern Acres Subdivision are predominantly Ranch Houses, modern infilling and collective contemporary modifications of later examples of Ranch Houses in this neighborhood detract from its integrity and, ultimately, these houses do not convey their significance as intact examples of the architectural type. Further, the Modern Acres Subdivision does not appear to have been developed as a cohesive subdivision and does not convey significance common to mid-twentieth (20th) century planning practices. FEMA recommends the Modern Acres Subdivision as ineligible for listing in the NRHP.

The proposed Cherry Hill development APE was subjected to the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee* and no intact subsurface deposits, surface features, or cultural resources were encountered as a result of this survey, with the APE described as highly eroded due to logging. Previous correspondence between the Waverly Housing Authority and the Tennessee SHPO, dated 03/22/2023 (Project # SHPO0002787), resulted in a determination that no historic properties eligible for listing in the NRHP, including their respective viewsheds, would be affected by this undertaking. FEMA concurred with this finding.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the no action alternative, no impacts to the respective viewsheds of historic structures, buildings, objects, sites, or districts would occur. The No Action alternative would result in continued blight and decay of the abandoned structures. Currently, the demolition sites are fenced off. Further, the structures serve as a constant reminder for the community of the devastation that occurred.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

Based on the results of FEMA's historic property identification efforts, no properties listed in or considered eligible for listing in the National Register were located within the APE of this undertaking. FEMA has made a determination of No Historic Properties Affected for the proposed demolition of the East Brookside and West Brookside residential housing developments. As such, no impacts to the respective viewsheds of historic structures, buildings, objects, sites, or districts would occur. Upon completion of the proposed project, any standing residential buildings will be demolished, broadening potential view of the section of Trace Creek situated along the southern and northern border of the west and east sites, respectively. The proposed project will likely have a long-term beneficial impact on the viewshed for the surrounding area. No mitigation or further action is required.

Cherry Hill Development Area

Based on the results of FEMA's historic property identification efforts, no properties listed in or considered eligible for listing in the National Register were located within the APE of this undertaking. FEMA has made a determination of No Historic Properties Affected for the proposed new development of the Cherry Hill residential housing project. As such, no impacts to the respective viewsheds of historic structures, buildings, objects, sites, or districts would occur. The proposed Project will be developed in a suburban residential area, consistent with adjacent suburban residential uses. Although a number of trees will be removed to construct the development, in order to maintain a visual aesthetic and viewshed, a landscaped buffer and wooded area separating the higher density development from the surrounding single-family homes will be incorporated into the proposed developed area. The design of the site will be done in accordance with the requirements of the Zoning Ordinance and Subdivision Regulations. No significant negative impacts are anticipated due to the actions proposed in Alternative 2. No mitigation or further action is required.

5.5.2. HISTORIC (STANDING) STRUCTURES

Existing Conditions – Historic Standing Structures

West Brookside East Brookside Demolition Area

A review of TN Historical Commission (SHPO) online viewer revealed that no previously identified historic resources are located within the viewshed of the proposed demolition project. FEMA concurred with the Tennessee SHPO's previous determination that the Waverly Public Housing Complexes are ineligible for listing in the NRHP due to contemporary renovation work completed in 2004 and event-related damages that cumulatively detract from their integrity. Based on FEMA's additional desktop research, including historic aerial imagery and property assessment data in the TN online property viewer, no historic resources were identified within the viewshed of the West Brookside APE, and multiple historic resources forty-five (45) years old or older were identified within the viewshed of the East Brookside APE. No historic resources were identified during FEMA's desktop assessment of the viewshed to the west and north of the East Brookside APE. One (1) building constructed circa 1970, the Waverly Plaza strip mall, was identified to the immediate south of the East Brookside residential development. FEMA determined Waverly Plaza to be ineligible for listing in the NRHP under Criteria A or C based on a lack of significance. In addition to Waverly Plaza, FEMA identified numerous individual

houses along Carroll Avenue that were constructed between the 1930s and 1940s-1970s. Due to modern infilling of the neighborhood and contemporary alterations to individual houses that are forty-five (45) years or older that detract from the neighborhood's collective integrity and cohesiveness, FEMA recommends the Carroll Avenue neighborhood as ineligible for listing in the NRHP.

Cherry Hill Development Area

A review of TN Historical Commission (SHPO) online viewer revealed that no previously identified historic resources are located within the viewshed of the proposed new residential housing development project. According to historic aerial imagery and property assessment data in the TN online property viewer, Sycamore Avenue to the east of the proposed project area was developed by 1958. Property assessment data show that the houses in the neighborhood along Sycamore Avenue, referred to as the Slayden No 1 Subdivision, were constructed between 1944 through the 1950s to 1970s. Based on modern infilling of the neighborhood, collective contemporary modifications to homes that do not represent intact examples of Minimal Traditional or Ranch House types, and a lack of cohesive planning that would convey significance for post-World War II planning practices, FEMA recommends the Slayden No 1 Subdivision as ineligible for listing in the NRHP. Further, the proposed Cherry Hill residential development project area is located on a ridge above Sycamore Avenue, so it is unlikely that the proposed Cherry Hill residential development will be visible from the historic resources below. Project plans show the woods will remain as a vegetative buffer along the ridgeline between the Cherry Hill APE and Sycamore Avenue. Therefore, it is FEMA's opinion that a majority of the historic resources within the Slayden No 1 Subdivision are located outside of the proposed project's viewshed. One (1) additional neighborhood constructed between 1958 and 1981, the Modern Acres Subdivision, was identified along Washington Circle to the west of the proposed Cherry Hill residential development's APE. Multiple historic resources that are forty-five (45) years old or older are located along Washington Circle, which is within the viewshed of the proposed project area. While houses in the Modern Acres Subdivision are predominantly Ranch Houses, modern infilling and collective contemporary modifications of later examples of Ranch Houses in this neighborhood detract from its integrity and, ultimately, these houses do not convey their significance as intact examples of the architectural type. Further, the Modern Acres Subdivision does not appear to have been developed as a cohesive subdivision and does not convey significance common to mid-twentieth (20th) century planning practices. FEMA recommends the Modern Acres Subdivision as ineligible for listing in the NRHP.

Potential Impacts and Proposed Mitigation to Standing Historic Structures

Alternative 1: No Action

Under the no action alternative, no impacts to historic structures, buildings, objects, or districts would occur.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

Based on the results of FEMA's historic property identification efforts, no properties listed in or considered eligible for listing in the National Register were located within the APE of this undertaking. FEMA has made a determination of No Historic Properties Affected for the proposed demolition of the East Brookside and West Brookside residential housing developments and the proposed new development of the Cherry Hill residential housing project.

5.5.3. ARCHAEOLOGICAL RESOURCES

Existing Conditions

FEMA's review found there are no historic properties listed or eligible for listing in the NRHP, National Historic Landmarks (NHLs), or known archaeological sites eligible for listing in the NRHP in the proposed project's APE. One (1) previously recorded archaeological site whose eligibility for listing in the NRHP has not been evaluated was identified within a half-mile radius of the extant East and West Brookside residential housing development APE and one (1) additional previously recorded archaeological site reported destroyed was identified within a half-mile radius of the proposed Cherry Hill development APE. FEMA determined that both the East Brookside and West Brookside APEs have a low potential to contain intact archaeological resources due to previous disturbance from prior land use and development for multi-housing residential use. Further, project activities associated with the proposed demolition of the existing buildings and associated infrastructure will be confined to previously disturbed soils. The proposed Cherry Hill development APE was subjected to the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee* (Appendix C13) and no intact subsurface deposits, surface features, or cultural resources were encountered as a result of this survey, with the APE described as highly eroded due to logging. Previous correspondence between the Waverly Housing Authority and the Tennessee SHPO, dated 03/22/2023 (Project # SHPO0002787) (Appendix D2), resulted in a determination that no historic properties eligible for listing in the NRHP would be affected by this undertaking. FEMA concurred with this finding.

Prehistoric Archaeological Resources

No pre-contact (prehistoric) archaeological resources were identified within the proposed project's APE.

Historic Archaeological Resources

No historic archaeological resources were identified within the proposed project's APE.

Potential Impacts and Proposed Mitigation, Archaeological Resources

Alternative 1: No Action

Under the no action alternative, no impacts to archaeological resources would occur.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

Based on the results of FEMA's historic property identification efforts and the *Phase I Archaeological Survey of the Proposed Waverly Housing Project; Humphreys County, Tennessee*, no properties listed in or considered eligible for listing in the National Register were located within the APE of this undertaking. FEMA has made a determination of No Historic Properties Affected for the West and East Brookside Demolition and Cherry Hill Development project. As such, the proposed project should have no effect to pre-contact (prehistoric) or historic archaeological resources.

Three (3) National Historic Preservation Act (NHPA) conditions shall be adhered to for Alternative 2. See Section 7.1.

A copy of the document referenced in the NHPA conditions, *Best Management Practices: Demolition and Debris Removal Stipulations for FEMA Grant Funded Projects - State of Tennessee (07/13/2023)*, is located in Appendix D Subsection D3.

5.6. SOCIOECONOMIC RESOURCES

Socioeconomic factors considered include employment and income, demographic trends, lifestyle and cultural values, and community infrastructure.

5.6.1. SOCIOECONOMICS

Existing Conditions

Humphreys County, Tennessee was reported to have 19,074 residents in 2023 according to U.S. Census Bureau (USCB) data. The demolition and development project areas are located within Humphreys County Census Tract 1303 (USCB, 2023). In 2023, the population of Humphreys County Census Tract 1303 was 5,287. The census tract has a total land area of 42.2 square miles with a population density of 125.2 people per square mile (USCB, 2023). The USCB reported that approximately 88 percent of the population was over 18 years old, with 26 percent of the population being over 65 years old. Approximately 52 percent of the population was female, and 48 percent of the population was male.

The USCB (2023) reported that 91 percent of the population over 25 years of age within the census tract are high school graduates. The per capita income from 2019-2023 was approximately \$34,950 which is slightly higher than the average for Humphreys County (\$30,868). The median household income for the same time period of \$46,793 is less than the amount for Humphreys County (\$59,333). Locally, the per capita income and median household income are less than the Tennessee statewide average, \$37,866 and \$67,097, respectively.

The USCB (2023) reported the racial makeup of the community as: approximately 92 percent of the population White; 3 percent of the population Black or African American; 3 percent two or more races; less than one percent of the population was reported as American Indian and Alaskan Native, less than one percent was Asian, less than one percent was Native Hawaiian and Other Pacific Islander. Approximately 1 percent of the population identified as being of Hispanic or Latino.

The project is located within the City of Waverly, Tennessee, which reported a population of 4,278. The City of Waverly comprises 8.8 square miles and has an average population density of 488.9 people per square mile.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

Under the No Action Alternative, the Waverly Housing Authority would neither rebuild nor relocate the existing publicly assisted housing units damaged by the disaster. The No Action alternative would not address the need for affordable housing options within the City of Waverly. The former residents of the West Brookside and East Brookside developments have been displaced from their homes and the community. The No Action alternative would not provide the necessary housing options that would facilitate the displaced residents' return to Waverly, Tennessee and would not help them rebuild their communities. The No Action alternative would have a negative impact on short-term and long-term community demographics and socioeconomics.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

The Cherry Hill Development will provide new affordable housing options in Waverly, Tennessee. This development is needed to address the growing need for affordable housing and to replace the housing units lost to the Severe Tennessee Storm and Flooding event. Alternative 2 will provide the necessary housing options that would facilitate the displaced residents' return to Waverly, Tennessee and will help them rebuild their communities. As such, Alternative 2 will have no negative effects on community demographics and socioeconomics and no mitigation or action is required.

5.6.2. LAND USE AND PLANNING

Existing Conditions

West Brookside East Brookside Demolition Area

The two (2) sites contained within the proposed project are both situated on residential plots of land, surrounded mainly by other residential or commercial buildings in an urbanized setting.

The West Brookside site previously had fifteen (15) residential structures and one commercial office used by the Waverly Housing Authority. Creekview Manor Apartments is located on the eastern boundary of the West Brookside Site, and The Kingdom Hall of Jehovah's Witnesses is located on its western boundary. Highway 70 East runs east to west along the northern boundary of the project site, and Trace Creek flows east to west along the southern boundary of the project site.

The East Brookside site previously had seventeen (17) individual residential buildings within a suburban setting. North Clydeton Road and Mytle Avenue runs north to south along the western and eastern boundary of the project site, respectively. Waverly Cash Saver and conjoined parking lot are located on the southern boundary of the project site. Trace Creek flows east to west along the northern boundary.

Cherry Hill Development Area

The Cherry Hill Development Area is situated within an existing forested plot of land, surrounded by contiguous forest along the northern boundary. Washington Circle is a circular suburban neighborhood situated along the site's western boundary. Sycamore Avenue is a linear suburban neighborhood running north to south along the site's eastern boundary. East Railroad Street and Highway 70 East run east to west along the site's southern boundary.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect land use and planning.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

West Brookside East Brookside Demolition Area

Any required municipal permit will be obtained prior to commencement of demolition activities. TDEC permits will also be obtained. Following demolition, land use is planned to be vacant (open space) until disposition. The proposed project will not displace or divide the existing community. Housing vacancies have already been caused by extensive damage from the 2021 Flood disaster. New dwelling units are

planned as part of a separate project, to be constructed on a separate piece of land, designated as the 'Cherry Hill Development Area'. No significant negative impacts will occur due to the actions proposed in Alternative 2, and no further mitigation or action is required.

Cherry Hill Development Area

The City of Waverly is requiring the proposed project to go through the normal city review and approval process. Rezoning to a high-density residential zoning district was approved in Fall 2022. The site design will go through site plan review and approval, and the building design will go through building permit approval. Regarding land use and zoning, the proposed project will be residential in use, which is consistent with adjacent residential uses. The proposed use is also consistent with the uses permitted in the zoning district that was approved by the Planning Commission and Board of Mayor and Aldermen during the Fall 2022 rezoning process. The urban design of the site will be done in accordance with the requirements of the Zoning Ordinance and Subdivision Regulations. No significant negative impacts will occur due to the actions proposed in Alternative 2, and no further mitigation or action is required.

5.6.3. NOISE

Under the Clean Air Act, the EPA administrator established the Office of Noise Abatement and Control (ONAC) to carry out investigations and studies on noise and its effect on the public health and welfare. Through ONAC, the EPA coordinated all Federal noise control activities, but in 1981 the Administration concluded that noise issues were best handled at the State and local level. As a result, ONAC was closed and primary responsibility of addressing noise issues was transferred to State and local governments. However, EPA retains authority to investigate and study noise and its effect, disseminate information to the public regarding noise pollution and its adverse health effects, respond to inquiries on matters related to noise, and evaluate the effectiveness of existing regulations for protecting the public health and welfare, pursuant to the Noise Control Act of 1972 and the Quiet Communities Act of 1978.

Existing Conditions

West Brookside East Brookside Demolition Area

According to the most recent data available through the U.S. Department of Transportation (USDOT) National Transportation Noise in the U.S. mapping tool, the primary sources of noise pollution in the vicinity of both demolition sites originate from rail and roadway traffic. Noise pollution is measured in dBA (A-weighted decibels) and collected over a 24-hour LAeq period. Data is reported using a colored scale range. The greatest source of reported railway noise pollution within the vicinity of the proposed sites is the CSX Transportation railroad line, situated approximately 215 feet north of the West Brookside demolition area and approximately 330 feet north of the East Brookside demolition area. Noise pollution from this railroad is reported to primarily range between 45.0 – 49.9 dBA (yellow) and 55.0-59.0 dBA (red), with infrequent points reporting a dBA of >90 (blue).

Cherry Hill Development Area

Three (3) primary noise generators are found within the regulatory threshold distances (1,000' from major road; 3,000' from railroad; 15 miles from airport): US Highway 70 is located less than 900 feet south of the Project Site. A railroad is located adjacent to US Highway 70, under 850 feet from the project site. The Humphreys County Airport is located under 15,000 feet from the project site. However, none of these noise generators cause the noise exposure at the project site to exceed the regulatory threshold of 65 decibels. In order to evaluate the effect of noise from roadway, railroad, and airport sources, HUD's Day/Night Noise Level (DNL) Calculator was utilized. Average Annual Daily Traffic (AADT) data regarding US Highway 70 was taken from a database provided by the Tennessee Department of Transportation (TDOT), and other input data was estimated based on approximations and observation. In summary, HUD DNL indicates a combined DNL of 53 decibels, which falls underneath the regulatory threshold of 65 decibels. See Appendix C14 for a screenshot from HUD DNL Calculator.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect noise pollution levels.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Area

The City of Waverly has implemented noise ordinances that apply to demolition required for building operation purposes within city limits. This ordinance, under municipal codes section 11-202(1)(h) "building operations", specifies demolition activity as being a miscellaneous prohibited noise and is considered "...loud, disturbing, and unnecessary..." if the activity occurs outside of the hours of "...6:00pm – 7:00am on week days, except in cases of urgent necessity in the interest of public health, safety, and then only with a permit from the building inspector for a period while the emergency continues not to exceed thirty (30) days." During demolition activities, the demolition contractor will comply with all applicable laws and ordinances regarding site safety and noise. Any increase in noise coming from the project site during demolition will be temporary and short-term. No significant negative impact will occur due to the demolition activity proposed in Alternative 2, and the project is found to be in compliance. No further mitigation or action is required.

Cherry Hill Development Area

The City of Waverly has implemented noise ordinances that apply to construction required for building operation purposes within city limits. This ordinance, under municipal codes section 11-202(1)(h) "building operations", specifies construction activity as being a miscellaneous prohibited noise and is considered "...loud, disturbing, and unnecessary..." if the activity occurs outside of the hours of "...6:00pm – 7:00am on week days, except in cases of urgent necessity in the interest of public health, safety, and then only with a permit from the building inspector for a period while the emergency continues not to exceed thirty (30) days.". During development activities, the construction contractor will comply with all applicable laws and ordinances regarding site safety and noise.

Noise effects of the adjacent railroad and US highway were evaluated using HUD's DNL calculator. In summary, the combined DNL (calculated based by HUD's DNL tool based on estimated information) does not appear to exceed the regulatory threshold of 65 decibels. See Appendix C14 for a screenshot from HUD DNL Calculator. Noise exposure is mitigated by the fact that the Project Site is set back on a hill away from US Highway 70 and the railroad. After construction is complete, noise effects will be limited to typical noises of residential developments (e.g. cars starting, doors shutting, children playing, etc.), which would not noticeably increase the ambient noise levels in the surrounding area. No significant negative impact will occur due to the actions proposed in Alternative 2, and the project is found to be in compliance. No further mitigation or action is required.

A HUD worksheet was used to test compliance. See Appendix C14 for the completed worksheet and other information including a screenshot of HUD DNL Calculator; screenshot of TDOT AADT Traffic Count Database System.

5.6.4. TRANSPORTATION

Existing Conditions

West Brookside East Brookside Demolition Area

The West Brookside site is located in a developed urban area within the limits of the City of Waverly with direct connectivity to major Highway 70 East and adjacent connectivity to route 13. The East Brookside site has adjacent access to major Highway 70 East and West main street through connectivity to North Clydeton Road, a public road.

Cherry Hill Development Area

The development site is located near two (2) local public roads (Washington Circle to the west and Sycamore Avenue to the east) with direct connectivity to major highway (US Highway 70).

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect accessibility or usage of transportation infrastructure.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

West Brookside East Brookside Demolition Area

The demolition activity proposed in Alternative 2 will not increase current rates of traffic congestion in the area. Any spikes in traffic due to demolition activity and the movement of demolition equipment will be temporary, and short-term. Existing city transportation infrastructure will not experience extra strain as a result of the proposed project. Accessibility to the project site will be restricted during demolition activities, but this is not a negative impact because tenants were already displaced after

the 2021 Flood disaster. No significant negative impact will occur due to the actions proposed in Alternative 2 and no further mitigation or action is required.

Cherry Hill Development Area

The proposed development activity in Alternative 2 contains plans to connect the newly developed housing units to the local public road network via an internal, private road designed to public road specifications, made feasible via a variance obtained in August 2023. Current construction plans for development activities will be subject to certain design criteria required by Tennessee Housing Development Agency (THDA) and HUD, including the Fair Housing Act, which will require accessible routes within certain portions of the site. Minor, short-term negative impacts will affect the immediate area during development due to the influx of construction equipment and related trucks on public roadways that will contribute to traffic congestion. These minor impacts will be temporary and localized to the period of construction. No other significant negative impacts will occur due to the actions proposed in Alternative 2 and no further mitigation or action is required.

5.6.5. PUBLIC SERVICES AND UTILITIES

Existing Conditions

West Brookside East Brookside Demolition Area

- Commercial facilities: Commercial property (retail) lies on the adjacent parcel to the south of the East Brookside site. One commercial property (retail) currently exists north of the West Brookside site across Highway 70 East.
- Parks, open space, and recreation: The East Brookside site is located approximately 0.3 miles north of The Walls Art Park, and the West Brookside site is located approximately 0.54 miles northwest of The Walls Art Park. The closest city park to both sites is the Waverly City Park, located approximately 1.90 miles from West Brookside and 1.98 miles from East Brookside.
- Public facilities and social services: The East and West Brookside sites are located approximately 0.37 miles and 0.92 miles away from the Humphreys County Library, respectively. The Mid-Cumberland Human Resource building and United Way of Humphreys County are both located centrally in downtown Waverly. The East Brookside site is approximately 0.50 miles northwest and 0.37 miles north of both facilities, respectively. The West Brookside site is approximately 0.75 miles and 0.62 miles northwest of both facilities, respectively.
- Emergency Services: The East and West Brookside sites are located approximately 1.18 miles and 1.31 miles from the Humphreys County Volunteer Fire department, respectively. The East and West Brookside sites are located 0.49 and 0.72 miles from the Waverly Police Department, respectively. The closest emergency medical facilities to both the East and West Brookside sites are the Fast Pace Health Urgent Care, and Ascension Saint Thomas Three Rivers hospital. East Brookside is 0.29 miles from Fast Pace Health Urgent Care and 1.19 miles from Ascension Saint Thomas Three Rivers Hospital. West Brookside is 0.50 miles from Fast Pace Urgent Care and 1.21 miles from Ascension Saint Thomas Three Rivers Hospital.

- **Public Utilities:** Both sites currently receive public water and water services through the Waverly Water Division. Both sites currently receive sewer services through The Storm and Sanitary Sewer Division, and gas services through MidAmerican Energy Company. Electricity is City-owned and provided by Waverly Utilities.

Cherry Hill Development Area

- **Commercial facilities:** No commercial property currently lies within the immediate vicinity of the Cherry Hill Development site.
- **Parks, open space, and recreation:** The Cherry Hill site is closely adjacent to the Waverly City Park, located approximately 0.78 miles east of the proposed development property.
- **Public Facilities and social services:** The Cherry Hill site is located approximately 0.78 miles west of the Humphreys County Library. The Mid-Cumberland Human Resource building and United Way of Humphreys County are both located centrally in downtown Waverly, approximately 0.80 miles southwest and 0.96 miles southwest of the proposed development site, respectively.
- **Emergency Services:** The closest fire department to the Cherry Hill site is the Humphrey County Volunteer Fire Department, located approximately 1.48 miles south of the proposed development property. The closest Police Station is the Wavery Police Department, located approximately 0.80 miles southwest of the proposed development property. The closest emergency medical facilities are the Fast Pace Health Urgent Care, and the Ascension Saint hospital, located approximately 1.0 mile southwest and 1.1 miles south of the proposed development site, respectively.
- **Public utilities:** The Cherry Hill development site receives public water and water services through the Waverly Water Division. Sewer services are provided by The Storm and Sanitary Sewer Division, and gas is provided by MidAmerican Energy Company. Electricity is City-owned and provided by Waverly Utilities.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect public services or utilities.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition Cherry Hill Development)

West Brookside East Brookside Demolition Area

The project will not directly impact any commercial facilities. Demolition activities at both sites will remove the current decaying vacant buildings and will create a more aesthetically pleasing environment for the adjacent commercial facilities in the area. Removal of the vacant buildings will also create minor, beneficial impact on public safety. Private underground utilities 5-feet outside the building will be disconnected and capped for water service lines (66 locations), sewer service lines (58 locations), and gas service lines (64 locations). Local utility will cut and cap mains located underneath

public streets, specifically a water main (1 location), sewer main (2 locations), and gas main (4 locations). No significant negative impacts will occur due to the actions proposed in Alternative 2, no mitigation or further action is required.

Cherry Hill Development Area

The commercial facilities located in the downtown Waverly area may potentially benefit from the minor increase in consumer activity as a result of the population influx due to new housing development. Current development plans include some open space for resident recreation, including areas for sitting and a playground and will likely have a minor beneficial impact on the local community. The proposed project will increase the number of residents needing services by the local healthcare, emergency, and social services system. However, the proposed development in Alternative 2 only anticipates constructing a mixture of sixty-two (62) units, including eleven (11) duplexes, five (5) stacked flats buildings containing eight (8) units in each building, one (1) administration building, and one (1) maintenance building. The impact to each utility service provider will be minimal. The proposed development activity will include wastewater and water extensions to service the site. The utility plans for these improvements will be reviewed and approved by City Planning as part of the City's review and approval of the Site Plan. The City of Waverly has confirmed that it has capacity to support the proposed development and required water supply and infrastructure, per the Water and Sewer Availability letter sent on 04/04/2023. See Appendix D3 for a copy of this letter and response. No significant, negative impacts will occur due to the actions proposed in Alternative 2, no mitigation or further action is required.

5.6.6. HAZARDOUS MATERIALS

EO 13045 requires that each federal agency make it a high priority to identify and assess environmental health risks and safety risks that may disproportionately affect children and ensure that its policies, programs, activities, and standards address disproportionate risks to children that result from environmental health risks or safety risks. Section 2-203 of the EO defines environmental health risks and safety risks as, "risks to health or to safety that are attributable to products or substances that the child is likely to come in contact with or ingest (such as the air we breathe, the food we eat, the water we drink or use for recreation, the soil we live on, and the products we use or are exposed to)."

Existing Conditions

West Brookside East Brookside Demolition Area

Both demolition sites have been in residential use since the 1950s and the existing buildings were constructed utilizing asbestos materials for some building components. Outside of asbestos containing materials, the Waverly Housing Authority is not aware of any onsite or nearby toxic, hazardous, or radioactive substances. To identify any existing hazardous materials prior to demolition, an asbestos survey was performed on June 8th, 2022, by Frost Environmental Services, LLC to identify Asbestos Containing Materials (ACMs). The survey was performed in accordance with US EPA, OSHA, and State of Tennessee protocols. A total of one hundred eighty-eight (188) samples of suspect ACM were collected and tested from both sites – ninety-seven (97) samples from East Brookside and ninety-

one (91) from West Brookside. Positive ACMs were identified in several functional spaces within the East Brookside site, including black tar/felt material, ACM black mastic under non-ACM 12x12 tile (double layer), and 9x9 tiles and black mastic under non-ACM 12x12 tile. Positive ACMs were identified in several functional spaces within the West Brookside site, including black tar/felt material, ACM black mastic under non-ACM 12x12 tile (double layer), and 9x9 tiles and black mastic under non-ACM 12x12 tile. Non-asbestos containing materials were also identified on both sites, including drywall and joint compound, cove base, white HVAC mastic, roof shingle/felt, flex duct connectors, plaster, window caulk, gray duct mastic. A copy of the asbestos survey is located in Appendix C2.

Neither demolition sites are located on or near an EPA National Priority List (“Superfund”) site. The nearest Superfund site appears to be located in Lyles, Hickman County, Tennessee, over 25 miles to the southeast of the West and East Brookside sites.

There are no EPA Facilities located on or directly adjacent to the demolition sites. The three (3) nearest EPA Facilities are CVS Pharmacy (406 West Main Street), Burger King (West Main Street and Myrtle Avenue), and the Former Q-Mart (204 West Main Street). EPA ECHO reports, EPA ICIS detail reports, and an EPA RCRAinfo report are provided in the appendix for these EPA Facilities.

Cherry Hill Development Area

EnviroScience, Inc. conducted an American Society for Testing and Materials (ASTM) Phase I Environmental Site Assessment to assess the existing condition of the Cherry Hill Development site (report dated 1/5/2023). The Phase I Environmental Site Assessment report was used to evaluate previous uses of the Project Site and other evidence of contamination on or near the Project Site. A copy of the Phase I Executive Summary is included in the below-mentioned Appendix C3. In its report, EnviroScience found the following environmental conditions:

- One (1) recognized environmental condition, fluorescent tube lamp dump within a limited area in the southern portion of the Project Site. EnviroScience recommended that the fluorescent tube lamps should be removed and properly disposed of as universal waste.
- One other environmental condition, the presence of several automotive vehicles in various states of disrepair, piles of tires, and other trash and construction debris in the western portion of the Project Site. EnviroScience recommended that this debris be removed and properly managed.

There are no EPA Facilities within or directly adjacent to the project site. Please refer to the NEPAassist map for the location of the nearest EPA Facilities, for which a Detailed Facility Reports from EPA ECHO, reports from EPA’s Integrated Compliance Information System (ICIS) database, and RCRAinfo Facility Information are provided.

Potential Impacts and Proposed Mitigation

Alternative 1: No Action

The No Action alternative would not affect public health through the movement or introduction of new hazardous materials.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)**West Brookside East Brookside Demolition Area**

Frost Environmental Services prepared an Asbestos Abatement Plan for the West and East Brookside sites based on results from the corresponding Asbestos Survey. The intent of the work outlined in the abatement plan is to remove all friable or potentially friable ACMs prior to demolition activities. Removal and disposal of all ACMs will be done in accordance with the methods and procedures outlined in the U.S. Department of Labor Occupational Safety and Health Administration (OSHA) Asbestos Regulations (Code of Federal Regulations Title 29, Part 1926, Section 1926.1101). Once ACMs have been properly removed and sealed, all contaminated wastes and materials will be disposed of in an approved sanitary landfill in accordance with 40 CFR 61 and 49 CFR 171 and 172. The name, address, permit number of the approved landfill, and methods of disposal of hazardous materials will be ascertained by the contractor and other involved entities tasked with removal and disposal of ACMs.

Prior to demolition activities, a Notification of Demolition and/or Asbestos Renovation application will be submitted to the Tennessee Division of Air Pollution Control by the contractor involved with the removal of ACMs. A waste shipment record will also be provided by the transporter contracted to deliver all sealed hazardous materials to the approved waste disposal site. Following the procedures and limitations set forth in the asbestos abatement plan, as well as any other applicable state and federal law, the project will be in compliance and no further mitigation is required.

A HUD worksheet was used to test compliance. See Appendix C15 for the completed worksheet and other information consulted, including maps from the EPA NEPAAssist application, EPA ECHO, EPA ICIS, and EPA RCRA info. A copy of the asbestos abatement plan can be found in Appendix C2.

Two (2) Resource Conservation and Recovery Act (RCRA) conditions, one (1) State Air Quality (SAQ) condition, and one (1) State Hazardous Materials and Solid Waste (SHM&SW) condition shall be adhered to for Alternative 2. See Section 7.1.

Cherry Hill Development Area

The Waverly Housing Authority worked with EnviroScience and a qualified contractor to mitigate environmental concerns identified in the Phase 1 ESA and to demonstrate compliance with required authorities. Based on findings in the Phase I ESA, Hull's Environmental Services was hired to remove potentially hazardous material (including automotive debris and universal waste such as fluorescent tubes) that had been located on the Project Site. This removal was completed on 5/30/2023 and 05/31/2023 and was verified by field observation conducted by EnviroScience.

- On 05/30/2023, waste materials identified onsite that required special removal or disposal were taken by Hull's Environmental Services (US EPA ID Number: TNR000046466) to the Waste Management West Camden Sanitary Landfill located at 2410 Highway 70 West, Camden, Tennessee 38320 (Profile Number 109309TN). The materials disposed of at this site include non-hazardous, non-regulated construction and demolition debris from a building, structure or road. None of this debris has been contaminated by a manufacturing process,

chemical process, through facility operations or other processes and does not include lead-based painted debris, liquids, asbestos, fluorescent light bulbs, PCB light ballasts, and PCB containing building materials such as caulk/glaze/mastic/galbestos. Approximately 3.12 tons of construction and demolition debris were removed and disposed via dump truck (truck number: 8884) during a one-time mobilization.

- On 05/30/2023, used vehicle tires found onsite were removed by Hull's Environmental Services to Liberty Tire Recycling, LLC located at 1941 Cement Plant Road, Nashville, Tennessee, 37208. The materials disposed of at this site include 34 shipping units of mixed load used tires bound for recycling. Approximately 0.86 tons of used vehicle tire material were removed and disposed of via truck (truck number: 2098).

Details and receipts from the removal and disposal process can be found in Appendix C2.

A HUD worksheet was used to test compliance. See Appendix C15 for the completed worksheet; Phase I ESA Executive Summary; and EPA-provided information on the nearest EPA Facilities. The proposed project is in compliance now that the abovementioned mitigation has been completed, and no further action is required.

Two (2) Resource Conservation and Recovery Act (RCRA) conditions, one (1) State Air Quality (SAQ) condition, and one (1) State Hazardous Materials and Solid Waste (SHM&SW) condition shall be adhered to for Alternative 2. See Section 7.1.

6. Other Considerations Analysis

NEPA requires agencies to consider "reasonably foreseeable environmental effects of the proposed agency action" and "any reasonably foreseeable adverse environmental effects which cannot be avoided should the project be implemented" (42 U.S.C. 4332(C)). In accordance with NEPA, this SEA considered the combined effect of the preferred alternative and other actions occurring or proposed in the vicinity of the proposed project sites.

Alternative 1: No Action

Based on an analysis of the information detailed within this Supplementary Environmental Assessment, it has been determined that three (3) long-term impacts have the potential to negatively or adversely affect the local area as a result of the No Action activity proposed in Alternative 1. These three (3) long-term impacts are:

- Farmlands Protections: Potential short-term, negligible impacts due to underutilization of prime farmland soil contained on the West and East Brookside Sites.
- Visual Quality and Aesthetics: Potential minor, long-term adverse impacts could result from the future dilapidation of any standing flood damaged buildings within the flood zone of the East and West Brookside Sites.

- **Land Use and Planning:** Potential minor, long-term adverse effects associated with the inability to integrate the plots of land containing the flood-damaged buildings into future planning. No open space or development can occur on the West and East brookside sites without the demolition activities proposed in Alternative 2.

Under the No Action Alternative, the Waverly Housing Authority would neither rebuild nor relocate the existing publicly assisted housing units damaged by the disaster. As a result, displaced residents would continue to face housing instability, and the community would lack critical affordable housing infrastructure. Additionally, the extant, damaged housing units and adjacent improved properties would remain at risk from future flooding events and serve as a constant reminder to community members of the devastation that occurred from previous, lethal flooding events. Furthermore, Under the No Action alternative, demolition and disposition activities would not occur at the West and East Brookside sites. As a result, neither of these parcels would be cleared for future development or potential utilization of the site's prime farmland and thus poses minor, long-term negative effects due to the underutilization of this important local soil resource.

Alternative 2: Relocate Waverly Housing Authority Units to New Site (Brookside Demolition and Cherry Hill Development)

West Brookside East Brookside Demolition Site

The activities proposed in Alternative 2 ultimately culminate in the demolition of existing, flood-damaged dwelling units located on West and East Brookside Road in Waverly, Tennessee. Several negligible or minor adverse or beneficial impacts were identified as having the potential to occur due to the actions proposed in Alternative 2 of the West and East Brookside Demolition project. These impacts include:

- **Air Quality:** Potential negligible short-term adverse impacts due to exhaust and dust accumulation from construction activity and equipment use at demolition sites.
- **Water Quality:** Potential minor short-term, adverse impacts due to the movement of sediment into on and/or offsite aquatic resources.
- **Wetlands:** Potential minor short-term, adverse impacts due to sediment movement into on and/or onsite aquatic resources as a result of demolition and development activities.
- **Threatened and Endangered Species:** Potential negligible long-term, adverse impacts to aquatic species possibly occupying the adjacent Trace Creek.
- **Visual Quality and Aesthetic:** Potential minor short-term adverse impact on the aesthetic quality of the surrounding landscape in the immediate vicinity of construction and demolition associated with construction equipment. Potential longer-term, minor beneficial effect associated with the removal of the existing blighted structures and subsequent construction of the proposed new housing units.

- Noise: Potential negligible, short-term adverse impacts during demolition activities associated with an increase in noise pollution as a result of construction activity and equipment use.
- Hazardous, Toxic, and Radioactive Waste: Potential minor, short-term adverse impacts during demolition due to the presence of ACMs within the existing buildings on the West and East Brookside Sites.

Each impact identified as having the potential to adversely or beneficially impact the natural and/or human environment has been individually addressed to include mitigation measures to reduce the negative footprint of their effects to highest extent, within reason. Based on an analysis of the information detailed in this Supplementary Environmental Assessment, when added to past, present, and reasonably foreseeable actions, it has been determined that no impacts will have long-term, moderate or major negative impacts to the local area as a result of the demolition activities proposed in Alternative 2, contingent on adherence to the mitigation measures outline in Table 4.0.2.

Notices were issued to allow for public comments to be gathered and taken into consideration regarding any potential, impacts that could result from the demolition activities proposed in Alternative 2. These efforts include two (2) public notices advertised by Sherry Lynch (Executive Director of WHA) on behalf of the WHA in a local newspaper in conjunction with the 8-Step Process due to the proposed demolition activity occurring within a FEMA 100-year flood zone. Two public meetings were also hosted by WHA to gather and address concerns from members of the public regarding the potential impacts to human and/or natural resources within the City of Waverly. A detailed description of the public notice efforts is contained within Section 7.

Cherry Hill Development Area

The activities proposed in Alternative 2 culminates in the development of new residential dwelling units to be constructed on an undeveloped plot of land located between Washington Circle and Sycamore Avenue in Waverly, Tennessee. Several negligible or minor adverse or beneficial impacts were identified as having the potential to occur due to the actions proposed in Alternative 2 that pertain to the Cherry Hill Development Project. These impacts include:

- Land Resources and Topography: Potential short-term, negative impacts to the Cherry Hill Development Site due to clearing and grading required for construction equipment accessibility and creation of new roadways, residencies, and new recreational area. Other minor impacts include the use of onsite stormwater detention ponds for drainage capture.
- Farmlands Protections: Potential short-term adverse impacts due to new development on 0.2 acres of prime farmland contained on the Cherry Hill site.
- Air Quality: Potential negligible short-term adverse impacts due to exhaust and dust from construction activity and equipment use at demolition and development sites.

- Water Quality: Potential minor short-term, adverse impacts due to the movement of sediment into onsite aquatic resources.
- Threatened and Endangered Species: Potential negligible minor and temporary impacts may occur for aquatic species at the Brookside sites due to construction run-off and for habitat features at Cherry Hill.
- Migratory Bird Treaty Act: Potential negligible minor and temporary impacts to migratory birds could occur during vegetation clearing at the Cherry Hill Site due to increased activity and noise.
- Land Use and Planning: Potential minor, long-term beneficial effects associated with the development of the proposed housing will result in the construction of a landscaped buffer and wooded area within the existing residential zone, resulting in access to aesthetic and functional green space.
- Noise: Potential negligible, short-term adverse impacts during development activities associated with an increase in noise pollution as a result of construction equipment use.
- Hazardous, Toxic, and Radioactive Waste: Potential minor, short-term adverse impacts during development due to the presence of hazardous materials identified within the Cherry Hill Site.

Each impact identified as having the potential to adversely or beneficially impact the natural and/or human environment has been addressed and required to include mitigation measures to reduce the short-term and long-term footprint of their effects to highest extent, within reason. Based on an analysis of the information detailed in this Supplementary Environmental Assessment, when added to past, present, and reasonably foreseeable actions, it has been determined that no impacts will have long-term, moderate or major negative impacts to the local area as a result of the development activities proposed in Alternative 2, is contingent on adherence to the mitigation measures outlined in Table 4.0.2.

Notices were issued to allow for public comments to be gathered and taken into consideration regarding any potential, cumulative impacts that could result from the development activities proposed in Alternative 2. These efforts include two (2) public meetings hosted by the Waverly Housing Authority, one for a rezoning and another for a variance to the Subdivision Regulations. During the rezoning process, the Board of Aldermen heard WHA's application and held a public hearing during which numerous community members spoke. Two (2) other meetings were held that were open to public attendance but closed for public commentary. Several notes and a detailed description of these public notice efforts are contained within Section 7.

7. Public Involvement and Agency Coordination

HUD was the leading federal agency that conducted the original NEPA analysis for the West and East Brookside Demolition EA. HUD issued an initial public notice for commentary regarding the actions and alternatives proposed within the West and East Brookside project. This initial notice was made on August 17, 2022, with a September 2, 2022, end date for the public notice comment period. Following the closure of the public commentary period for the West and East Brookside EA, a subsequent public notification was made detailing reasoning for the final selection of HUD's proposed actions in or affecting floodplains or wetlands on September 07, 2022, with a September 15, 2022, end date for the public comment period. The second public notification and commentary period also included language notifying the public of the Request for Release of Funds (RROF) submitted for this project. Both public notices for commentary were published in the local general circulation newspaper *Waverly News Democrat* as well as made available for public examination at the office of the WHA located at c/o Dickson Housing, 333 Martin Luther King Jr. Blvd., Dickson, TN. After the conclusion of the second and final public commentary period for the Brookside EA, a FONSI was issued and authorized on October 11, 2022, by Sherry Lynch, Executive Director of the Waverly Housing Authority, and W. B. "Buddy" Frazier, Mayor of the City of Waverly, Tennessee.

On September 7, 2024, WHA submitted a RROF to HUD under the State Identification Number TN030 and was open for objection by HUD for a 15-day period. Following the closure and consideration of this comment period, WHA received approval of its RROF from HUD on November 11, 2022. A copy of this authorization to use grant funds is located in Appendix E Subsection E3.

HUD was the leading federal agency that conducted the original NEPA analysis for the Cherry Hill Development EA. HUD issued the public notice for commentary regarding the actions and alternatives proposed within the Cherry Hill project on December 6, 2023, with a December 27, 2023, end date for the public notice comment period. This public notice for commentary was published in the local general circulation newspaper *Waverly News Democrat* as well as made available for public examination at the office of the WHA located at c/o Dickson Housing, 333 Martin Luther King Jr. Blvd., Dickson, TN. This public notification and commentary period also included language notifying the public of the RROF submitted for this project. On November 29, 2023, a FONSI was issued and authorized by Sherry Lynch, Executive Director of the Waverly Housing Authority, and W. B. "Buddy" Frazier, Mayor of the City of Waverly, Tennessee.

On March 1, 2024, WHA submitted a RROF to HUD under the State Identification Number TN043 and was open for objection by HUD for a 15-day period. Following the closure and consideration of this comment period, WHA received approval of its RROF from HUD on April 18, 2024. A copy of this authorization to use grant funds is located in Appendix E Subsection E4.

[West Brookside East Brookside Demolition Site](#)

Two (2) public notices were advertised by Sherry Lynch (Executive Director of WHA) on behalf of the WHA in a local newspaper in conjunction with the 8-Step Process:

1. On August 17, 2022, a public notice was published in the Waverly News Democrat to notify interested parties and individuals that the City of Waverly is proposing to conduct the proposed West and East Brookside Drive demolition project, which is located within Flood Zone AE (100-year floodplain), and that the City has conducted an evaluation as required by Executive Order 11988 and/or 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, to determine the potential affect that its activity in the floodplain will have on the human environment. The public notice was posted for a thirty (30)-day public comment period.
2. On September 7, 2022, a final public notice was published in the Waverly News Democrat to announce and explain the City of Waverly's decision to interested parties and individuals and to give notice that the City has conducted an evaluation as required by Executive Order 11988 and/or 11990, in accordance with HUD regulations at 24 CFR 55.20 Subpart C Procedures for Making Determinations on Floodplain Management, to determine the potential affect that its activity in the 100-year floodplain will have on the human environment. A discussion of the City's alternatives analysis and mitigation measures to be taken to minimize adverse impacts and to restore and preserve natural and beneficial values was included in the final public notice. The City of Waverly determined that it has no practicable alternative to the proposed demolition within the 100-year floodplain. The City also concluded that the proposed action would have no significant impact on the environment because there will not be any new construction or any increase in density, and the amount of stormwater runoff will not increase. Noted beneficial impacts on the surrounding neighborhood included appearance, health, and safety of the neighborhood.
 - i.) Scanned copies of both news postings are available in Appendix C16.
3. Two (2) public meetings were hosted by WHA to discuss updates on demolition and development, and updates on RAD and demolition.
 - a. On May 26, 2022, WHA hosted a public meeting regarding updates to project demolition and development. Sherry Lynch gave opening comments, followed by details on project updates presented by Derwin Jackson and Susan Minor of Franklin Housing Authority. Public questions and comments from residents were then heard, and the meeting was adjourned by Sherry Lynch following public commentary. A copy of the meeting agenda is located in Appendix C16.
 - b. On August 3, 2022, WHA hosted a public meeting regarding updates on RAD and demolition. Sherry Lynch gave opening comments, followed by details on project updates presented by Derwin Jackson of Franklin Housing Authority. Public questions and comments were then heard, and the meeting was adjourned by Sherry Lynch following public commentary. A copy of the meeting agenda is located in Appendix C16.

4. Following the initial notice and public commentary of the West and East Brookside Demolition Project EA, a second and final public notice was made to announce and explain the decision to perform the proposed demolition activity contained in the EA. This Environmental Assessment and Finding of No Significant Impact was made available for public inspection and comment pursuant to the requirements in 24 CFR 50.23 and 24 CFR 58.43. This combined notice also included a Request for Release of Funds (RROF). An advertisement was placed in the local newspaper on September 7, 2022. This Environmental Assessment and the Environmental Review Record were available for review at the office of the Waverly Housing Authority on Sep, 2022 with a request for written comments to be submitted to the City of Waverly on or before September 2, 2022.” Once the public commentary period closed for the EA and RROF, a FONSI was issued and authorized by Sherry Lynch, Executive Director of the Waverly Housing Authority and W.B. “Buddy” Frazier, Mayor of the City of Waverly, Tennessee on October 11, 2022. A copy of this signed FONSI is located in Section E Subsection E1.
5. On November 8, 2024, Waverly Housing Authority submitted a Request for Release of Funds (RROF) from HUD under the State Identification Number TN030. Following the submission of the RROF, a 15-day period of objection was opened in which HUD could object to the release of funds and certification. No objections were received. Subsequently, WHA received approval of its RROF from HUD on November 18, 2024. A copy of this authorization to use grant funds is located in Appendix E Subsection E3.

Cherry Hill Development Site

The Waverly Planning Commission twice heard (at public meetings) applications from the Waverly Housing Authority, once for a rezoning and another time for a variance to the Subdivision Regulations. During the rezoning process, the Board of Aldermen heard WHA’s application and held a public hearing during which numerous community members spoke. Two (2) other meetings were held that were open to public attendance but closed for public commentary. Several notes regarding these meetings are itemized below:

1. Rezoning: The rezoning of the Cherry Hill property required approval by the Waverly Planning Commission and then passage of an ordinance (two readings) by the Waverly Board of Aldermen.
 - a. At the Planning Commission meeting (9/22/2022), Sherry Lynch (Executive Director of WHA) commented, and then Robert D. James of James + Associates gave a brief overview of the proposed redevelopment. Planning Commissioners asked questions. The public was present but did not speak or ask questions, as it was not a public hearing. A copy of the comments made by Sherry Lynch is located in Appendix C16.
 - b. At the First Reading of the ordinance by the Board of Aldermen (11/14/2022), there was a public hearing in which the public was invited to speak and ask questions. A brief presentation was given by Robert D. James including displaying a concept drawing

the public notice on [insert posting location] and on FEMA’s website. An electronic version of the SEA is posted on FEMA’s website at: [insert URL].

Appendices are available for review upon request to: FEMA-R4EHP@fema.dhs.gov. Several of the findings of the HUD were adopted per Unified Federal Review. The following agencies and organizations were contacted by HUD and/or FEMA:

Table 7.0.1. Agencies and Organizations Contacted by HUD and/or FEMA

| | | | |
|-----------------------------------|-----------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------------------------------|
| Alabama-Quassarte Tribal Town | Tennessee Department of Environment & Conservation (TDEC) | Poarch Band of Creek Indians | U.S. Army Corps of Engineers (USACE) Nashville District |
| Chickasaw Nation | Tennessee Division of Archaeology | Seminole Tribe of Florida | U.S. Fish and Wildlife Service (USFWS) Tennessee Ecological Services Field Office |
| Eastern Band of Cherokee Indians | Tennessee Historical Commission (Tennessee SHPO) | Shawnee Tribe | |
| Eastern Shawnee Tribe of Oklahoma | Muscogee (Creek) Nation | United Keetoowah Band of Cherokee Indians | |

7.1. Permits and Project Conditions

The Sub-Recipient, Waverly Housing Authority, is responsible for compliance with all federal state and local laws and regulations, including obtaining all required federal, state, and local approvals or permits prior to beginning demolition or development activities and adhering to any conditions laid out in these approvals for this EA. The following is a list of currently known permits required to be obtained prior to demolition and development activities.

West Brookside East Brookside Demolition Site

1. Municipal Demolition Permit, City of Waverly.
2. Notification of Demolition and/or Asbestos Renovation
3. TDEC Division of Air Pollution Control.
4. NPDES Construction Stormwater General Permit, TDEC.
5. Erosion Prevention and Sediment Control measures according to Tennessee state regulations.

Cherry Hill Development Site

1. NPDES Stormwater Construction Permit, which includes a Notice of Intent and Storm Water Pollution Prevention Plan, Tennessee Department of Environment and Conservation.

2. Utility Permit, City of Waverly.
3. Building Permit, City of Waverly.
4. Grading Permit City of Waverly.

EHP Standard Conditions

Under Alternative 2, Waverly Housing Authority would follow the following EHP standard conditions:

- Any change to the approved scope of work will require re-evaluation for compliance with NEPA and other Laws and Executive Orders.
- This review does not address all federal, state and local requirements. Acceptance of federal funding requires recipient to comply with all federal, state and local laws. Failure to obtain all appropriate federal, state and local environmental permits and clearances may jeopardize federal funding.
- If ground disturbing activities occur during construction, applicant will monitor ground disturbance and if any potential archeological resources are discovered, will immediately cease construction in that area and notify the State and FEMA.

EHP Special Conditions

Under Alternative 2, Waverly Housing Authority would follow the following EHP special conditions:

- EO 11988 Program Condition: Per EO 11988 and 44 CFR Part 9.12(f) requirements, project cannot be obligated until [15 days after date of draft SEA and Notice of Availability (NOA) posting].
- EO 11988 Condition: Subgrantee must obtain floodplain permit or approval from the local floodplain administrator before work begins.
- EO 11990 Condition: Construction activities and equipment storage and staging activities are not to be located in or impact any adjacent wetlands.
- ESA Condition: The erosion prevention controls shall be designed to eliminate to the maximum extent practicable the dislodging and suspension of soil in water. Sediment controls shall be designed to retain mobilized sediment on site to the maximum extent practicable.
- ESA Condition: All control measures must be properly selected, installed and maintained in accordance with the manufacturer's specifications and/or good engineering practices. If periodic inspections or other information indicate a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control. If structures fail or are found to

be inadequate, work should cease and not resume until appropriate corrective measures have been taken.

- ESA Condition: If sediment escapes the permitted area, off-site accumulations that have not reached a stream must be removed at a frequency sufficient to minimize off-site impacts (e.g., sediment that has escaped a construction site and collected in a street must be removed so that it does not subsequently wash into storm sewers and streams during the next rain or so that it does not pose a safety hazard to users of public streets). Permittees shall not initiate remediation or restoration of a stream without receiving prior authorization from the division. This permit does not authorize access to private property. Arrangements concerning the removal of sediment on adjoining property must be settled by the permittee and the adjoining landowner.
- ESA Condition: Sediment must be removed from sediment traps, silt fences, sediment basins and other sediment controls when design capacity has been reduced by 50%.
- ESA Condition: Erodible material storage areas (e.g., overburden and stockpiles of soil) and borrow pits that are used primarily for the permitted project are considered a part of the site and shall be identified on the NOI, addressed in the SWPPP and included in the fee calculation. TDOT projects shall be addressed in the Waste and Borrow Manual per the Statewide Stormwater Management Plan (SSWMP).
- ESA Condition: Pre-construction vegetative ground cover shall not be destroyed, removed or disturbed more than 14 days prior to commencement of grading or earth moving activities unless the area is subsequently temporarily or permanently stabilized.
- ESA Condition: Clearing and grubbing must be held to the minimum necessary for grading and equipment operation. Existing vegetation at the site shall be preserved to the maximum extent practicable. The limits of soil disturbance shall be clearly outlined in the SWPPP and the areas to remain undisturbed clearly indicated on the site, with the methods to be used to mark these areas described in the SWPPP.
- ESA Condition: Construction must be sequenced to minimize the exposure time of graded or denuded areas.
- ESA Condition: EPSC measures must be in place and functional before earth moving operations begin and must be constructed and maintained throughout the construction period stages as appropriate. Temporary measures may be removed at the beginning of the workday but must be replaced at the end of the workday.
- ESA Condition: Off-site vehicle tracking of sediment and the generation of dust shall be minimized. A stabilized construction access shall be described and implemented to reduce the tracking of mud and dirt onto public roads by construction vehicles.

- ESA Condition: FEMA recommends that the Subrecipients restore disturbed construction areas of the site with native seed and/or plant species to minimize soil erosion and sedimentation, as well as enhance environmental habitat quality of project area. FEMA also recommends that disturbed soil areas be planted as soon as practicable after exposure to avoid or minimize growth of undesired and potentially invasive plant species. Local landscape plant nurseries and soil conservation offices can assist with identification of suitable native plants for site location and type.
- ESA Condition: The applicant will adhere to all conditions with the obtained National Pollutant Discharge Elimination System (NPDES) General Permit for Discharges of Stormwater Associated with Construction Activities Permit Number TNR100000.
- ESA Condition: Accumulated debris and construction waste will be stockpiled away from watercourses and be disposed of at a TDEC permitted facility.
- ESA Condition: Existing native vegetation near the project area should be left in place where possible to help protect nearby wildlife habitat.
- ESA Condition: Construction equipment and materials shall be staged in previously disturbed or developed areas to avoid encroachment into native habitat.
- NHPA Condition: If human remains or intact archaeological features or deposits (e.g. arrowheads, pottery, glass, metal, etc.) are uncovered, work in the vicinity of the discovery will stop immediately and all reasonable measures to avoid or minimize harm to the finds will be taken. The applicant will ensure that archaeological discoveries are secured in place, that access to the sensitive area is restricted, and that all reasonable measures are taken to avoid further disturbance of the discoveries. The applicant's contractor will provide immediate notice of such discoveries to the applicant. The applicant shall contact the Tennessee Division of Archaeology and FEMA within 24 hours of the discovery. Work in the vicinity of the discovery may not resume until FEMA has completed consultation with SHPO, Tribes, and other consulting parties as necessary. In the event that unmarked human remains are encountered during permitted activities, all work shall stop immediately, and the proper authorities notified in accordance with Tennessee Code, Section 11-6-107d.
- NHPA Condition: The subrecipient shall adhere to the Demolition Best Management Practices for Tennessee to minimize potential impacts to historic resources caused by ground disturbing activities. Failure to comply with this condition may jeopardize FEMA funding; verification of compliance by FEMA-EHP will be required at project closeout.
- NHPA Condition: If contractor uses fill that does not come from a commercial source or from a regularly maintained stockpile, prior to ground disturbance occurring, the project must be returned to FEMA for consultation requirements. Failure to do so may jeopardize funding.

- RCRA Condition: Unusable equipment, debris and material shall be disposed of in an approved manner and location. In the event significant items (or evidence thereof) are discovered during implementation of the project, applicant shall handle, manage, and dispose of petroleum products, hazardous materials and toxic waste in accordance to the requirements and to the satisfaction of the governing local, state and federal agencies.
- RCRA Condition: Subgrantee shall handle, manage, and dispose of potentially hazardous waste, universal waste, and hazardous materials in accordance with the requirements of local, state, and federal regulations. These materials may include, but are not limited to asbestos, lead-based paint, laboratory reagents, propane cylinders, paints and solvents, coolants containing chlorofluorocarbons (CFCs), used oil, polychlorinated biphenyls (PCBs), other petroleum products, used oil filters, fuel filters, cleaning chemicals, pesticides, batteries, and unlabeled tanks and containers. Equipment that may include these materials are ice machines, refrigerators, generators, computers, televisions, mercury switches, fluorescent lights, fluorescent light ballasts, sandblast units, paint sprayers, etc.
- SAQ Condition: The Applicant must comply with all applicable federal and state air quality regulations, including the Clean Air Act (CAA) and Tennessee Department of Environment and Conservation (TDEC) Division of Air Pollution Control (DAPC) requirements. If asbestos-containing materials (ACMs) are identified, the Applicant must ensure removal and disposal of asbestos-containing materials in accordance with the National Emission Standards for Hazardous Air Pollutants (NESHAP) for asbestos (40 CFR Part 61, Subpart M) and Tennessee Rule 1200-03-11-.02. All ACMs must be properly wetted, contained, and disposed of at a state-approved facility. Records of abatement activities, disposal manifests, and air monitoring (if required) must be maintained and made available upon request at project closeout.
- SHM&SW Condition: The subgrantee must fulfill any site restoration requirements set forth by the Tennessee Department of Environment and Conservation (TDEC). Documentation of compliance will be required at project closeout.
- SHM&SW Condition: The subgrantee shall ensure that all debris collection and/or temporary staging sites are approved by the Tennessee Department of Environment and Conservation (TDEC) Division of Solid Waste Management (SWM) regional office. The subgrantee is also responsible for ensuring contracted collection and/or temporary staging also follows these guidelines. The subgrantee must fulfill any site restoration requirements set forth by TDEC. Documentation of compliance will be required at project closeout.

8. List of Preparers

Table 8.0.1. List of West and East Brookside Demolition and Cherry Hill Development Preparers

| Name | Organization | Title |
|-----------------------------------------------|--------------------------------------------------------------------------|-------------------------------------------------|
| Michael Naymik | EnviroScience, Inc. | Environmental Scientist |
| Carlyn Rocazella | EnviroScience, Inc. | Environmental Scientist |
| Charles Kessler, AICP, CEP | EnviroScience, Inc. | Senior Environmental Planner |
| Keegan Kelly, TN EHP FIT | FEMA, Environmental Planning & Historic Preservation/Mitigation Division | Environmental Protection Specialist |
| Kristen Hall, R4 EHP FIT Lead | FEMA, Environmental Planning & Historic Preservation/Mitigation Division | Supervisory Environmental Protection Specialist |
| Scott Fletcher, R4 Lead Environmental Advisor | FEMA, Environmental Planning & Historic Preservation/Mitigation Division | Lead Environmental Advisor |
| Hamilton Dickey, Attorney Advisor | FEMA, Office of Chief Counsel | Attorney Advisor |
| Jean Hardin, General Attorney | FEMA, Office of Chief Counsel | General Attorney |
| Maria Carruthers, Attorney Advisor | FEMA, Office of Chief Counsel | Attorney Advisor |

9. References and Resources

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SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

WEST AND EAST BROOKSIDE DEMOLITION AND CHERRY HILL DEVELOPMENT, HUMPHREYS COUNTY, TN

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Appendices available upon request to FEMA Region 4 EHP
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