

Subapplicant information

Name of federal agency

FEMA

Type of submission

Application

CITY OF LUMBERTON

500 N CEDAR ST

LUMBERTON, NC 28358 United States

State	DUNS #	EIN #
NC	080882574	566001274

Subapplicant type

Local Government

Is the subapplicant subject to review by Executive Order 12372 Process?

No - Not selected

Is the subapplicant delinquent on any federal debt?

No

Contact information

Subrecipient Authorized Representative (SAR)

Brandon Love	Primary phone 9106713805 Work	Mailing address
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blove@ci.lumberton.nc.us

Point(s) of contact

<p>Michael B Love Deputy City Manager</p> <p>blove@ci.lumberton.nc.us</p>	<p>Primary phone 9106713805 Work</p> <p>Fax</p>	<p>Additional phones 9107336049 Mobile</p>	<p>Mailing address PO Box 1388 Lumberton NC 28359</p>
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Community

Please provide the following information. If the Congressional district number for your community does not display correctly, please contact your State NFIP coordinator.

Add Communities

Please find the community(ies) that will benefit from this mitigation activity by clicking on the Find communities button. If needed, modify the Congressional District number for each community by entering the updated number under the U.S. Congressional District column for that community. When finished, click the Continue button. NOTE: You should also notify your State NFIP coordinator so that the updated U.S. Congressional District number can be updated in the Community Information System (CIS) database.

Community name	County code	CID number	CRS community	CRS rating	U.S. Congressional District
LUMBERTON, CITY OF	155	370203	N		1,7

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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Mitigation plan

Please provide your plan information below.

Is the entity that will benefit from the proposed activity covered by the current FEMA approved multi-hazard mitigation plan in compliance with 44 CFR Part 201? **Yes**

Please provide plan detail

Plan name	Plan type	Plan approval date
Bladen, Columbus & Robeson Regional Hazard Mitigation Plan	Local Multijurisdictional Multi-Hazard Mitigation Plan	09/09/2020
Proposed activity description		

Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Haz_Mit_Resolution_Lumberton_2020.pdf	12/17/2020	blove@ci.lumberton.nc.us	Mitigation Plan Attachments	<i>No description given.</i>	

Scope of work

The project Scope of Work (SOW) identifies the eligible activity, describes what will be accomplished and explains how the mitigation activity will be implemented. The mitigation activity must be described in sufficient detail to verify the cost estimate. All activities for which funding is requested must be identified in the SOW prior to the close of the application period. FEMA has different requirements for project, planning and management cost SOWs.

Subapplication title (include type of activity and location)

Lumberton Loop: A City-Wide Plan for Flood Mitigation, Restoration, and Recreation in Lumberton, NC

Activities

Primary activity type

Flood control

Primary sub-activity type

Floodplain and stream restoration

Secondary activity type (Optional)

Acquisition

Tertiary activity type (Optional)

Tertiary sub-activity type

If Other please specify

Geographic areas description

Education and awareness

Other

Youth environmental education site.

The proposed project will take place in Lumberton, North Carolina. Lumberton is the county seat of Robeson County with a population of approximately 20,840 people. The project area included in the proposed scope of work primarily encompasses lands directly adjacent to the Lumber River and two of its tributaries, Meadow Branch and Five Mile Branch, which are all part of the 3,343 square mile Lumber River Basin in North Carolina’s coastal plain ecoregion.

Community lifelines

Primary community lifeline

Primary sub-community lifeline

Secondary community lifeline (optional)

Secondary sub-community lifeline

Tertiary community lifeline (optional)

Tertiary sub-community lifeline

Health and medical

Public health

Safety and security

Community safety

Transportation

Maritime

Hazard sources

Primary hazard source

Flooding

Secondary hazard source (optional)

Tropical cyclone (Hurricane/Typhoon)

Tertiary hazard source (optional)

Infrastructure failure

Is this a phased project?

No

Are you doing construction in this project?

Yes

Population affected

36.6

Detail/description of stated percentage

The Lumberton Loop is a 806+ acre green infrastructure project that connects Lumberton residents to riverine ecosystems, restored streams, constructed wetlands, and recreational facilities through a connected 8.52-mile greenway. Creating a 0.25-mile buffer around the perimeter of the Lumberton Loop captures the residents that are most likely to regularly access the Loop for recreational purposes. The 0.25-mile buffer contains 3,064 buildings out of the 8,366 buildings that are within Lumberton's city limits. This ratio is equivalent to 36.6% of all buildings in Lumberton, and is assumed to have a direct correlation to the percentage of Lumberton's population affected by the project on a daily basis. However, THE LUMBERTON LOOP'S CITY-WIDE FOOTPRINT, WATERSHED BENEFITS, AND REGIONAL CONNECTEDNESS TO MULTIMODAL NETWORKS HAS SIGNIFICANT POTENTIAL TO IMPACT ALL OF THE CITY'S RESIDENTS AND TO COMMUNITIES OUTSIDE THE CITY LIMITS AS WELL.

Provide a clear and detailed description of your proposed activity

BACKGROUND: Hurricanes Matthew (2016) and Florence (2018) brought record-breaking rainfalls and devastating floods across the North Carolina coastal plain. In Lumberton, North Carolina these impacts either met or exceeded the reach of the 500-year floodplain, and have left a lasting imprint on the social, environmental, and economic vitality of the neighborhoods that

were hardest hit. Now engaged in multiple federally-financed and state-led recovery processes, THE CITY OF LUMBERTON AND ITS RESIDENTS ARE IN NEED OF HOLISTIC SOLUTIONS THAT CAN RESPOND TO THE CURRENT AFTERMATH AND PROJECTED RECURRENCE OF UNMITIGATED FLOODWATERS. Flooding witnessed after Matthew and Florence was not distributed equally across communities, neighborhoods, or individuals. As seen throughout the U.S., communities with large numbers of low-income households and people of color, often find themselves in areas most affected by environmental stressors. These areas are most notably present south of the Lumber River within its corresponding floodplain, and represent some of the city's most demographically vulnerable populations. A new pattern that the hurricanes have uncovered, however, is extensive flooding along the Lumber River's smaller tributaries located north of downtown Lumberton. Despite the vastly different demographic profiles that have historically divided north and south Lumberton, both areas now share a unifying problem in need of collective response: the emerging presence of vacant lots in high-risk flood zones. Resulting either from mitigation efforts or through abandonment, the discontinuous checkerboard pattern of vacant parcels has further fractured these neighborhoods, and has created a compromising condition that threatens the health, safety, and welfare of Lumberton residents. In response to these issues, the CITY OF LUMBERTON, the NC STATE UNIVERSITY COASTAL DYNAMICS LAB, and THE CONSERVATION FUND have engaged in a MULTI-YEAR, COLLABORATIVE effort that ultimately led to the creation of a land-planning framework for the procurement of connected, tangible, and flood-adapted projects. Coined the LUMBERTON LOOP, this plan: i) combines and consolidates clusters of vacant properties acquired through HMGP (Hazard Mitigation Grant Program) processes; ii) connects them to existing public parks, conservation easements, and city-owned parcels; and iii) proposes a series of green infrastructure projects and outdoor recreation facilities to programmatically activate the system. Adopted by the City of Lumberton in MARCH of 2019, the

LUMBERTON LOOP connects over 108 PARCELS OF LAND to create a CONTIGUOUS 8.52-MILE, 806+ ACRE TRAIL SYSTEM throughout the city - of which, over 99% IS WITHIN THE 100-YEAR FLOODPLAIN. Since adoption, collaborative partnerships centered around realizing the Lumberton Loop have grown to include numerous affiliates at the NC Office of Recovery and Resiliency, the NC Department of Transportation, NC State Parks, the Lumber River Conservancy, and countless local officials and stakeholders that have been involved in public engagement processes. To date, this group has been successful in securing a number of regional- and state-level grants that have been foundational for acquiring critical properties and generating early-phase funds for immediate mitigation efforts. However, more substantial funds are needed in order to fully implement the Lumberton Loop, and to build a more resilient City of Lumberton. PROJECT DESCRIPTION: Guided by the North Carolina Enhanced Hazard Mitigation Plan (2018), core values of BUILDING OF TECHNICAL CAPACITY, REDUCING THE RISK OF REPETITIVE FLOOD LOSS PROPERTIES, and STRENGTHENING LOCAL FISCAL CAPABILITY are embedded within the processes and outcomes of the Lumberton Loop plan. As a small, rural community in a Tier One county (most economically distressed ranking per NC Commerce, 2020), the City of Lumberton has very limited financial and personnel resources that are needed in order to engage in complex hazard mitigation activities without significant assistance. While the Lumberton Loop plan has created a framework that has been: i) vetted by community members through a MULTI-YEAR ENGAGEMENT PROCESS; ii) shown to ENHANCE THE EQUITY OF PARK SPACE IN LUMBERTON TO SOCIALLY VULNERABLE POPULATIONS through geospatial analyses; and iii) HYDRAULICALLY MODELED TO QUANTIFY THE REDUCTION OF FUTURE FLOOD LOSSES, there are additional financial resources that are needed to implement the next phases of this INNOVATIVE APPROACH TO RURAL RESILIENCY AND HAZARD MITIGATION. Specifically, the requested \$2,623,670 in funds will be used to finance mitigation, restoration, and recreational enhancements at four

focus areas identified in the Lumberton Loop plan. These are: i) restored stream channels, constructed wetlands, reforested floodplains, demolished roadways, and greenway trails as part of a newly-expanded park along Meadow Branch in North Lumberton; ii) constructed wetlands and educational paths as part of a newly-established park at the former Scottish Packing facility in South Lumberton; iii) multi-modal paths along Five Mile Branch; and iv) multi-modal paths along Walnut Street to close the loop. Funds from the BRIC program would allow for the acquisition of the last four (4) properties along Meadow Branch where homeowners missed previous phases of HMGP but have expressed interest in acquisition at a later date after becoming aware of the Lumberton Loop initiative. In supporting these select acquisitions, the 806+ acre, 8.52-mile footprint of the Lumberton Loop becomes effectively established, and will enable the remaining requested funds to CATALYZE AND CONNECT A CHAIN OF NATURE-BASED INFRASTRUCTURE PROJECTS ACROSS THE CITY. Implementing these components of the Lumberton Loop MITIGATES THE CASCADING RISKS TO MULTIPLE CRITICAL LIFELINES (HEALTH, SAFETY, TRANSPORTATION) in neighborhoods and to various forms of city-supported infrastructure that were damaged post-Matthew and post-Florence by reducing the severity of future flood events to property, infrastructure, and human life. Further supporting these lifelines are a wide range of secondary benefits that will serve the community. These ancillary benefits include: IMPROVED WATER QUALITY, ENHANCED ECOLOGICAL HABITATS, INCREASED OPPORTUNITIES FOR ECONOMIC DEVELOPMENT, INCREASED PUBLIC HEALTH, and the ESTABLISHMENT OF A CITY-WIDE CULTURAL AND RECREATIONAL RESOURCE. By continuing the collaborative partnership between the City of Lumberton, the NC State University Coastal Dynamics Design Lab, and The Conservation Fund, the group will utilize a TEAM APPROACH WITH MONTHLY PROJECT BENCHMARKS TO MEET THE PROJECT'S RESILIENCY GOALS. This will allow for a division of tasks that are best-suited to each partner's area of expertise while

sustaining deadlines. This framework has proven effective for executing projects in the past where challenges and obstacles are similar to those expected in this proposed scope of work. Overall, the items included in this proposal directly respond to mitigation directives identified in local hazard mitigation plans while simultaneously aligning with guiding principles of the BRIC program. Thematically present across the: “Robeson County Multi-Jurisdictional Hazard Mitigation Plan (2017),” “Robeson County Resilient Redevelopment Plan (2017),” and the “Lumberton Recovery Plan (2018),” is the expression of mitigation strategies that specifically: i) restore floodways and improve floodplain conveyance; ii) manage and maintain buyout properties; and iii) expand recreational lands. This project seeks to realize these strategies in a way that builds a culture of resilience in the City of Lumberton through the implementation of the Lumberton Loop. Once completed, these projects will have an impact that stretches across watersheds, demographic boundaries, and ecological corridors while concurrently reducing the threats associated with future flood events.

How will the mitigation activity be implemented?

The City of Lumberton will provide the personnel time for acquisition administration, labor for demolition activities, and labor for city-owned right-of-way enhancements as an in-kind service to the project. Components of the project relating to the procurement of restored stream channels, constructed wetlands, reforested floodplains, and installment of trails and signs will be hired as contractual services using funds from the requested project budget. The City of Lumberton, in partnership with team members from the NC State University Coastal Dynamics Design Lab and The Conservation Fund, will administer and manage each aspect of the project to ensure that key benchmarks are met on time and on budget.

Describe how the project is technically feasible and will be effective in reducing the risk by reducing or eliminating damage to property and/or loss of life in the project area. Please include engineering design parameters and references to the following: preliminary schematic or engineering drawings/design; applicable building codes; engineering

The Lumberton Loop was created as a mitigation response to damaged, vulnerable, and acquired properties that experienced catastrophic flooding during Hurricanes Matthew (2016) and Florence (2018). The various components included in this scope of work are technically feasible by connecting city-owned parks,

practices and/or best practices; level of protection (e.g., life safety, 100-yr flood protection with freeboard, 100-yr wind design, etc.):

city-owned rights-of-way, city-owned acquisition properties, and existing conservation easements through hydrological, ecological and recreational networks. Proposed land-use delineations as shown in illustrative attachments of the Lumberton Loop have been carefully vetted to fit: i) FEMA-defined deed restrictions for acquired properties where appropriate (44 CFR Part 80, 2010); ii) descriptions of Conservation Purpose and Public Benefit in accordance with U.S. Treasury Regulations for Qualified Conservation Contributions (26 CFR 1.170A-14, 1999); and iii) input from resident stakeholders in surrounding neighborhoods as gathered during community engagement activities. As applicable for the Meadow Branch focus area, the resultant schematic designs were then subject to hydraulic analyses to prove effectiveness of the proposal. Outputs from the hydraulic model and subsequent engineering studies showed significant benefit for: i) protecting project-adjacent properties from future flood events by reducing peak flood extents up to the 100-year flood; ii) protecting multiple adjacent road crossings and a lift station for lower-return periods by reducing peak flood elevations and velocities; and iii) improving water quality by reducing sediment and nutrient loads through the construction of restored stream channels, wetland areas, and reforested floodplain lands. Overall, future risk of property damages has been eliminated for areas within the project scope of work through the previously-completed acquisition and demolition of structures. Furthermore, this proposal seeks to eliminate future flood risk and potential loss of life for four (4) additional properties in the Meadow Branch floodway, and in doing so, will enable a broader and more holistic nature-based restoration effort that has been modeled to significantly reduce flood risk for project-adjacent properties.

Who will manage and complete the mitigation activity?

A team approach between the City of Lumberton, the NC State University Coastal Dynamics Design Lab, and The Conservation Fund will be utilized to assure that each type of mitigation, restoration, and recreational element of the project is completed

and that overall project outcomes are met. THIS CROSS-DISCIPLINARY PARTNERSHIP HAS A MULTI-YEAR HISTORY OF SUCCESSFULLY WORKING TOGETHER IN LUMBERTON BY ADVANCING COMMON GOALS OF PROTECTING ENVIRONMENTAL ASSETS AND BUILDING COMMUNITY RESILIENCE. The complementary backgrounds and skill sets represented across the team will afford specific team members to lead individual components of the proposed project as best-suited to their area of expertise. However, overall project benchmarks and collective team efforts will be unified as guided by the project schedule included in this application.

Will the project address the hazards identified and what risks will remain from all hazards after project implementation (residual risk)?

Yes. This project addresses flood hazards through a combination of: i) eliminating future flood risk through acquisition and demolition activities within the project area; ii) reducing future flood risk for project-adjacent properties that will benefit from the proposed mitigation and restoration interventions; and iii) increasing environmental awareness of Lumberton residents by enabling public access to sensitive, flood-prone environments throughout the city. Minimal residual risk will remain within the project area for recreational facilities (i.e. trails and open-air shelters), however all other risk to structures and property will be eliminated.

When will the mitigation activity take place?

The proposed activities will take place within a 36-month period of performance to begin 01/01/2022 and to be complete by 12/31/2024.

Explain why this project is the best alternative. What alternatives were considered to address the risk and why was the proposed activity considered the best alternative?

The exact alignment of the Lumberton Loop was created through an iterative and analytical process that considered: i) GEOSPATIAL ANALYSES OF AREAS IN LUMBERTON WITH THE HIGHEST CONCENTRATIONS OF EXISTING AND ANTICIPATED SOCIAL, ECONOMIC, ENVIRONMENTAL VULNERABILITIES; ii) OPPORTUNITIES CREATED THROUGH ALLIED LAND OWNERSHIP CONDITIONS; and iii) HIGHWAY, ROADWAY, AND MULTI-MODAL TRANSPORTATION PLANS. Collating this information led to the formation of the Lumberton Loop plan that responds to the areas of highest need through connecting city-

wide assets and leveraging adopted plans by the City of Lumberton and State of North Carolina. At more localized levels, facilitated community engagement meetings in the Meadow Branch and Scottish Packing focus areas utilized a mixed-methods approach for communicating environmental risks and collecting stakeholder preferences for various small area plan design alternatives. CLEAR CONSENSUS WAS ESTABLISHED AROUND SPECIFIC PROGRAMMING AND LAND PLANNING CRITERIA THAT LED TO THE COMPLETION OF FINALIZED SCHEMATIC PROPOSALS FOR EACH FOCUS AREA.

Collectively, the various forms of due diligence, site inventory and analysis, and community participation at state, city, and neighborhood levels of intervention corroborate the mitigation, restoration, and recreation strategies included in this proposal as being the best alternative for implementing desired outcomes.

Please identify the entity that will perform any long-term maintenance and provide a maintenance, schedule and cost information. The subapplicant or owner of the area to be mitigated is responsible for maintenance (including costs of long-term care) after the project is completed?

The City of Lumberton will be responsible for performing long-term maintenance of the project areas. Maintenance costs for the items proposed to be implemented in this scope of work are estimated to equal \$13,718 annually (which includes 1% of green infrastructure project costs, per FEMA guidance). The CITY OF LUMBERTON will allocate annual budget funds to the RECREATION and PUBLIC WORKS DEPARTMENTS for regular monitoring and maintenance in accordance with existing parks and recreation maintenance schedules and per the needs of the project areas. Supplemental post-occupancy data collection will also be performed by the NC STATE UNIVERSITY COASTAL DYNAMICS DESIGN LAB as an in-kind service to the project in order to study the efficacy of the proposed project elements and inform long-term maintenance decisions.

Additional comments (optional)

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC Attachments 2020.12.17.pdf	12/18/2020	blove@ci.lumberton.nc.us	Scope of Work Attachments	<i>No description given.</i>	
Hydraulic Analysis_Meadow Branch.pdf	01/25/2021	blove@ci.lumberton.nc.us	Scope of Work Attachments	<i>No description given.</i>	

Schedule

Specify the work schedule for the mitigation activities.

Add tasks to the schedule

Please include all tasks necessary to implement this mitigation activity; include descriptions and estimated time frames.

Task Name Property Acquisitions: Meadow Branch	Start Month 01	Task Duration (in Months) 09 months
Task Description Final due diligence; issuance of offers and close on four property acquisitions along Meadow Branch		

Task Name Issuance of Request for Proposals for Contractual Services	Start Month 06	Task Duration (in Months) 03 months
Task Description		

Submit RFP and select consultant to complete survey, design, engineering, and construction services

Task Name

Demolition of Property
Acquisitions: Meadow Branch

Start Month

09

Task Duration (in Months)

03 months

Task Description

Demolition of acquired properties along Meadow Branch

Task Name

Decommissioning and
Demolition of Roadways:
Meadow Branch

Start Month

09

Task Duration (in Months)

06 months

Task Description

Portions of Best Drive / Fuller Avenue along Meadow Branch

Task Name

Stream Restoration,
Constructed Wetlands,
Reforestation, and Trails:
Meadow Branch

Start Month

15

Task Duration (in Months)

09 months

Task Description

Construction activities related to the: site preparation, grading, stream restoration, constructed wetlands, reforestation, and trails / boardwalk for Meadow Branch project extents

Task Name

Constructed Wetlands and
Trails: Scottish Packing

Start Month

18

Task Duration (in Months)

06 months

Task Description

Construction activities related to the: site preparation, grading, constructed wetlands, and trails / boardwalk for Scottish Packing project extents

Task Name

Sidewalk Improvement
Installation: Meadow Branch

Start Month

23

Task Duration (in Months)

12 months

Task Description

Construction activities related to the installation of sidewalk improvements in the Meadow Branch / Roberts Avenue corridor (in coordination with NC Department of Transportation)

Task Name

Gravel / Natural Surface Trail
and Boardwalk Installation:
Five Mile Branch

Start Month

25

Task Duration (in Months)

04 months

Task Description

Construction activities related to the: site preparation, grading, and trails / boardwalk for Five Mile Branch project extents (in coordination with The Lumber River Conservancy and The Conservation Fund)

Task Name

Bicycle Lane Striping and
Installation of Pedestrian
Safety Beacons / Signage

Start Month

25

Task Duration (in Months)

04 months

Task Description

Bicycle lane striping along Walnut Street and installation of pedestrian safety equipment

Task Name**Start Month****Task Duration (in**

Educational Signage	30	Months) 03 months Task Description Fabrication and installation of educational signage
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Task Name Project Oversight, Management, and Reporting	Start Month 01	Task Duration (in Months) 36 months Task Description Project oversight, management, and reporting per FEMA requirements
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Estimate the total duration of your proposed activities (in months). **36**

Proposed project start and end dates

Start Date **2022-01-01**

End Date **2024-12-31**

Budget

Budget cost estimate should directly link to your scope of work and work schedule. You must add at least one item(s) greater than 0 for your cost estimate. As necessary, please adjust your federal/non-federal cost shares, and add the non-federal funding source(s) you are planning to use this project. Once you have completed this section, please click the Continue button at the bottom of this page to navigate to the next section.

Add budget cost types and item(s)

First, click the Add cost type button below to add cost type cost estimate and then click the Add item(s) button to add the item(s) for the cost estimate.

Grand total: \$2,623,685.32

Budget type: Construction

▶ Cost type: Cost estimate	\$2,498,774.84
▶ Cost type: Management cost	\$124,910.48

Program income (optional)

Cost share

Cost share or matching means the portion of project costs not paid by federal funds.

Proposed federal vs. non-federal funding shares

Hazard Mitigation Assistance (HMA) funds may be used to pay up to 75% federal share of the eligible activity costs. For Building Resilient Infrastructure and communities (BRIC), small impoverished communities may be eligible for up to 90% federal share. For Flood Mitigation Assistance (FMA), and severe repetitive loss (SRL) properties may be eligible for up to 100% federal share. Repetitive loss (RL) properties may be eligible for up to 90% federal share. Flood Mitigation Assistance (FMA) and severe repetitive loss (SRL) properties may be eligible for up to 100% federal share. Repetitive loss (RL) properties may be eligible for up to 90% federal share.

	% Percentage	\$ Dollar amount
<p><u>Is this a small impoverished community?</u></p> <p>i</p> <p>This determines your federal/non-federal share ratio.</p> <p>No</p>	73.45	1927179.32
	26.55	696506.00

Based on total budget
cost: \$2,623,685.32

Non-federal funding sources here

That portion of the total costs of the program provided by the non-federal entity in the form of in-kind donations or cash match received from third parties or contributed by the agency. In-kind contributions must be provided and cash expended during the project period along with federal funds to satisfy the matching requirements.

Funding source	Funding amount	% Non-federal share by source
▶ Funding source: Environmental Enhancement Grant	\$250,000.00	35.89%
▶ Funding source: City of Lumberton Public Works Department	\$76,800.00	11.03%
▶ Funding source: City of Lumberton Administration	\$12,000.00	1.72%
▶ Funding source: Duke Energy Foundation Grant	\$35,000.00	5.03%
▶ Funding source: North Carolina Land and Water Fund Grant	\$48,331.00	6.94%
▶ Funding source: Environmental Enhancement Grant	\$150,000.00	21.54%
▶ Funding source: North Carolina Community Foundation Grant	\$90,000.00	12.92%
▶		

\$25,000.00 **3.59%**

▶ Funding source: North Carolina Policy Collaboratory Grant	\$9,375.00	1.35%
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Please provide any additional comments below (optional).

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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Cost-effectiveness

How was cost-effectiveness determined for this project?

- BCA completed in FEMA's BCA toolkit
Subapplicant must attach supporting documentation.
- Pre-calculated benefits
- Substantial damage in special flood hazard area
- Other BCA methodology approved by FEMA in writing
- Not applicable
- Not applicable

What are the total project benefits? (\$) **4005285**

What are the total project cost? (\$) **2793897**

What is the benefit-cost ratio (BCR) for the entire project? **1.43**

Was sea level rise incorporated into the flood elevations in the BCA? **No**

Were environmental benefits added to the project benefits? **Yes**

Were social benefits added to the project benefits?

No

Does the mitigation measure incorporate nature-based solutions?

Yes

Please provide any additional comments below (optional).

This benefit-cost analysis (BCA) represents a lower-bound analysis of future risk reduction benefits associated with the proposed scope of work. Ancillary benefits to project-adjacent public infrastructure, commercial businesses, and social factors were not quantified as part of this analysis. Acquisitions. For each of the four acquisition properties, the following data sources were used for BCA Calculator inputs: i) Lowest finished floor elevation (FFE): Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov); ii) Streambed Elevation: HEC-RAS derived cross section dataset (from National Flood Hazard Layer); iii) Water surface elevation (WSE) and discharge rates: Flood Insurance Study accessed through NC Flood Risk Information System; and iv) Building information: Building Footprint dataset developed for the NC Floodplain Mapping program (fris.nc.gov). The default building replacement value and content replacement value from the BCA Calculator was used in place of those attributes from the building footprint dataset as the original source of that information was unknown. See attached spreadsheet 'Meadow Branch Acquisition Properties' for the detailed information used in these calculations. Floodplain & Stream Restoration: Professional Expected Damages. Expected damages for all buildings in the vicinity of the restoration project were calculated using the FEMA-developed 'Significant Damage Estimator' (SDE) Triage tool (provided by the NC Floodplain Mapping Program). In order to estimate the flood depth above FFE, WSE values for the various storm events pre- and post-mitigation (generated through hydraulic analysis) were assigned to each building footprint in GIS within the study area. The FFE of each building was subtracted from the WSE of each flood event to determine the depth of flooding incurred for each building. Previously acquired properties (e.g. via HMGP) and the four future

acquisitions included this proposed scope of work (each listed as separate mitigation actions) were excluded from damage estimate calculations. For each of the buildings with a flood depth at or above the finished floor elevation, the SDE Triage tool was used to estimate damages for each flood event. Building information inputs were derived from attributes of the NC Building Footprint dataset. These included residence type, foundation, number of stories, and square footage. The default building replacement value and content replacement value from the SDE Triage tool was used in place of those attributes from the building footprint dataset as the original source of that information was unknown. See attached spreadsheet 'Meadow Branch Restoration - Expected Damages Pre- and Post-Mitigation' for the detailed information used in these calculations. The SDE Triage tool estimates minimal damage when the flood depth reaches finished floor elevation, but does not account for any damages sustained to the foundation when the WSE is above grade but below the FFE. Many of the WSE's calculated were between grade and FFE, so it's anticipated that actual damages would exceed what is reported, thus the proposed project is likely to yield significantly higher benefits than what is calculated. Standard Benefits: Ecosystem Services. After implementation of the proposed scope of work, the Project Area will consist of: riparian (52.5%), forest (28.5%), wetland (14.7%), and green open space (4.3%) land uses. Locations denoted as 'riparian' are specifically reserved for areas within a 150-foot buffer of the Meadow Branch stream centerline, and are entirely within the existing regulatory floodway (AEFW flood hazard area). Area percentages for forests, wetlands, and green open spaces were calculated using computer-aided design software, and are derived from approved design proposals in the Meadow Branch and Scottish Packing focus areas included in the proposed scope of work.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Lumberton BCA 2021.01.23.pdf	01/25/2021	blove@ci.lumberton.nc.us	Cost Effectiveness Attachments	Revised BCA to replace BCA document from 12/17/2020. Final BCR is 1.43.	
Lumberton BCA - Meadow Branch Acquisitions.pdf	01/25/2021	blove@ci.lumberton.nc.us	Cost Effectiveness Attachments	<i>No description given.</i>	
Hydraulic Analysis Meadow Branch.pdf	01/25/2021	blove@ci.lumberton.nc.us	Cost Effectiveness Attachments	<i>No description given.</i>	
Lumberton BCA - Expected Damages - Meadow Branch Restoration.pdf	01/25/2021	blove@ci.lumberton.nc.us	Cost Effectiveness Attachments	<i>No description given.</i>	
Lumberton BCA 2021.01.24.xlsx	01/25/2021	blove@ci.lumberton.nc.us	Cost Effectiveness Attachments	BCA Excel spreadsheet	
BRIC_Cost Effectiveness BCA 2020.12.16.pdf	12/17/2020	blove@ci.lumberton.nc.us	Cost Effectiveness Attachments	Please delete this file from the application.	

Environmental/Historic Preservation (EHP) Review Information

Introduction

An environmental/historic preservation review is required for all activities for which FEMA funds are being requested. FEMA will complete this review with the assistance of both the state or tribal government and the local applicant. It is important that you provide accurate information. If you are having problems completing this section, please contact your application point of contact.

A. National Historic Preservation Act - Historic Buildings and Structures

1. Does your project affect or is it in close proximity to any buildings or structures 50 years or more in age? **Yes**

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please attach the required documents below.)

- The property address and original date of construction for each property affected (unless this information is already noted in the Properties section).
- A minimum of two color photographs showing at least three sides of each structure (Please label the photos accordingly).
- A diagram or USGS 1:24,000 scale quadrangle map displaying the relationship of the property (s) to the project area.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

- Information gathered about potential historic properties in the project area, including any evidence indicating the age of the building or structure and presence of buildings or structures that are listed or eligible for listing on the National Register of Historic Places or within or near a National Register listed or eligible historic district. Sources for this information may include the State Historic Preservation Officer, and/or the Tribal Historic Preservation Officer (SHPO/THPO), your local planning office, historic preservation organization, or historical society.
- Consideration of how the project design will minimize adverse effects on known or potential historic buildings or structures, and any alternatives considered or implemented to avoid or minimize effects on historic buildings or structures. Please address and note associated costs in your project budget.
- For acquisition/demolition projects affecting historic buildings or structures, any data regarding the consideration and feasibility of elevation, relocation, or flood proofing as alternatives to demolition.
- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

122 Best Drive (originally constructed in: 1965) 108 Best Drive (originally constructed in: 1965) 205 Highland Avenue (originally constructed in: 1967) 208 Highland Avenue (originally constructed in: 1970) Buildings in proximity to the project area consist of residential homes that were built between 1965 - 1970, and are therefore over 50 years in age. However, none of these buildings or associated structures

would be eligible for NRHP listing since they do not possess significance at the national, tribal, state, or level in American history, architecture, archeology, engineering, or culture. Additionally, properties including residential homes of similar character have been acquired and demolished through previous HMGP processes, and there was not any historical significance noted from consulted agencies.

Please provide an explanation and any information about this project that could assist FEMA in its review.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC Section A Historic Buildings and Structures 2021.01.20.pdf	01/25/2021	blove@ci.lumberton.nc.us	closeProximityTo50YearOldBuilding.attachmentIds	No description given.	

B. National Historic Preservation Act - Archeological Resources

Does your project involve disturbance of ground?

Yes

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please attach the required documents below.)

- A description of the ground disturbance by giving the dimensions (area, volume, depth, etc.) and location.
- The past use of the area to be disturbed, noting the extent of previously disturbed ground.
- A USGS 1:24,000 scale or other site map showing the location and extent of ground disturbance.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

- Any information about potential historic properties, including archeological sites, in the project area. Sources of this information may include SHPO/THPO, and/or the Tribe's cultural resources contact if no THPO is designated. Include, if possible, a map showing the relation of any identified historic properties to the project area.
- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

The ground disturbance activities and map(s) are included as part of graphic attachments and scope of work description.

Please provide an explanation and any information about this project that could assist FEMA in its review.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC Section B Archeological Resources.pdf	12/18/2020	blove@ci.lumberton.nc.us	involveDisturbanceOfGround.attachmentIds	<i>No description given.</i>	

C. Endangered Species Act and Fish and Wildlife Coordination Act

1. Are federally listed threatened or endangered species or their critical habitat present in the area affected by the project?

Not known

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please provide the required documents either through attachment and/or comment box below.)

- Information you obtained to identify species in or near the project area. Provide the source and date of the information cited.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

- Any request for information and associated response from the USFWS, the National Marine Fisheries Service (NMFS) (for affected ocean-going fish), or your State Wildlife Agency, regarding potential listed species present and potential of the project to impact those species.
- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Please provide an explanation and any information about this project that could assist FEMA in its review.

There have not been any federally-listed threatened or endangered species reported within any of the project areas included in the scope of work. However, habitat typologies found within the Scottish Packing, Meadow Branch, and Five Mile Branch project areas have the potential to serve as critical habitat for select species that are threatened or endangered. Enhanced monitoring and wildlife observations protocols will be taken should BRIC funds be awarded.

2. Does your project remove or affect vegetation?

Yes

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please provide the required documents either through attachment and/or comment box below.)

- Description of the amount (area) and type of vegetation to be removed or affected.
- A site map showing the project area and the extent of vegetation affected.
- Photographs or digital images that show both the vegetation affected and the vegetation in context of its surroundings.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Site maps, vegetation removal descriptions and photographs are included as part of graphic attachments, EHP section, and scope of work description.

Please provide an explanation and any information about this project that could assist FEMA in its review.

3. Is your project in, near (within 200 feet), or likely to affect any type of waterway or body of water? **Yes**

If Yes, and project is not within an existing building, you must confirm that you have provided the following: (If you have not provided these documents in any other section of the application, please attach the required documents below.)

- A USGS 1:24,000 scale quadrangle map showing the project activities in relation to all nearby water bodies (within 200 feet).
- Any information about the type of water body nearby including: its dimensions, the proximity of the project activity to the water body, and the expected and possible changes to the water body, if any. Identify all water bodies regardless whether you think there may be an effect.
- A photograph or digital image of the site showing both the body of water and the project area.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

- Evidence of any discussions with the US Fish and Wildlife Service (USFWS), and/or your State Wildlife Agency concerning any potential impacts if there is the potential for the project to affect any water body.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

These items are included as part of graphic attachments and the EHP section.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC Section C Endangered Species Wildlife.pdf	12/18/2020	blove@ci.lumberton.nc.us	endangeredSpecies.attachmentIds	No description given.	

D. Clean Water Act, Rivers and Harbors Act, and Executive Order 11990 (Protection of Wetlands)

1. Will the project involve dredging or disposal of dredged material, excavation, adding fill material or result in any modification to water bodies or wetlands designated as 'waters of the U.S' as identified by the US Army Corps of Engineers or on the National Wetland Inventory? **Yes**

Please confirm that you have provided the information listed below by selecting each check box. (If you have not provided these documents in any other section of the application, please attach the required documents below.)

- Documentation of the project location on a USGS 1:24,000 scale topographic map or image.
- A copy of a National Wetlands Inventory map or other available wetlands mapping information.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

- Request for information and response letter from the US Army Corps of Engineers and/or state resource agencies regarding the potential for wetlands, and applicability of permitting requirements.
- Evidence of alternatives considered to eliminate or minimize impacts to wetland.
- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional) **Items were previously included in the EHP section attachments.**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action

E. Executive Order 11988 (Floodplain Management)

1. Does a Flood Insurance Rate Map (FIRM), Flood Hazard Boundary Map (FHBM), hydrologic study, or some other source indicate that the project is located in or will affect a 100 year floodplain, a 500 year floodplain if a critical facility, an identified regulatory floodway, or an area prone to flooding? **Yes**

Please explain in the text box below and/or provide any documentation to identify the means or the alternatives considered to eliminate or minimize impacts to floodplains (See the 8 step process found in 44 CFR Part 9.6.) to help FEMA evaluate the impact of the project:

All activities proposed within mapped floodways, 100-year floodplains, and 500-year floodplains are specifically designed to improve floodplain function after construction is complete. This will be achieved through significant reductions in impervious surfaces in the project areas (demolition of buildings, roads, driveways), and in the installation of nature-based solutions that will increase water storage capacity and reduce peak flood velocities. Multiple design alternatives were considered as they pertain to hydraulic analysis scopes of work in previously completed studies, and the alternative that the community selected was chosen specifically because of its ability to reduce the extents of flood waters the greatest. Overall, all mitigation activities connected to BRIC-funded enhancements will minimize future adverse impacts within their connected floodplains, as well as to the ecological and human interfaces that reside in and around the proposed project areas.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

2. Does the project alter a watercourse, water flow patterns, or a drainage way, regardless of its floodplain designation? **Yes**

If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project:

- Hydrologic/hydraulic information from a qualified engineer to demonstrate how drainage and flood flow patterns will be changed and to identify down and upstream effects.

- Request for information and response letter from the state water resource agency, if applicable, with jurisdiction over modification of waterways.
- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional) **Previously provided.**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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F. Coastal Zone Management Act

1. Is the project located in the state's designated coastal zone? **No**

G. Farmland Protection Policy Act

1. Will the project convert more than 5 acres of prime or unique farmland outside city limits to a non-agricultural use? **No**

H. Resource Conservation and Recovery Act (RCRA) and Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (Hazardous and Toxic Materials)

1. Is there a reason to suspect there are contaminants from a current or past use on the property associated with the proposed project?

Not known

Please provide an explanation and any information about this project that could assist FEMA in its review.

The primary structure on the Scottish Packing property is currently being studied as part of a due diligence and environmental assessment process as part of a separately funded grant, that once complete, will result in the abatement (if needed) and demolition of the Scottish Packing structure. However, the proposed scope of work at the Scottish Packing property - as part of the BRIC-funded effort - does not include any disturbance to the building or the areas immediately around it. Activities tied to BRIC funds are intended to be used for the installation of constructed wetlands, boardwalks, and trails, and are not directly connected to any potential contaminants within the structure that may exist. Furthermore, the proposed schedule of tasks for the Scottish Packing property provides adequate time in between demolition activities relating to the building, and proposed interventions connected to BRIC-funded activities.

2. Are there any studies, investigations, or enforcement actions related to the property associated with the proposed project?

Yes

If Yes, please indicate below any other information you are providing to help FEMA evaluate the impact of the project: (If you have not provided these documents in any other section of the application, please attach the required documents below.)

- Comments and any relevant documentation.
- Results of any consultations with state or local agency to obtain permit with requirements for handling, disposing of or addressing the effects of hazardous or toxic materials related to project implementation.
- Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

Previously provided in EHP attachments.

3. Does any project construction or operation activities involve the use of hazardous or toxic materials? **No**

4. Do you know if any of the current or past land-uses of the property affected by the proposed project or of the adjacent properties are associated with hazardous or toxic materials? **No**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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I. Executive Order 12898, Environmental Justice for Low Income and Minority Populations

1. Are there low income or minority populations in the project's area of effect or adjacent to the project area? **Yes**

If Yes, you must confirm that you have provided the following either in the text box below or by attachment: (If you have not provided these documents in any other section of the application, please attach the required documents or provide the description below.)

Description of any disproportionate and adverse effects to these populations.

To help FEMA evaluate the impact of the project, please indicate below any other information you are providing. (optional)

Description of the population affected and the portion of the population that would be disproportionately and adversely affected. Please include specific efforts to address the adverse impacts in your proposal narrative and budget.

Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)

No adverse effects to these populations are anticipated as part of this scope of work. Community stakeholders have been involved

and engaged in planning and design processes, and ultimately, this led to consensus around programming preferences and site design considerations. Furthermore, inclusion of additional park space and nature-based infrastructure fills capacity gaps in park equity for South Lumberton residents, and aims to bolster environmental awareness and education through the proposed elements of the project.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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J. Other Environmental/Historic Preservation Laws or Issues

- 1. Are there other environmental/historic preservation requirements associated with this project that you are aware of? **No**
- 2. Are there controversial issues associated with this project? **No**
- 3. Have you conducted any public meeting or solicited public input or comments on your specific proposed mitigation project? **Yes**

If Yes, please indicate in the text box below a description of the requirements, issues or public involvement effort.

Project team leadership facilitated various types of public engagement as part of previously completed scopes of work during planning and design phases of the Lumberton Loop plan. Specifically, neighborhood residents, local precinct representatives, and city staff were included as stakeholders in meetings for the Meadow Branch and Scottish Packing focus

areas, with stakeholder-generated input on planning objectives and programming preferences ultimately guiding the design process. Additionally, research findings, planning recommendations, and design alternatives have been presented to City Council on multiple occasions as part of the public record.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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K. Summary and Cost of Potential Impacts

Having answered the questions in parts A. through J., have you identified any aspects of your proposed project that have the potential to impact environmental resources or historic properties? **Yes**

If Yes, you must confirm that you have provided the following: (If you have not provided these documents in any other section of the application, please attach the required documents below.)

- Evaluated these potential effects and provided the materials required in Parts A through J that identify the nature and extent of potential impacts to environmental resources and/or historic properties.
- Consulted with appropriate parties to identify any measures needed to avoid or minimize these impacts.
- Considered alternatives that could minimize both the impacts and the cost of the project.
- Made certain that the costs of any measures to treat adverse effects are realistically reflected in the project budget estimate.

Please enter your comments below. (optional) : (Please indicate why in the text box below and any information about this project that could assist FEMA in its review). **Details pertaining to these aspects of the project have been provided in other sections of the application.**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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Evaluation

Is the applicant participating in the Community Rating System (CRS) ?	No
Is the applicant a Cooperating Technical Partner (CTP) ?	No
Was this created from a previous FEMA HMA Advance assistance / Project scoping award?	No
Has the applicant adopted building codes consistent with the international codes ?	Yes
Year of building code	2018
Please provide the building code.	2018-NC Building Code, 2017-National Electrical Code, 2019-Flood Damage Prevention Ordinance
Have the applicant's building codes been assessed on the Building Code Effectiveness Grading Schedule (BCEGS) ?	No
Describe involvement of partners to enhance the mitigation activity outcome.	Project partners are critical to the success of the proposed mitigation activities. The conceptual framework of the Lumberton Loop was co-created through collaborative research, engagement, and design processes that included representatives from the City of Lumberton, the NC State University Coastal Dynamics Design Lab, The Conservation Fund, resident stakeholders, and numerous affiliates at the North Carolina Office of Recovery and Resiliency, the North Carolina Department of Transportation, North Carolina State Parks, and

Discuss how anticipated future conditions are addressed by this project.

the Lumber River Conservancy. The City of Lumberton aims to further leverage these existing relationships to see the next phase of the Lumberton Loop realized for city residents. The three-pronged partnership that led to the conception and early-phase implementation aspects of the Lumberton Loop - the City of Lumberton, the NC State University Coastal Dynamics Design Lab, and The Conservation Fund - will continue to work together in order to manage, administer, and enhance the mitigation activities outlined in the scope of work.

The activities included in this proposal recognize the vulnerable conditions that are created by extreme flooding events, and responds by connecting a chain of mitigation, restoration, and recreation amenities to serve as a city-wide green infrastructure network. Through hydraulic analysis, the activities included in the scope of work have been modeled to: i) reduce peak flood elevations, ii) reduce peak flood extents, iii) reduce peak flood velocities, and iv) improve water quality. These benefits service the community by creating a greater capacity to withstand future flooding conditions by: i) protecting road crossings and other valuable infrastructure, and ii) protecting land and property that would flood without the proposed mitigation and restoration projects in place. Additionally, restored ecological habitats and increased recreational access by the general public creates significant places of meaning that will enable future economic development growth initiatives centered around these projects.

Additional comments (optional)

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC_Attachments_lowquality_2020.12.15.pdf	12/17/2020	blove@ci.lumberton.nc.us	Evaluation Attachments	<i>No description given.</i>	

Comments & attachments

▶ Community	0 comment, 0 attachments
▶ Mitigation plan	0 comment, 1 attachments
▶ Scope of work	0 comment, 2 attachments
▶ Budget	0 comment, 0 attachments
▶ Cost-effectiveness	1 comment, 6 attachments
▶ Evaluation	0 comment, 1 attachments
▶ Environmental/Historic Preservation (EHP)	0 comment, 3 attachments
▶ Location	0 comment, 0 attachments

Introduction

Project location

Provide a detailed description of the proposed project's location.

The proposed project is located in Lumberton, North Carolina which is the county seat of Robeson County. Should funding be awarded, the four focus areas where BRIC-funded activities will take place are: i) along the Meadow Branch and Roberts Avenue corridor between Jerry Giles Park and Five Mile Branch; ii) along Five Mile Branch between Roberts Avenue and the Lumber River; iii) along the Lumber River at the former Scottish Packing property; and iv) along Walnut Street starting nearest the Lumber River and ending at Jerry Giles Park.

Latitude

34.617600

Longitude

-078.982400

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
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Project benefiting area

Provide a detailed description of the proposed project's benefiting area.

The proposed benefiting area for this project is defined as locations that will directly receive a benefit from the construction of the mitigation, restoration, and recreational activities included in this proposal as part of the Lumberton Loop. While some areas of the Lumberton Loop will see direct benefits, such as the reduction of peak flood extents, all areas of the Loop will indirectly benefit from the increased access to the enhanced outdoor recreation amenities. Equitable and walkable park access is commonly defined as being within a quarter-mile distance to one's home. As this quarter-mile buffer is greater than the areas that will see more direct benefits - such as

adjacent properties that share the same floodplain - the project benefiting area as shown includes all locations within Lumberton city limits that are inside or within a quarter-mile distance of the Lumberton Loop boundaries.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC Project Benefiting Area 2020.12.17.pdf	12/18/2020	blove@ci.lumberton.nc.us	Location project benefiting area Attachments	Please delete this file from the application.	
BRIC Project Benefiting Area 2021.01.20 b.pdf	01/25/2021	blove@ci.lumberton.nc.us	Location project benefiting area Attachments	Revised Project Benefiting Area	

Project impact area

Provide a detailed description of the proposed project's impact area.

The proposed impact area for this project is defined as locations that will be directly impacted by the construction activities included in the scope of work. For the Meadow Branch and Scottish Packing focus areas, this was delineated by buffering the proposed limits of disturbance to adjacent properties and road networks that may be impacted during construction. Segments of multi-modal paths and sidewalk enhancements show buffers within the right-of-way that extend to the adjacent intersections, in both directions, in the event that a temporary

road closure may need to occur. Lastly, the multi-modal path along Five Mile Branch is shown with a 50-foot buffer as an estimate of anticipated tree protection areas or temporary fencing that may be in place during the construction of the trail system.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BRIC_Project_Impact_Area_2020.12.17.pdf	12/18/2020	blove@ci.lumberton.nc.us	Location project impact area Attachments	Please delete this file from the application.	

Project site inventory

Does this project subapplication propose to mitigate a property/structure(s)? (Examples: residential home, commercial building, bridge, fire station, levee, pumping station, wastewater treatment plant, telephone pole, electric line, etc.)

Yes

Please describe how the propert(ies) will be selected upon subgrant approval. (Example: Saferoom Lottery Project, Fix the Bricks Project)

Please [download the excel template](#), and then fill out the template with building or infrastructure data.

Enter the location of the property/structure.

List of location(s) (4 locations)

Status	Location ID	Address	Inventory type	Structure type	Mitigation action
✓	16848	122 Best Drive , Lumberton, NC, Robeson, 28358	Building	Residential	Acquisition
✓	16851	108 Best Drive , Lumberton, NC, Robeson, 28358	Building	Residential	Acquisition
✓	16852	208 Highland Avenue , Lubmerton, NC, Robeson, 28358	Building	Residential	Acquisition
✓	16853	205 Highland Avenue , Lubmerton, NC, Robeson, 28358	Building	Residential	Acquisition

Assurances and certifications

OMB number: 4040-0009, Expiration date: 02/28/2022 [View burden statement](#)

SF-424D: Assurances - Construction Programs

Content:

OMB Number: 4040-0009

Expiration Date: 02/28/2022

Certain of these assurances may not be applicable to your project or program. If you have any questions, please contact the awarding agency. Further, certain Federal awarding agencies may require applicants to certify to additional assurances. If such is the case, you will be notified.

As the duly authorized representative of the applicant, I certify that the applicant:

1. Has the legal authority to apply for Federal assistance and the institutional, managerial and financial capability (including funds sufficient to pay the non-Federal share of project costs) to ensure proper planning, management and completion of the project described in this application.
2. Will give the awarding agency, the Comptroller General of the United States and, if appropriate, the State, the right to examine all records, books, papers, or documents related to the assistance; and will establish a proper accounting system in

- accordance with generally accepted accounting standards or agency directives.
3. Will not dispose of, modify the use of, or change the terms of the real property title or other interest in the site and facilities without permission and instructions from the awarding agency. Will record the Federal awarding agency directives and will include a covenant in the title of real property acquired in whole or in part with Federal assistance funds to assure nondiscrimination during the useful life of the project.
 4. Will comply with the requirements of the assistance awarding agency with regard to the drafting, review and approval of construction plans and specifications.
 5. Will provide and maintain competent and adequate engineering supervision at the construction site to ensure that the complete work conforms with the approved plans and specifications and will furnish progressive reports and such other information as may be required by the assistance awarding agency or State.
 6. Will initiate and complete the work within the applicable time frame after receipt of approval of the awarding agency.
 7. Will establish safeguards to prohibit employees from using their positions for a purpose that constitutes or presents the appearance of personal or organizational conflict of interest, or personal gain.
 8. Will comply with the Intergovernmental Personnel Act of 1970 (42 U.S.C. Â§Â§4728-4763) relating to prescribed standards for merit systems for programs funded under one of the 19 statutes or regulations specified in Appendix A of OPM's Standards for a Merit System of Personnel Administration (5 C.F.R. 900, Subpart F).
 9. Will comply with the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. Â§Â§4801 et seq.) which prohibits the use of lead-based paint in construction or rehabilitation of residence structures.
 10. Will comply with all Federal statutes relating to nondiscrimination. These include but are not limited to: (a) Title VI of the Civil Rights Act of 1964 (P.L. 88-352) which prohibits discrimination on the basis of race, color or national origin; (b) Title IX of the Education Amendments of 1972, as amended (20 U.S.C. §§1681-1683, and 1685-1686), which prohibits discrimination on the basis of sex; (c) Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. §794), which prohibits discrimination on the basis of handicaps; (d) the Age Discrimination Act of 1975, as amended (42 U.S.C. §§6101-6107), which prohibits discrimination on the basis of age; (e) the Drug Abuse Office and Treatment Act of 1972 (P.L. 92-255), as amended, relating to nondiscrimination on the basis of drug abuse; (f) the Comprehensive Alcohol Abuse and Alcoholism Prevention, Treatment and Rehabilitation Act of 1970 (P.L. 91-616), as amended, relating to nondiscrimination on the basis of alcohol abuse or alcoholism; (g) §§523 and 527 of the Public Health Service Act of 1912 (42 U.S.C. §§290 dd-3 and 290 ee- 3), as amended, relating to confidentiality of alcohol and drug abuse patient records; (h) Title VIII of the Civil Rights Act of 1968 (42 U.S.C. §§3601 et seq.), as amended, relating to nondiscrimination in the sale, rental or financing of housing; (i) any other nondiscrimination provisions in the specific statute(s) under which application for Federal assistance is being made; and, (j) the requirements of any other nondiscrimination statute(s) which may apply to the application.
 11. Will comply, or has already complied, with the requirements of Titles II and III of the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (P.L. 91-646) which provide for fair and equitable treatment of persons displaced or whose property is acquired as a result of Federal or federally-assisted programs. These requirements apply to all interests in real property acquired for project purposes regardless of Federal participation in purchases.
 12. Will comply with the provisions of the Hatch Act (5 U.S.C. §§1501-1508 and 7324-7328) which limit the political activities of employees whose principal employment activities are funded in whole or in part with Federal funds.

13. Will comply, as applicable, with the provisions of the Davis-Bacon Act (40 U.S.C. §§276a to 276a-7), the Copeland Act (40 U.S.C. §276c and 18 U.S.C. §874), and the Contract Work Hours and Safety Standards Act (40 U.S.C. §§327-333), regarding labor standards for federally-assisted construction subagreements.
14. Will comply with flood insurance purchase requirements of Section 102(a) of the Flood Disaster Protection Act of 1973 (P.L. 93-234) which requires recipients in a special flood hazard area to participate in the program and to purchase flood insurance if the total cost of insurable construction and acquisition is \$10,000 or more.
15. Will comply with environmental standards which may be prescribed pursuant to the following: (a) institution of environmental quality control measures under the National Environmental Policy Act of 1969 (P.L. 91-190) and Executive Order (EO) 11514; (b) notification of violating facilities pursuant to EO 11738; (c) protection of wetlands pursuant to EO 11990; (d) evaluation of flood hazards in floodplains in accordance with EO 11988; (e) assurance of project consistency with the approved State management program developed under the Coastal Zone Management Act of 1972 (16 U.S.C. §§1451 et seq.); (f) conformity of Federal actions to State (Clean Air) Implementation Plans under Section 176(c) of the Clean Air Act of 1955, as amended (42 U.S.C. §§7401 et seq.); (g) protection of underground sources of drinking water under the Safe Drinking Water Act of 1974, as amended (P.L. 93-523); and, (h) protection of endangered species under the Endangered Species Act of 1973, as amended (P.L. 93-205).
16. Will comply with the Wild and Scenic Rivers Act of 1968 (16 U.S.C. §§1271 et seq.) related to protecting components or potential components of the national wild and scenic rivers system.
17. Will assist the awarding agency in assuring compliance with Section 106 of the National Historic Preservation Act of 1966, as amended (16 U.S.C. §470), EO 11593 (identification and protection of historic properties), and the Archaeological and Historic Preservation Act of 1974 (16 U.S.C. §§469a--1 et seq.).
18. Will cause to be performed the required financial and compliance audits in accordance with the Single Audit Act Amendments of 1996 and OMB Circular No. A-133, "Audits of States, Local Governments, and Non-Profit Organizations."
19. Will comply with all applicable requirements of all other Federal laws, executive orders, regulations, and policies governing this program.
20. Will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits grant award recipients or a sub-recipient from (1) Engaging in severe forms of trafficking in persons during the period of time that the award is in effect (2) Procuring a commercial sex act during the period of time that the award is in effect or (3) Using forced labor in the performance of the award or subawards under the award.

OMB number: 1660-0083, Expiration date: 10/31/2021 [View burden statement](#)

Certifications regarding lobbying; Debarment, Suspension and other responsibility matters; and Drug-free workplace requirements

Content:

OMB Control Number: 1660-0083

Expiration: 10/31/2021

Applicants should refer to the regulations cited below to determine the certification to which they are required to attest. Applicants should also review the instructions for certification included in the regulations before completing this form. Signature of this form provides for compliance with certification requirements under 44 CFR Part 18, "New Restrictions on Lobbying" and 28 CFR Part 17, "Government-wide Debarment and Suspension (Nonprocurement) and Government-wide Requirements for Drug-Free Workplace (Grants)." The certifications shall be treated as a material representation of fact upon which reliance will be placed when the Federal Emergency Management Agency (FEMA) determines to award the transaction, grant, or cooperative agreement.

1. LOBBYING

As required by section 1352, Title 31 of the U.S. Code, and implemented at 44 CFR Part 18, for persons entering into a grant or cooperating agreement over \$ 100,000, as defined at 44 CFR Part 18, the applicant certifies that:

(a) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the making of any Federal grant, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal grant or cooperative agreement.

(b) If any other funds than Federal appropriated funds have been paid or will be paid to any other person for influencing or attempting to influence an officer or employee of any agency, a member of Congress, an officer or an employee of Congress, or employee of a member of Congress in connection with this Federal Grant or cooperative agreement, the undersigned shall complete and submit Stand Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.

(c) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subgrants, contracts under grants and cooperative agreements, and subcontracts) and that all subrecipients shall certify and disclose accordingly.

Standard Form-LLL 'Disclosure of Lobbying Activities' attached (This form must be attached to certification if nonappropriated funds are to be used to influence activities.)

2. DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS (DIRECT RECIPIENT)

As required by Executive Order 12549, Debarment and Suspension, and implemented at 44 CFR Part 67, for prospective participants in primary covered transactions, as defined at 44 CFR Part 17, Section 17.510-A.

A. The applicant certifies that it and its principals:

- a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, sentenced to a denial of Federal benefits by a State or Federal court, or voluntarily excluded from covered transactions by any Federal department or agency;

- b. Have not within a three-year period preceding this application been convicted of a or had a civilian judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or perform a public a public (Federal ,State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. Are not presently indicted for otherwise criminally or civilly charged by a governmental entity (Federal, State, or local) with commission of any of the offenses enumerated in paragraph (1) (b) of this certification; and
 - d. Have not within a three-year period preceding this application had one or more public transactions (Federal, State, or local) terminated for cause of default; and
- B. Where the applicant is unable to certify to any of the statements in this certification, he or she shall attach an explanation to this application.

3. DRUG-FREE WORKPLACE (GRANTEE OTHER THAN INDIVIDUALS)

As required by the Drug-Free Workplace Act of 1988, and implemented at 44 CFR Part 17, Subpart F, for grantees, as defined at 44 CFR Part 17.615 and 17.620-

- A. The applicant certifies that it will continue to provide a drug-free workplace by;
- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the grantee's workplace and specifying the actions that will be taken against employees for violation of such prohibition;
 - b. Establishing an on-going drug free awareness program to inform employees about-
 - 1. The dangers of drug abuse in the workplace;
 - 2. The grantee's policy of maintaining a drug-free workplace;
 - 3. Any available drug counseling, rehabilitation, and employee assistance programs; and
 - 4. The penalties that may be imposed upon employees for drug abuse violations occurring in the workplace;
 - c. Making it a requirement that each employee to be engaged in the performance of the grant to be given a copy of the statement required by paragraph (a);
 - d. Notifying the employee in the statement required by paragraph (a) that, as a condition of employment under the grant, the employee will-
 - 1. Abide by the term of the statement; and
 - 2. Notify the employee in writing of his or her conviction for a violation of a criminal drug statute occurring ion the workplace no later than five calendar days after such convictions;
 - e. Notifying the agency, in writing, within 10 calendar days after receiving notice under subparagraph (d)(2) from an employee or otherwise receiving actual notice of such conviction. Employers of convicted employees must provide notice, including position, title, to the applicable FEMA awarding office, i.e., regional office or FEMA office.
 - f. Taking one of the following actions, within 30 calendar days of receiving notice under subparagraph (d)(2), with respect to anyemployee who is convicted-

1. Taking appropriate personnel action against such an employee, up to and including termination, consistent with the requirements of the Rehabilitation act of 1973, as amended; or
 2. Requiring such an employee to participate satisfactorily in a drug abuse assistance or rehabilitation program approved for such purposes by a Federal, State, or local health, law enforcement, or other appropriate agency;
- g. Making a good faith effort to continue to maintain a drug free workplace through implementation of paragraphs (a), (b), (c), (d), (e) and (f).

B. The grantee may insert in the space provided below the site(s) for the performance of work done in connection with the specific grant:

Place of Performance (Street address, City, County, State, Zip code)

There are workplaces on file that are not identified

Sections 17.630 of the regulations provide that a grantee that is a State may elect to make one certification in each Federal fiscal year. A copy of which should be included with each application for FEMA funding. States and State agencies may elect to use a state wide certification.