Subapplicant information

Name of federal agency	**FEMA**
Type of submission	**Application**

CITY OF HIGH POINT

211 S HAMILTON ST
HIGH POINT, NC 27260 United States

State	DUNS #	EIN #
NC	071581938	566000231

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)

Nancy Myers nancy.myers@highpointnc.gov	**Primary phone**	**Mailing address**
Yeymy Jones yeymy.jones@highpointnc.gov	**Primary phone**	**Mailing address**

Point(s) of contact

Robby Stone Public Services Director robby.stone@highpointnc.gov	**Primary phone** 3368833217 Work **Fax**	**Additional phones** 3368833217 Work	**Mailing address** 211 S. Hamilton, Room 206 High Point NC 27260
Grace Messinger PTRC Water Resources Planner gmessinger@ptrc.org	**Primary phone** 3369040300 Work **Fax**	**Additional phones** 3369040300 Work	**Mailing address** 1398 Carrollton Crossing Drive Kernersville NC 27284

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
HIGH POINT, CITY OF	057,081,151	370113	N		1,6

Please provide any additional comments below (optional).

The City of High Point is located in the Southwest corner of Guilford County, North Carolina, with parts of the City extending into Randolph, Davidson, and Forsyth counties, in the Piedmont Triad region of the state. The project stream and watershed (Richland Creek) is a named stream that drains through Randleman Lake, down to the Deep River. Richland Creek (17-7-(0.5)) is listed on the 303(d) list for fish community with a Hydraulic Unit Code (HUC) of 03030003. Richland Creek is classified as WS-IV which are generally moderately to highly developed watersheds. Richland Creek is part of the Cape Fear watershed, which does not include riparian buffers. Opportunities for water quality improvement throughout the watershed typically include restoration of smaller tributaries, wetland restoration, or stormwater control methods (SCMs). This corridor is located in one of the poorest census tracts (143) of the area, the Southwest corridor.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
HighPointFEMA-BRIC_Technical_Criteria_FINAL.pdf	01/12/2023	gmessinger@ptrc.org	Community Attachments	City of High Point inner-city, Southwest- Rehabilitation, Restoration and Enhancement Technical Criteria document	
CapeFearBasin_outline_.jpg	01/11/2023	gmessinger@ptrc.org	Community Attachments	Cape Fear River Basin in NC; City of High Point located in Guilford County- upper Cape Fear River Basin area	
0_PTRC_FEMA_BRIC_Regional Site Location Map.pdf	01/11/2023	gmessinger@ptrc.org	Community Attachments	City of High Point, NC location and project location map indicating specific project location	

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
Guilford County NC Hazard Mitigation Annual Update March 2022

Plan type
Local Multijurisdictional Multi-Hazard Mitigation Plan

Plan approval date
03/21/2022

Proposed activity description

The neighborhood of Southwest High Point currently faces multiple challenges related to drinking water, sewer, and stormwater infrastructure, including worsening flooding conditions, decaying and failing sewer infrastructure, and contamination of drinking water supplies by stormwater runoff, sewer leakages, and impaired streambanks. This confluence of factors generates a chronic risk for the community and an ongoing disincentive for redevelopment. This project is a holistic, comprehensive approach to increasing the resiliency of the City of High Point, NC and the surrounding region, using a targeted strategy to resolve critical flooding, water quality, drinking water supply, sewer, and stormwater issues impacting Southwest High Point and the Richland Creek watershed. Through the combined implementation of ONE WATER practices to address SEWER, STREAMBANKS and STORMWATER, the project will reduce risks to the community (including flood and health risks); improve water quality in Richland Creek as it flows into the Deep River, thus preserving a critical regional drinking water source, the Randleman Reservoir; and prepare Southwest High Point for proposed mixed-use redevelopment as a green business incubator district. The infrastructure rehabilitation and enhancements proposed will bring to a state of good repair failing sewer infrastructure, reduce flood flows and incorporate nature-based practices to address stormwater in an urban setting. The synergies of each piece of infrastructure enhancement will contribute to the overall long-term functioning of the flood mitigation, sewage treatment, drinking water provision, and natural stream systems in the neighborhood and in the region. For more information please see "SCOPE OF WORK"

Please provide any additional comments below (optional).	**Per Guilford County Plan for City of High Point Continue to identify areas in the city subject to repetitive flooding and institute mitigation measures as funds allow Continue to update city of High Point facilities and infrastructure that may be deemed "High Risk" facilities for various threats. As budgetary resources allow, redefine the criteria and evaluate the aid of establishment of protective measures that may be required to mitigate and respond to incidents within the high risk facilities. Annual Updates: 2021 The city has worked to identify facilities that may be at high risk to various threats and will continue to evaluate and mitigate, where possible, facilities and infrastructure that are in high risk areas. For additional information please see "GUILFORD COUNTY HAZARD MITIGATION PLAN" page 9-13**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
GuilfordCountyMitigation_2020_FloodplainAreas.pdf	01/12/2023	gmessinger@ptrc.org	Mitigation Plan Attachments	2021 Hazard Mitigation Plan for Guilford County in which City of High Point is located; screenshot of floodplain areas values in County	
GuilfordHazardMitigation_FloodOccurancesTable_2020.pdf	01/12/2023	gmessinger@ptrc.org	Mitigation Plan Attachments	2021 Hazard Mitigation Plan for Guilford County in which City of High Point is located; noted flood occurances screenshot	
2021 Hazard Mitigation Projects and Strategies Memo.pdf	01/11/2023	gmessinger@ptrc.org	Mitigation Plan Attachments	2021 Hazard Mitigation Plan for Guilford County in which City of High Point is located; identifies hazards	

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)	**Resilient Inner-City High Point thru Rehabilitation, Restoration & Enhancement**

Activities

Primary activity type	**Stabilization and restoration**
Primary sub-activity type	**Floodplain and stream restoration**

Primary sub-activity type	**Floodplain and stream restoration**
Secondary activity type (Optional)	**Utility and infrastructure protection**
Secondary sub-activity type	**Wastewater and/or sanitary sewer system**
Tertiary activity type (Optional)	**Feasibility, engineering and design studies**
Geographic areas description	**The City of High Point is located in the Southwest corner of Guilford County, North Carolina, with parts of the City extending into Randolph, Davidson, and Forsyth counties, in the Piedmont Triad region of the state. The project stream and watershed (Richland Creek) is a named stream that drains through Randleman Lake, down to the Deep River. Richland Creek (17-7-(0.5)) is listed on the 303(d) list for fish community with a Hydraulic Unit Code (HUC) of 03030003. Richland Creek is classified as WS-IV which are generally moderately to highly developed watersheds. Richland Creek is part of the Cape Fear watershed, which does not include riparian buffers. Opportunities for water quality improvement throughout the watershed typically include restoration of smaller tributaries, wetland restoration, or stormwater control methods (SCMs). This corridor is located in one of the poorest census tracts (143) of the area, the Southwest corridor.**

Community lifelines

Primary community lifeline	**Food, water, shelter**
Primary sub-community lifeline	**Water**
Secondary community lifeline (optional)	**Health and medical**
Secondary sub-community lifeline	**Public health**
Tertiary community lifeline (optional)	**Hazardous material**
Tertiary sub-community lifeline	**HAZMAT, pollutants, contaminants**

Hazard sources

Primary hazard source	**Infrastructure failure**
Secondary hazard source (optional)	**Flooding**
Tertiary hazard source (optional)	**Biological incident**
Is this a phased project?	**Yes**
Are you doing construction in this project?	**Yes**
Percentage of population impacted	**100**
Provide detailed description of population impacted	**The City of High Point is located in four counties in North Carolina: Davidson, Forsyth, Guilford and Randolph; the City of High Point population as of July 2022 is 114,932 people, it is the 9th largest city in NC. The City contains five Hydraulic Unit Code (HUC)-12 watersheds. This project will concentrate on Census Tract 143, known as the Southwest, it is 1.8 sq. miles in size and is noted as a low-income community opportunity zone with an approximate population of 3,200. Approximately 40% of households in Census 143 are below the poverty line with a median household income average of $27,000; City of High Point average median household income is $48,000. Richland Creek watershed has the highest and most intense development within the City of High Point. Approximately 67% of the area is developed. For additional information, please see POPULATION IMPACTED criterion #4 attached.**
Provide a clear and detailed description of your proposed activity	**The project will work with ecological design engineers with wastewater infrastructure experience, streambank/ecological restoration experience and**

	experience designing and implementing green stormwater infrastructure. The three major components will be to: (1) Rehabilitate over 25,000 feet of aging wastewater (sewer) conveyance systems as it runs parallel to the Richland Creek; first all lengths of pipe have to be cleaned, second, in order to determine the integrity of the piping, the systems will be inspected via TV investigation, based on assessment of pipe integrity the third step will be to line the pipes with Cast in Place Pipe; based on need to access pipes additional repairs may be needed to the pavement system; construction attributes could also include need for additional safety features while process in occurring (2) Stabilization, Enhancement and/or Restore up to 3,1700 feet of the Richland Creek; this will be incorporate up to approximately 7.41 acres, with 3.23 acres included for native Riparian Buffer establishment (3) Construct green stormwater control measures (SCMs) that will capture excessive run-off from the headwaters region of the Richland Creek watershed in the urban core of the southwest region of High Point. These SCMs will work in conjunction with the sewer conveyance repairs and the stream stabilization efforts listed above (as well as other planned adjacent projects) to greatly reduce the stormwater runoff loading into Richland Creek, thus mitigating the flood risks for the entire neighborhood and for downstream areas. The SCMs consist of three stormwater basins that capture runoff from the public rights-of-way of neighborhood streets. A larger SCM basin near the intersection of Oak Street and Russell Street will be approximately 63,000 sf; two smaller basins (approximately 27,500 sf and 8,500 sf in size) will collect runoff from Grimes Avenue. Utilizing a 10:1 loading ratio as a starting point, these basins would be able to manage up to approximately 22 acres of stormwater runoff from the city's street network. For additional information, please see SCOPE OF WORK attachment.
How will the mitigation activity be implemented?	**The proposed project involves three major components, stream stabilization tasks, green stormwater infrastructure tasks and sewer rehabilitation tasks. PHASE 1 Task 1: Project Administration The City of High Point, in association with the Piedmont Triad Regional Council, will manage the scope of services in a manner to be responsive to the needs and schedule laid out in the FEMA BRIC Grant. Following contract execution with consultants, a preliminary consultant team meeting will be organized. Task 2: Data Collection 2.1 Review Existing Data Sources The Consultant shall assemble relevant available data such as GIS, as-built drawings, FEMA flood studies, previous City of High Point study documents, and other documentation of flooding history. GIS data may include aerial photography, topography, zoning, soils, planimetrics, water, and sewer. 2.2 Field Surveying Data Collection A registered land surveyor is required to complete the survey for the project site. The survey will then be used to generate the base construction drawings. The City owns the property or has easements in the project area that will be affected but where the City does not, right-of-entry agreements will be obtained. Task 3: Conceptual Drawings and Preliminary Engineering Report Upon completion of the above survey and site assessment, the Consultant will develop conceptual design. The preliminary design will also seek to address issues and opportunities discovered because of the site assessment, structures, and other features. The Consultant will provide conceptual designs and locations of stormwater control measures (SCMs) or other green infrastructure in the proposed design. After completion of the conceptual design, the Consultant will develop a report and preliminary design. Task 4: Public Involvement and Meeting It is anticipated that the City of High Point will host a public meeting to discuss the alternatives that were developed during Task 3. The Consultant is responsible for developing project renderings for the public meeting to show the areas that will be impacted in the project area and anticipated project schedule. Task 5: Phase 1 Go/No-Go Upon completion of the public meeting, the Consultant will have a potential cost-effectiveness. This cost-effectiveness is based on the preliminary assessment of anticipated benefits and cost. The City of High Point and PTRC will meet with the Consultant and FEMA BRIC representatives to discuss key assumptions, along with justification or rationale for these assumptions, regarding risk, project effectiveness, and cost. If the project is determined to be eligible, technically feasible, cost-effective, and compliant with Environmental Planning & Historic Preservation (EHP) requirements under the technical review in Task 5, the project may then be approved for construction under Phase II. Task 6: Design 60% Construction Drawings The Consultant will prepare 60% construction drawings for the stormwater, stream enhancement, and sewer lining. The three green stormwater infrastructure (GSI) retention and infiltration basins will be designed in accordance with the North Carolina Department of Environmental Quality (NCDEQ), NCDOT, and leading national GSI guidance. The stream enhancement will be designed using Rosgen's stream classification system. The streams' geomorphology will be determined by**

	existing geomorphic characteristics and accessing the channel cross-section dimensions for similar stable streams within the watershed. The sewer will include record drawings, existing CCTV, and existing CIPP database reviews to determine age, material, and general condition of the existing pipe. Internal CCTV inspection of the sanitary sewer lines will determine which sanitary sewer lines will be replaced. It is assumed that up to 25,565 linear feet of existing sanitary sewer will be lined. PHASE II Task 7: Permitting 7.1 404/401 Permit The Consultant will submit a Preliminary Jurisdictional Determination (PJD) to meet the objectives of the project. Consultant will submit the PJD request to the US Army Corps of Engineers and concurrently with the 404/401 Permit Application to expedite the review. Consultant will review the delineation in the field with the applicable agency representatives before formal permit application. 7.2 Erosion and Sediment Control Permit Consultant will prepare an erosion and sediment control packet for submission to NCDEQ, Land Quality Section. The packet will include the sediment and erosion control plans, E&SC plan checklist, supporting calculations and documentation, and a financial responsibility/ownership form. The City will provide necessary signatures. The Consultant will submit and track the permit. 7.3 Floodplain Development Permit Consultant will use the existing HEC-RAS to model existing and proposed site conditions under present development scenarios. The modeling will be done based on the topographic survey and existing HEC-RAS models obtained from the City, Floodplain Mapping Program (NCFMP), or FEMA. Consultant will update the model to a corrected-effective model that represents the existing condition based on the current survey. The corrected effective/existing condition model will be modeled in HEC-RAS. Proposed conditions will be modeled in HEC-RAS. It is assumed that a No-Impact Certification will be achieved based on the site conditions. Consultant will submit the No-Impact Certification with supporting data and documentation to NCFMP and City floodplain manager. Consultant will prepare a floodplain impact permit application on behalf of the City. Task 8: Right-of-way and Easement Coordination The project is located within City of High Point property or City of High Point easements. It is assumed construction access will be located off of City of High Point property or easements. If temporary construction easements are needed, these tasks would include coordination with property owners and the City of High Point. Task 9: Final Construction Drawings and Specifications Consultant will incorporate final comments and finalize the construction design drawings for this project. It is anticipated that these changes will not include significant design revisions and will include the sheets previously provided. Consultant will prepare the technical specifications, a bid tab sheet, and an engineer's opinion of probable construction cost (OPCC). OPCCs provided will be based on the information known to the Consultant at the time and will represent the Consultants best as a design professional familiar with the construction industry. Task 10: Construction Activities Task 10.1 Bid Phase In coordination with the City of High Point, PTRC will assemble the bid package and manage the bid process. The Consultant shall assist PTRC/City during the bid process. Consultant will prepare answers to RFIs and assist PTRC/City in preparing any addenda. The Consultant shall attend the pre-bid meeting and review the bid tabs received. Task 10.2 Construction Phase:This scope of services is to provide for construction phase services for the construction of stabilization measures for that project. The Consultant will prepare site visit reports (when visits occur), monthly status reports, prepare summary notes from onsite meetings, provide update Task 10.3 Final Review Task 10.4 Post-Construction Documentation For additional information please see "SCOPE OF WORK" attachment
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 practices and/or best practices; level of protection (e.g., life safety, 100-yr flood protection with freeboard, 100-yr wind design, etc.):	**This project is a holistic, comprehensive approach to reducing risk and increasing the resiliency of the City of High Point, NC and the surrounding region. Combining enhancements in sewer, stormwater, and streambank natural infrastructure, the project will reduce neighborhood flooding risks and regional drinking water source contamination risks that are chronic. As a result, sewers will no longer leak fecal coliforms to the drinking water supply for a third of the region, and the infrastructure will be able to handle higher volume storms as well, recreating some of the natural infiltration and green cover in this highly urbanized, industrialized and redeveloping area in the City. Failing sewers, many over a century old, will be rehabilitated by modern sewers; green stormwater infrastructure (GSI) and restored streambanks will provide better strategies and higher capacities to address increased storm events, thus reducing flood risk. Working together as a system, sewer, GSI basins and the restored streambank will be a more resilient, interconnected network of infrastructure that will be more than the sum of its parts. The synergies of each piece of infrastructure enhancement will contribute to the overall long-term functioning of the flood mitigation, sewage treatment,**

	drinking water provision, and and natural stream systems in the neighborhood and in the region. The proposed practices are not new and innovative, however the opportunity to directly and collaboratively address flooding and water quality impairements for a watershed with documented fecal coliform/bacteria containmination in the City of High Point in a disadvantaged area is INNOVATIVE and the proposed practices are proven successful. For additional information, please see RISK REDUCTION AND RESILIENCE EFFECTIVIES, Criterion #1 and the SCOPE OF WORK attachments. For additional information regarding the proposed practices see attached information pieces: WATER ENVIRO FEDERATION-SEWER REHABILITATION, CENTER FOR WATERSHED PROTECTION URBAN STREAM RESTORATION PRACTICES , GREEN VALUES STRATEGY GUIDE
Who will manage and complete the mitigation activity?	**The City of High Point, who will engage with the Piedmont Triad Regional Council for project management and oversight along with the Southwest Renewal Foundation, will collaboratively implement the components of this project. The Piedmont Triad Regional Council (PTRC) is a voluntary association of local governments - urban and rural authorized by North Carolina state law to: Make and implement joint regional decisions; provide management, planning and technical services to local governments; identify and solve short and long-term problems best addressed at the regional level; and bring together local elected officials on a regular basis, giving them an opportunity to form working relationships. (see attachment for PTRC Planning) Please see SCOPE OF WORK for additional details Please see IMPLEMENTATION MEASURES criterion #3 for additional details**
Will the project address the hazards identified and what risks will remain from all hazards after project implementation (residual risk)?	**Yes the project will address the hazards identified. Risks that will remain from hazards after the project is implemented is that there will still be components of excessive stormwater flowing in the area, however with a better functioning riverine system this will help to better contain and infiltrate the excessive storm flows until more green infrastructure can be constructed in the urban setting. For additional information please see "RISK REDUCTION/RESILIENCE EFFECTIVENESS" criterion 1.**
Does the mitigation activity incorporate nature-based solutions?	**Yes**
When will the mitigation activity take place?	**The project is being proposed as a Phased project per the FEMA guidance. Phase 1 will include the preparation of the technical and environmental information, including design, engineering studies, a final Benefit-Cost Analysis (BCA) and associated permitting activities. Final design and construction activities will occur in Phase 2, thus allowing the development of an effective mitigation project. Between the two phases the project design team anticipates a 36-month schedule of activities. For additional information please see "SCOPE OF WORK" For additional information please see IMPLEMENTATION MEASURES, criterion #3 attached**
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?	**In the Cape Fear River Basin Subbasin 03-06-08, Chapter 8, the Richland Creek [AU# 17-7-(0.5) and (4)] is identified as being impaired for aquatic life because of a Fair Fish community rating. Streambanks were steep and habitat was sparse. These sections were also noted, in 2000 as being impaired for recreation due to fecal coliform bacteria standard violation. It was recommended that Total Maximum Daily Load (TMDL) be developed for fecal coliform bacteria. Over twenty years later and with an approved TMDL drafted in 2004 that recommended an 82% reduction in fecal coliform bacteria loading into Richland Creek, the ecological integrity of the Creek is still exceeding standards. Based on the on-going exceedances, the City of High Point has been monitoring bacterial levels for several years. The City of High Point understands there are issues with the failing infrastructure as many of the pipes date back to 1904. There are increasing instances of system failure. It is evident in the shape and form of the Richland Creek in this corridor that it is disconnected from its floodplain and therefore it is not functioning properly, especially given its urban setting. Clean water and adequate access to green spaces are essential elements of a healthy, vibrant, and sustainable community. Beyond the obvious human health benefits that clean water provides, clean water helps support local businesses, food production, recreation and tourism, and wildlife habitat. Green spaces, such as parks, community gardens, or other vegetated areas, also provide enormous benefits to human health and the environment. Research has shown that urban green spaces promote physical activity and psychological well-being, improve air and water quality, and reduce the heat island effect in urban areas. However, in most dense, urban environments, where impervious surfaces such as roads, parking lots, and sidewalks dominate the landscape, water resources are often impacted and natural areas are few and far between. This is particularly true in low-income or marginalized communities, as neighborhoods of higher socioeconomic status tend to enjoy greater**

	access to nearby green space. The implementation of the project will result in improved water quality, a reconnected floodplain and riparian buffer within Richland Creek, and enhanced habitat that will generate a positive response to the anticipated future conditions caused by climate change and provide public engagement within the community. The project will use a ONE WATER, triple-strategy approach to better manage all sewer and stormwater streams, eliminating unwanted sewage pipe infiltration, infiltrating and slowing down stormwater, and stabilizing groundwater aquifers. According to the US Water Alliance, "the ONE WATER approach envisions managing all water in an integrated, inclusive, and sustainable manner to secure a bright, prosperous future for our children, our communities, and our country." This project will reline and rehab over 25,000 feet of aging/failing wastewater/sewer infrastructure; it will enhance, stabilize and/or restore 3,170 feet of the Richland Creek as it flows from the outfall north of W. Grimes Ave to W. Ward Ave; and it will reduce nonpoint source pollution and reduce/slow down stormwater volumes by installing three green infrastructure features to capture and contain excessive stormwater runoff that directly inputs into Richland Creek. This ONE WATER approach, leveraging nature-based solutions, will reduce flooding and improve water quality in this HUC-12 watershed, it will result in a reduction in fecal coliform levels, therefore better meeting the designated use as monitored and outlined by NC Division of Environmental Quality (DEQ) Division of Water Resources (DWR) and USEPA Clean Water Act. According to the Water Environment Federation, "WSEC-2017-FS-009- Sanitary Sewer Rehabilitation Fact Sheet", sewer rehabilitation, or restoring to an improved condition is a means to reduce extraneous flow entering the system or exiting the system. This in turn will lower the potential for causing sanitary sewer overflows and flooding. The proposed rehabilitation will be conducted in selected areas noted for infiltration/inflow sources and for structural defects. "Pipe lining" has been proven to be an effective improvement methodology while limiting negative impacts associated with traditional dig and replace construction projects. Decreasing the negative impacts to the residents, businesses and community is a concern while providing the most feasible, efficient, and effective solution. Engineers would further assess the designated pipe segments within the referenced area through CCTV inspection once the pipe has been cleaned via a jet and flusher system. The CCTV inspection will offer more data and provide justification for sequencing of pipe lining, areas that may need point repairs, assuring service connections remain active and pumping sequences. Pipe lining has been proven to re-establish the pipe integrity, rigidity, and conveyance which will significantly reduce and eliminate leaking pipes within the collection system. Inflow and Infiltration volumes are also known to drastically decrease with pipe lining projects. These reductions, with a goal of complete elimination of contamination from the collection system is one of the main objectives which this project will assist in successfully achieving. The City of High Point in coordination with Piedmont Triad Regional Council (PTRC) staff, the consulting engineers for the stream and stormwater aspects, will conduct the projects in the most cost-effective manner. Based on the combined estimated design and construction components for the streambank stabilization/rehabilitation tasks of $841,100, the project will achieve 3,170 linear feet of work averaging $265/linear foot. Based on the combined estimated engineering and permitting and implementation components for the sewer line work to achieve 26,000 linear feet of rehabilitation averaging $155/linear foot. Based on the combined estimated design and construction components for the green stormwater infrastructure tasks of $2,105,000, the project will achieve 99,000 sq feet of work averaging $21.26/sq foot. For additional information please see "SCOPE OF WORK". For additional information please see RISK REDUCTION/ RESILIENCE EFFECTIVENESS criterion #1 attached
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 High Point Public Services Department staff will be involved with implementation of the project and the City owns and operates the utilities of the project, including the power lines. Robby Stone is the City of High Point Director of Public Services Department. Pre and Post-Implementation Monitoring Strategies The Southwest Renewal Foundation in partnership with the City of High Point and the Piedmont Triad Regional Council recently received an Environmental Justice grant to increase monitoring of Richland Creek which will provide a good baseline of data on improvements to water quality that can be cross checked with post – implementation water monitoring for contaminants provide key data on the investment and benefit to the Richland Creek stream health. The construction schedule includes key milestones, which will be used to evaluate progress if funded. As part of the Scope of Work, the Project Team will work with the Consultant, who, will also provide a final summary memorandum for the City. The record drawings will**

	be based on the as-built survey. Based on final implementation measures a detailed maintenance guidance document will be compiled that emphasizes the attributes of short and long-term maintenance for the green stormwater infrastructure features and the streambank stabilization measures, the sewer work, once completed will have a need for continued visual inspection as time progresses. Project partners will coordinate maintenance activites with City of High Point Dpt of Public Works activities and will engage with local, volunteer associations and groups as available. For additional information please see TECHNICAL FEASIBILITY criteria and SCOPE OF WORK attached
Additional comments (optional)	**The project of incorporating a ONE WATER approach, to address the 82% reduction in FECAL COLIFORM contamination, to implement sewer line repairs and/or replacement, streambank stabilization measures and incorporating green stormwater control measures is hugely innovative to this region. It would be the FIRST in the region to tackle ALL three components. The project team has a goal of "advancing water equity by (1) ensuring all people have access to clean, safe water; (2) maximize community and economic benefits of water infrastructure investment (neighborhood revitalization) and (3) to foster community resilience in the face of climate change. COMMUNITY ENGAGEMENT & OUTREACH- The Outreach Strategy for this project includes the development of high-quality data visualizations, short videos, and audible testimonials, easily transmittable, absorbed, and understood, featuring community members, school children, and partners, to engage and personalize the message of environmental justice and advocacy. For additional information regarding the Total Maximum Daily Load designation for Richland Creek please see attachment "RICHLAND MUDDY CREEKS FECAL TMDL" For additional information discussing the best proposed course of action for the Richland Creek watershed to undertake please see attachment TECHNICAL CRITERIA and RICHLAND CREEK WATERSHED ACTION PLAN_DRAFT 1**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
3.BRIC2022_Implementation_HighPoint (2).pdf	01/12/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project- Implementation Measures criterion #3	
HighPointFEMA-BRIC_Technical_Criteria_FINAL.pdf	01/12/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancemnet Technical Criteria report for proposed project	
0_PTRC_FEMA_BRIC_Regional Site Location Map.pdf	01/12/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project- regional map for proposed project	
CityofHighPoint_FEMA_BRIC_ScopeofWork_2023Jan11_FINAL.docx	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project- detailed SCOPE OF WORK	

Filename	Date uploaded	Uploaded by	Label	Description	Action
1.BRIC2022_RiskReductionResiliency_HighPoint (1).pdf	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project- detailed response to Risk Reduction and Resiliency	
4.BRIC2022_PopImpact_HighPoint_FINAL.pdf	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project- detailed response to Population Impacted	
5.BRIC2022_Outreach_HighPoint.pdf	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project- detailed response to Outreach and Engagement Activities noting past, present and future	
RichlandMuddyCreeksFecalTMDLFinal.pdf	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	Richland Creek Total Maximum Daily Load report noting Fecal Coliform impairment	
August2019_SalvationArmyFloods.pdf	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point, news article about Salvation Army flooding August 2019	
_RICHLAND CREEK WATERSHED ACTION PLAN_draft1.pdf	01/11/2023	gmessinger@ptrc.org	Scope of Work Attachments	City of High Point, Watershed Action Plan Report for Richland Creek, target creek and watershed, report as of 2021	

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	Start Month	Task Duration (in Months)
Project Awarded funding via FEMA	1	2 months

Task Description
High Point work with NC Dpt of Public Safety and Piedmont Triad Regional Counci, state grant contracting (administrative task)

Task Name	Start Month	Task Duration (in Months)

Procurement for Management and Technical staff/support	2	2 months

Task Description
City of High Point will work with Piedmont Triad Regional Council to draft guidelines (request for qualifications) for management and engineering contract services per agency procurement guidelines; advertise; administrative task

Task Name	Start Month	Task Duration (in Months)
Issue Notice of Funding Award & Contract Execution	3	1 months

Task Description
Consultant selection based on procurement guidance will be chosen; notification of award (administrative task) Execute contract for services for engineering design services and sewer technical services Phase 1

Task Name	Start Month	Task Duration (in Months)
Contract Administration	3	1 months

Task Description
Phase 1 High Point approve contract of services with selected technical professionals High Point approve final contract for management services with Piedmont Triad Regional Council

Task Name	Start Month	Task Duration (in Months)
Progress and Financial Reporting	4	32 months

Task Description
(administrative task) High Point work with Piedmont Triad Regional Council to compile necessary and appropriate project progress reports, documentation and financial tracking/reports/invoices at designated timeframes throughout 36-month project. Information submitted or uploaded into online portals in agreed upon timeframes.

Task Name	Start Month	Task Duration (in Months)
Preliminary Consultant/Contractor/Team meeting	5	1 months

Task Description
Administrative Tasks Phase 1 Awarded engineering/consultants will schedule meetings with PTRC, City of High Point and key partners (Southwest Renewal Foundation) to review scope of work, schedule, reporting guidance, design & permitting procedures, promotional and engagement aspects for project success for Phase 1

Task Name	Start Month	Task Duration (in Months)
Survey	6	3 months

Task Description
Phase 1 Field data collection and creation of base files in digital autocad format for use during design phase (incorporates stream, stormwater and sewer components)

Task Name	Start Month	Task Duration (in Months)
Environmental Report	7	3 months

Task Description
Phase 1 Consultant will complete an environmental report (as required) for funding agency. Schedule assumes 30-day review period by authority having jurisdiction, as well as time to address comments and resubmit for approval

Task Name	Start Month	Task Duration (in Months)
On-Site Geomorphic and Natural Resource Assessment	9	1 months

Task Description
Phase 1; Stream Task in-depth assessment for geomorphic/stream bank dimensions

Task Name
Develop Concept Drawings (30%) and Preliminary Engineering Report

Start Month
10

Task Duration (in Months)
1 months

Task Description
Phase 1 Consulting engineers will develop Concept Drawings (30%) for stream and stormwater tasks; Preliminary Engineering Report will be compiled for implementation practices (stream, stormwater sewer)

Task Name
Public Involvement and Meeting

Start Month
11

Task Duration (in Months)
1 months

Task Description
Phase 1 City of High Point and Piedmont Triad Regional Council along with project partners (consultants and key support staff; Southwest Renewal Foundation) will host public session to seek feedback, comments and support for project components; activities will be reviewed along with estimated timeline and construction expectations; efforts will be made to directly engage with community where projects are taking place (meeting to be advertised and notifications/invitations sent out prior to meeting) (administrative task)

Task Name
Go/No-go Discussion

Start Month
12

Task Duration (in Months)
1 months

Task Description
Project team will determine the feasibility of completing the projects components as proposed/designed; mid-course corrections will be made to schedule or activities as necessary based on data and information collected during Phase 1

Task Name
Project Updates & Next Steps

Start Month
12

Task Duration (in Months)
24 months

Task Description
Periodic (minimum twice a year) updates will be given to the City of High Point (City Council, staff, etc) partnering organizations (PTRC, SWRF);key points of the 3-year project will be highlighted in updates; information will be shared via social media and outreach avenues as appropriate

Task Name
Develop 60% Construction Drawings

Start Month
13

Task Duration (in Months)
2 months

Task Description
Phase 1 Based on community and partner input/feedback, 60% design plans will be developed for project components

Task Name
Permitting - 404/401 Permit

Start Month
15

Task Duration (in Months)
4 months

Task Description
Phase 2 Submission of design plans, engineering report to regulatory agencies for review and approval

Task Name
Permitting - Erosion and Sediment Control

Start Month
15

Task Duration (in Months)
4 months

Task Description
Phase 2 Submission of design plans, engineering report to regulatory agencies for review and approval

Task Name
Permitting - Floodplain Development Permit

Start Month
15

Task Duration (in Months)
4 months

Task Description

Phase 2 Submission of design plans, engineering report to regulatory agencies for review and approval

Task Name
Right of Way and Easement Coordination

Start Month
19

Task Duration (in Months)
2 months

Task Description
Phase 2 Coordination with City of High Point and project team for right of way or easements for the restoration components

Task Name
Final Construction Drawings (100%) and Specifications

Start Month
20

Task Duration (in Months)
2 months

Task Description
Phase 2 Consulting engineer (s) complete engineering design plans for stream, stormwater, sewer implementation

Task Name
Bid and Construction Phase Services

Start Month
21

Task Duration (in Months)
2 months

Task Description
Phase 2 construction contractor bidding and procurement for services (stream, stormwater, sewer); advertise and plan for mandatory site evaluation by potential bidders

Task Name
Bid Approval

Start Month
23

Task Duration (in Months)
2 months

Task Description
Phase 2 review construction bid packages with engineering consultants; select and notify contractor(s) for award selection initiate contract with City of High Point

Task Name
Preconstruction requirements

Start Month
24

Task Duration (in Months)
1 months

Task Description
Phase 2 City of High & PTRC with engineering consultants will host pre-construction meetings with contractor (s) and possible subcontractors to ensure everyone has proper contact information, understands roles and project communication, task tracking, reporting and documentation and invoicing/payment process

Task Name
Notification/Announcement

Start Month
25

Task Duration (in Months)
1 months

Task Description
Submit and post information for public regarding start of project; follow City of High Point communication guidance for alerts and transparency of information/tasks

Task Name
Construction Duration

Start Month
25

Task Duration (in Months)
8 months

Task Description
Phase 2 Construction activities will be actively occurring based on approved permits; all construction guidelines will be followed to implement design as approved; regular contractor meetings/check-ins will occur to address issues or challenges or changes that may be needed throughout the process

Task Name
Educational Signage

Start Month
33

Task Duration (in Months)
3 months

Task Description
phase 2 project partners will design, construct and install educational signage identifying the various components incorporated into the holistic resiliency floodplain project; signs will be installed as part of

a "ribbon cutting/dedication" ceremony

Task Name	Start Month	Task Duration (in Months)
As-Builts and Closeout	35	1 months

Task Description
Phase 2 Consultant will provide City of High Point & PTRC with final set of plans identifying final project scope of work, including any adjustments made throughout the construction phase. Final walk-throughs will be completed, punch-list addressed and payments made to contractor

Task Name	Start Month	Task Duration (in Months)
Project Unveiling/Ribbon Cutting	35	1 months

Task Description
Phase 2 Project partners will plan final community engagement piece to include 'unveiling" of restoration practices completed; recognition of resiliency work completed with the community and partners

Task Name	Start Month	Task Duration (in Months)
Maintenance and Monitoring	33	3 months

Task Description
As components of the project are being completed, PTRC/City of High Point/consulting engineers and construction contractors will frequently observe and monitor the practices for stability and as necessary adjustments will be made if affected by weather events. PTRC/City of High Point will work with consulting engineers to compile handbook as reference for short and long-term maintenance needs for practices

Estimate the total duration of your proposed activities (in months).	**36**

Proposed project start and end dates

Start Date	**2023-11-01**
End Date	**2026-11-30**

Introduction

Project location

Provide a detailed description of the proposed project's location.	**City of High Point, Guilford County, North Carolina; Census Tract 143 located in southwest quadrant in City of High Point; Richland Creek (HUC-030300030103) as it overlaps with the Census Tract 143**
Latitude	**35.944270**
Longitude	**-080.009900**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
CapeFearBasin_outline.pdf	01/12/2023	gmessinger@ptrc.org	Project Location Attachments	Guilford County, Richland Creek within Deep River located within Cape Fear River Basin	
HighPoint_Location_image.pdf	01/12/2023	gmessinger@ptrc.org	Project Location Attachments	City of High Point location within North Carolina overview image	

Project benefiting area

Provide a detailed description of the proposed project's benefiting area.	**The City of High Point is located in the Southwest corner of Guilford County, North Carolina, with parts of the City extending into Randolph, Davidson, and Forsyth counties, in the Piedmont Triad region of the state. The project stream and watershed (Richland Creek) is a named stream that drains through Randleman Lake, down to the Deep River. Richland Creek (17-7-(0.5)) is listed on the 303(d) list for fish community with a Hydraulic Unit Code (HUC) of 03030003. Richland Creek is classified as WS-IV which are generally moderately to highly developed watersheds. Richland Creek is part of the Cape Fear watershed, which does not include riparian buffers. Opportunities for water quality improvement throughout the watershed typically include restoration of smaller tributaries, wetland restoration, or stormwater control methods (SCMs). This corridor is located in one of the poorest census tracts (143) of the area, the Southwest corridor. For additional information please see "SCOPE OF WORK" and "POPULATION IMPACTED" criterion #4**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
0_PTRC_FEMA_Richland Creek Drainage Areas.pdf	01/11/2023	gmessinger@ptrc.org	Location project benefiting area Attachments	City of High Point Richland Creek Watershed Area map that overlays with Census Tract 143	

Project impact area

Provide a detailed description of the proposed project's impact area.	**REGIONAL IMPACTS Located at the headwaters of Richland Watershed, Richland Creek runs throughout inner-city southwest High Point (US Census Tract 143) an area of approximately two (2) square miles. From this Project Area location, the creek flows approximately 9 miles to its confluence with Deep River, which then drains into the Randleman Reservoir. The reservoir is the critical source of drinking water supply for over 500,000 people in Guilford and Randolph counties, with current drinking water production capacity of 14.7 MGD and potential to expand to 48 MGD. COMMUNITY IMPACTS The Project will benefit 100% of inner-city southwest High Point residents that live and work along Richland Creek that runs throughout US Census Tract 143. Designated disadvantaged by the US American Rescue Plan Act, inner-city southwest High Point encompasses this entire census tract (QCT 143). This district is the historic industrial corridor of High Point, NC, with four (4) historic neighborhoods that supported its manufacturing base. Once known worldwide for furniture and textile manufacturing, the district now suffers from disinvestment, neglect, vacancy, poor public health, and dirty air and water. Located at the center of North Carolina and its hardwood forests, this former inner-city manufacturing district also presents plentiful surface water, an extraordinary environmental asset for the City of High Point and the Piedmont Region. For additional information please see "POPULATION IMPACTED" criteria #4**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
0_PTRC_FEMA BRIC_Overall Maps.pdf	01/11/2023	gmessinger@ptrc.org	Location project impact area Attachments	City of High Point Rehabilitation, Restoration and Enhancement Project focus area in inner-city High Point	

Project site inventory

Does this project subapplication propose to mitigate a property/structure(s)? (Examples: residential home, commercial building, bridge, fire station, levee,	**No**

pumping station, wastewater treatment plant, telephone pole, electric line, etc.)

Please download the excel template, and then fill out the template with building or infrastructure data.

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: $10,033,678.77

Budget type: Construction

Cost type: Cost estimate	**$9,555,884.55**
Cost type: Management cost	**$477,794.22**

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. Building Resilient Infrastructure and Communities (BRIC) and small impoverished communities 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 90% federal share. Repetitive loss (RL) properties may be eligible for up to 90% federal share.

Is this an Economically Disadvantaged Rural Community?
This determines your federal/non-federal share ratio.
No

	% Percentage	$ Dollar amount
Proposed federal share	**74.32**	**7457064.17**
Proposed non-federal share	**25.68**	**2576614.60**

Based on total budget cost: $10,033,678.77

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: Non-federal match	**2.22%**	**$57,287.00**
Funding source: Non-federal match	**7.76%**	**$200,000.00**
Funding source: Non-federal match	**0.77%**	**$19,734.00**
Funding source: Non-federal match	**10.15%**	**$261,581.60**

Funding source: Non-federal match	11.25%	$289,800.00
Funding source: Non-federal match	0.13%	$3,379.00
Funding source: Non-federal match	2.11%	$54,446.00
Funding source: Non-federal match	1.94%	$50,000.00
Funding source: Non-federal match	1.94%	$50,000.00
Funding source: Non-federal match	2.01%	$51,800.00
Funding source: Non-federal match	0.11%	$2,800.00
Funding source: Non-federal match	2.70%	$69,500.00
Funding source: Non-federal match	19.41%	$500,000.00
Funding source: Non-federal match	0.22%	$5,700.00
Funding source: Non-federal match	1.49%	$38,500.00
Funding source: Non-federal match	0.70%	$18,000.00
Funding source: Non-federal match	3.38%	$87,000.00
Funding source: Non-federal match	5.82%	$150,000.00
Funding source: Non-federal match	3.88%	$100,000.00
Funding source: Non-federal match	15.45%	$398,087.00
Funding source: Non-federal match	0.27%	$7,000.00
Funding source: Non-federal match	0.39%	$10,000.00
Funding source: Non-federal match	0.04%	$1,000.00
Funding source: Non-federal match	0.39%	$10,000.00
Funding source: Non-federal match	0.58%	$15,000.00
Funding source: Non-federal match	0.39%	$10,000.00
Funding source: Non-federal match	1.94%	$50,000.00
Funding source: Non-federal match	2.56%	$66,000.00

Please provide any additional comments below (optional).	**Cost-Share as per NOFO BRIC 2022 Additional/overmatch is documented in attachment See attached Matching Resources Letter documenting matching and in-kind contributions See attached Letters of Support from partnering organization and County gov't to support project proposal**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
1-3-2023_SWRF_LOSonly.pdf	01/12/2023	gmessinger@ptrc.org	Budget Attachments	Soutthwest Renewal Foundation Letter of Support	
PTRC_BRIC2022_Match-LOS.pdf	01/11/2023	gmessinger@ptrc.org	Budget Attachments	Piedmont Triad Regional Council Matching Resources Letter of Support	
PTRC_BRIC2022_AltaMatch-LOS.pdf	01/11/2023	gmessinger@ptrc.org	Budget Attachments	Alta Planning Matching Resources Letter of Support	
CityHighPoint_Match_LOS_BRIC2022.pdf	01/11/2023	gmessinger@ptrc.org	Budget Attachments	City of High Point Community Letters of Support from various partners and organizations in region	
SWRF_BRIC2022_MATCH_PTRC.pdf	01/11/2023	gmessinger@ptrc.org	Budget Attachments	Southwest Renewal Foundation Matching Resources Letter	
PTRC_BRIC2022_LettersOfSupport_Community.pdf	01/11/2023	gmessinger@ptrc.org	Budget Attachments	City of High Point Inner-city Rehabilitation, Restoration and Enhancement Letters of Support and matching documentation	
1. PTRC_FEMABRIC_OneWater_StreamSewerStormwaterInfrast_Budget-_2023Jan.pdf	01/10/2023	gmessinger@ptrc.org	Budget Attachments	High Point-Resiliency Project 36-month Budget	

Filename	Date uploaded	Uploaded by	Label	Description	Action
2. PTRC_FEMABRIC_OneWater_StreamSewerStormwater_RichlandCreek_Match_2023Jan.pdf	01/10/2023	gmessinger@ptrc.org	Budget Attachments	High Point Resiliency Matching Resources	

Cost-effectiveness

How was cost-effectiveness determined for this project?

- [x] 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? ($)	**19655139**
What are the total project cost? ($)	**6614389**
What is the benefit-cost ratio (BCR) for the entire project?	**2.97**
Was sea level rise incorporated into the flood elevations in the BCA?	**Yes**
Were environmental benefits added to the project benefits?	**Yes**
Were social benefits added to the project benefits?	**Yes**
Please provide any additional comments below (optional).	**"The Census Tract that includes the project area has a Centers for Disease Control and Prevention (CDC) Social Vulnerability Index (SVI) rating among the highest in the nation: 0.99 offering the BCA waiver and further assistance from FEMA in addressing any issues found with the BCA in the NTR review. Evidence is presented in the Technical Scoring Support document in the Evaluation section" Please review the following Based on proposed practices examples for achievement of projects have come from literature search. The Water Environment Federation Sewer Rehabilitation Factsheet, 2017; Urban Stream Restoration Practices An Initial Assessment (final report) by Kenneth Brown from the Center for Watershed Protection, October 2000; USDA-NRCS Chapter 11 Part 654 Stream Restoration Design National Engineering Handbook, Rosgen Geomorphic Channel Design, 2007; Green Values Strategy Guide, Linking Green Infrastructure Benefits to Community Priorities, Center for Neighborhood Technology, 2020**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Rosgen_GeomorphicChannelDesign.pdf	01/12/2023	gmessinger@ptrc.org	Cost Effectiveness Attachments	USDA-NRCS Stream Restoration Design National Engineering Handbook Chpt 11 highlighting purpose and succes of urban stream stabilization and restoration as will be utilized for High Point project	
urban-stream-restoration-practices-an-initial-assessment1.pdf	01/12/2023	gmessinger@ptrc.org	Cost Effectiveness Attachments	Center for Watershed Protection, October 2000, report Urban Stream Restoration Practices- utilized as reference- guidance for	

Filename	Date uploaded	Uploaded by	Label	Description	Action
				implementation for proposed project	
Memo_BCA TechnicalReportHighPointNC2022FEMA-BRIC_FINAL 01-05-2023.pdf	01/11/2023	gmessinger@ptrc.org	Cost Effectiveness Attachments	City of High Point-Rehabilitation, Restoration and Enhancement project for Richland Creek: Benefit Cost Analysis Technical Memo	
fema_bca_toolkit-6.0_HighPoint NC_FINAL01052023.xlsx	01/11/2023	gmessinger@ptrc.org	Cost Effectiveness Attachments	City of High Point: Benefit Cost Analysis spreadsheet toolkit	
WaterEnviroFederationSewerRehabilitationFactSheet9.27.17.pdf	01/11/2023	gmessinger@ptrc.org	Cost Effectiveness Attachments	Water Environment Federation Sewer Rehabilitation Factsheet	
Green Values Strategy Guide2020.pdf	01/11/2023	gmessinger@ptrc.org	Cost Effectiveness Attachments	Green Values Strategy Guide 2020 as reference to Green Infrastructure Stormwater Practices, Implmentation & Success	

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? **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 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)

Please provide an explanation and any information about this project that could assist FEMA in its review.	**Historic sites map from the Southwest Renewal Foundation (SWRF) brochure for Phase 1 with identification of sites and greenway; base maps used for planning the Southwest Heritage Greenway**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
BROCHURE MAP PHASE 1 HISTORIC SITES FINAL map-new6.pdf	01/11/2023	gmessinger@ptrc.org	closeProximityTo50YearOldBuilding.attachmentIds	Map indicating Southwest Renewal Foundation- City of High Point Heritage Greenway historical sites located in corridor	
0_PTRC_FEMA BRIC_Overall Maps.pdf	01/11/2023	gmessinger@ptrc.org	closeProximityTo50YearOldBuilding.attachmentIds	City of High Point Project map- indicates locations for proposed sewer, stream and stormwater projects	

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.)

- [x] A description of the ground disturbance by giving the dimensions (area, volume, depth, etc.) and location.
- [x] The past use of the area to be disturbed, noting the extent of previously disturbed ground.
- [x] 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)

- [x] 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.
- [x] Attached materials or additional comments.

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

The project will address 26,000 feet of aging/failing wastewater/sewer infrastructure lines that sit in the footprint of Richland Creek; it will enhance, stabilize and/or restore over 3000 feet of the Richland Creek as it flows from the outfall north of W. Grimes Ave to W. Ward Ave; it will reduce nonpoint source pollution by installing several green infrastructure stormwater practices to capture and contain excessive stormwater runoff that directly inputs into Richland Creek. All the projects mentioned above will consist of ground disturbance.

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
BROCHURE MAP PHASE 1 HISTORIC SITES FINAL map-new6.pdf	01/11/2023	gmessinger@ptrc.org	involveDisturbanceOfGround.attachmentIds	Map indicating Southwest Renewal Foundation- City of High Point Heritage Greenway historical	

Filename	Date uploaded	Uploaded by	Label	Description	Action
				sites located in corridor	

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? **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.)

- [x] 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**.**

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.)

- [x] Description of the amount (area) and type of vegetation to be removed or affected.
- [x] A site map showing the project area and the extent of vegetation affected.
- [x] 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)

- [x] Attached materials or additional comments.

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

As a result of the disturbance associated with these projects, existing vegetation will be impacted through the grading of proposed stream and stormwater control devices; some areas have existing invasive growth that will be properly removed and replanted with native, appropriate vegetation in line with City of High Point ordinances. All areas where grading will negatively impact the existing vegetation will be planted or replanted with native vegetation in accordance with local and/or state ordinances and guidance. Site photographs are located in qualitative criteria #4, #5 and #6

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.)

- [x] A USGS 1:24,000 scale quadrangle map showing the project activities in relation to all nearby water bodies (within 200 feet).
- [x] 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.
- [x] 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)

As a result of the disturbance associated with these projects, the Richland Creek will be directly affected by the proposed stream stabilization and enhancements. Along the Richland Creek, a bankfull bench will be installed

as space allows. A bankfull bench reduces shear stress on the channel banks and also provides the channel more access to the floodplain. Additionally, improvements to the streams hydraulic profile allows fish to pass and connects to upstream or downstream habitat. These improvements provide new habitats for wildlife with the addition of native plants, trees, and bushes along the stream banks and buffers. The fish and benthos population is expected to increase with the addition of natural stream structures. Site photographs are located in qualitative criteria #4, #5 and #6

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
C_PTRC_FEMA BRIC_WaterClassification.pdf	01/11/2023	gmessinger@ptrc.org	endangeredSpecies.attachmentIds	City of High Point- Southwest, Inner-City Project Map indicating water classification	
0_PTRC_FEMA_Richland Creek Drainage Areas.pdf	01/11/2023	gmessinger@ptrc.org	endangeredSpecies.attachmentIds	City of High Point- Southwest, Inner-City Project Map indicating Richland Creek drainage area	
C_PTRC_FEMA BRIC_Vegetation.pdf	01/11/2023	gmessinger@ptrc.org	endangeredSpecies.attachmentIds	City of High Point- Southwest, Inner-City Project Map indicating Vegetation affected by project	

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.)

- [x] Documentation of the project location on a USGS 1:24,000 scale topographic map or image.
- [x] 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)

As a result of the disturbance associated with these projects, coordination and 404 permit will be needed from the US Army Corps of Engineers due to the impacts to the Richland Creek. The proposed stream improvements consist of grading steep streambanks to flatter, more stable slopes, removing any invasive species and planting with native vegetation. Along the stream, a bankfull bench will be installed as space allows. A bankfull bench reduces shear stress on the channel banks and also provides the channel more access to the floodplain during high flow events thus reducing damaging downstream flooding effects.

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
D_PTRC_FEMA BRIC_USGS Map.pdf	01/11/2023	gmessinger@ptrc.org	waterBodyOrWetlandModification.attachmentIds	City of High Point-Southwest, Inner-City Project-USGS for West High Point	
D_PTRC_FEMA BRIC_National Wetlands Inventory.pdf	01/11/2023	gmessinger@ptrc.org	waterBodyOrWetlandModification.attachmentIds	City of High Point-Southwest, Inner-City Project-(USFWS) National Wetlands Inventory	

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 1% annual chance floodplain, a 0.2% annual chance floodplain, a 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:	**As a result of urbanization, higher flows, velocities and increased peak intensities have created impaired streams throughout North Carolina. The Richland Creek consists of high banks; acceptable to bank erosion and entrenched streams; lacking habitat. A goal of the Richland Creek watershed would be to connect the existing streambank back to the floodplain by grading the low flow bankfull benches. Additionally the hydraulic profile of the stream will be improved by installing natural stream structures can will add to the improvements to the stream's geomorphology. The impacts are anticipated to have no affect on the regulatory floodway and should generate a no-rise.**
Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)	**As a result of these projects, a CLOMR or LOMR is not anticipated. Any floodplain development application and/or no-rise certification will be issued to the local floodplain coordinator.**
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:

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

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)	**For additional information please see "SCOPE OF WORK" for the project.**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
E_PTRC_FEMA BRIC_DFIRM_NC_3710770900K.pdf	01/11/2023	gmessinger@ptrc.org	affectToPercentAnnualChanceFloodplain.attachmentIds	City of High Point-Southwest, Inner-City Project Map map	

Filename	Date uploaded	Uploaded by	Label	Description	Action
D_PTRC_FEMA BRIC_USGS Map.pdf	01/11/2023	gmessinger@ptrc.org	affectToPercentAnnualChanceFloodplain.attachmentIds	City of High Point-Southwest, Inner-City Project-USGS for West High Point	
E_PTRC_FEMA BRIC_DFIRM_NC_3710780000J.pdf	01/11/2023	gmessinger@ptrc.org	affectToPercentAnnualChanceFloodplain.attachmentIds	City of High Point-Southwest, Inner-City Project Map map	

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? **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.)

- [x] Comments and any relevant documentation.
- [x] 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.
- [x] Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional) **Active brownfields assessments on-going with documentation available. For more information please see attached "Phase II ESA_Tomlinson" report**

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.)

- [x] Comments and any relevant documentation.
- [x] 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.
- [x] Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional) **Active brownfields assessments on-going with documentation available. For more information please see attached "Phase II ESA_Tomlinson" report**

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?	**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.)

- [x] Comments and any relevant documentation.
- [x] 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.
- [x] Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)	**See attached "Phase II Tomlinson Report, August 2022"**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Phase II ESA_Tomlinson.pdf	01/11/2023	gmessinger@ptrc.org	resourceConservationRecovery.attachmentIds	Phase II Environmental Site Assessment Report for 422 Tomlinson St in City of High Point, NC, this property is contained within the Richland Creek watershed and proposed stream corridor	

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.)

- [x] 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)

- [x] 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.
- [x] Attached materials or additional comments.

Please provide an explanation and any information about this project that could assist FEMA in its review. (optional)	**The Project will benefit 100% of inner-city southwest High Point residents that live and work along Richland Creek that runs throughout US Census Tract 143. In 2018, the NC Department of Commerce designated US Census Tract 143 as one of the state's "most in need." This district is the 4th poorest zip code in NC in cities of 60,000 or more. This FEMA-BRIC 2022 project will leverage partners and collaborations among government, nonprofits, and traditionally marginalized neighborhoods, support local government for capacity building to implement best practices for improving water quality and quantity through restoration projects located in a critical watershed location and a traditional overburdened and underserved community. In addition to replacing/repairing aging sewer lines, the project will use nature-based solutions to mitigate climate change, lessen risk hazards, and eliminate chronic stressors which have been observed and documented since 1998. (205j Richland Watershed Plan 2021)**

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
HighPointFEMA-BRIC_Technical_Criteria_FINAL.pdf	01/11/2023	gmessinger@ptrc.org	lowIncomeMinority.attachmentIds	City of High Point- Southwest, Inner-City Project- Technical Criteria	
Health Impact Assessment Data Presentation (002).pdf	01/11/2023	gmessinger@ptrc.org	lowIncomeMinority.attachmentIds	Southwest High Point Health Impact Assessment ppt for QCT 143	

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.

Public input came from multiple community partners including the City of High Point, the Southwest Renewal Foundation, Piedmont Triad Regional Council; as well as the Southside Neighborhood Association: Fairview Elementary School: and Growing High Point, among others. The public feedback for this project follows over a dedace of public outreach and public support from prior planning efforts. For additional information please see "COMMUNITY ENGAGEMENT/OUTREACH ACTIVITIES" criterion #5

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
5.BRIC2022_Outreach_HighPoint.pdf	01/11/2023	gmessinger@ptrc.org	otherEHPLawsIssues.attachmentIds	City of High Point Rehabilitation, Restoration and Enhancement Project- Detailed Outreach and Engagement information	

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.)

- [x] 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.
- [x] Consulted with appropriate parties to identify any measures needed to avoid or minimize these impacts.
- [x] Considered alternatives that could minimize both the impacts and the cost of the project.
- [x] 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

For more information please see attached "MEMO BCA TECHNICAL REPORT HIGH POINT NC FEMA BRIC APPLICATION" for more detailed

review).

information regarding estimated cost effectiveness for proposed practices

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
Memo_BCA TechnicalReportHighPointNC2022FEMA-BRIC_FINAL 01-05-2023.pdf	01/11/2023	gmessinger@ptrc.org	summaryCostOfImpacts.attachmentIds	City of High Point- Southwest, Inner-City Project- Benefit Cost Analysis for estimated project costs for proposed project	

Evaluation

Is the applicant participating in the Community Rating System (CRS)?	**No**
Is the applicant a Cooperating Technical Partner (CTP)?	**No**
Was this application generated from a previous FEMA HMA Advance Assistance or Project Scoping award or any other federal grant award, or the subapplicant is a past recipient of Building Resilient Infrastructure and Communities (BRIC) non-financial Direct Technical Assistance?	**No**
Has the applicant adopted building codes consistent with the international codes?	**No**
Have the applicant's building codes been assessed on the Building Code Effectiveness Grading Schedule (BCEGS)?	**Yes**
Select rating.	**5**
Describe involvement of partners to enhance the mitigation activity outcome.	**The City of High Point and Piedmont Triad Regional Council (PTRC) have partnered for a number of years with the Southwest Renewal Foundation of High Point (SWRF), a grass roots, community development 501c3 nonprofit that has worked in the inner-city southwest High Point since 2011. Extensive community engagement activities have been completed since then. The planning process grew out of the Southwest High Point Greenway Feasibility Study (2015): Southwest High Point Green Infrastructure Plan (2019); Richland Watershed Action Plan (2021); Environmental Justice Data Fund Project (2022), and NC Local Assistance Stormwater Infrastructure Fund grant application (2022). Close collaboration in future planning activities continue today. For additional information please review "COMMUNITY ENGAGEMENT/OUTREACH ACTIVITIES" criterion #5.**
Discuss how anticipated future conditions are addressed by this project.	**With increasing storm intensities and flashiness, if sewer repairs and streambank restoration were not completed, the risks of flooding, contaminated sewer infiltration / overflows, and drinking water supply contamination would significantly increase. If this trend continues, instead of an occasional acute event along the creek, this would create a chronic, continued negative impact for many more in the region. Through the combined implementation of practices to address SEWER, STREAMBANKS and STORMWATER, the project will reduce risks to the community, including flood and health risks. The project will result in improved water quality, a reconnected floodplain and riparian buffer within Richland Creek, and enhanced habitat that will generate a positive response to the anticipated future conditions caused by climate change and provide public engagement within the community. For additional information please see attachment "CLIMATE CHANGE AND OTHER FUTURE CONDITIONS" Qualitative Criterion #2**
Additional comments (optional)	

Attachments

Filename	Date uploaded	Uploaded by	Label	Description	Action
HighPointFEMA-BRIC_Technical_Criteria_FINAL.pdf	01/12/2023	gmessinger@ptrc.org	Evaluation Attachments	City of High Point Rehabilitation, Restoration and Enhancement project technical criteria report	
6.BRIC2022_LeveragePartners_HighPoint.pdf	01/12/2023	gmessinger@ptrc.org	Evaluation Attachments	City of High Point Southwest Inner-City Rehabilitation, Restoration and Enhancement as described in working with Partners- discusses past, present and future partner opportunities	
BCEGS_Letter_59618HighPointNC_Jan2023.pdf	01/11/2023	gmessinger@ptrc.org	Evaluation Attachments	City of High Point- BCEGS rating letter	
2.BRIC2022_ClimateChange_HighPoint.pdf	01/11/2023	gmessinger@ptrc.org	Evaluation Attachments	City of High Point- Southwest Inner-City Rehabilitation, Restoration and Enhancement as described to address Climate Change and Future Conditions	
5.BRIC2022_Outreach_HighPoint.pdf	01/11/2023	gmessinger@ptrc.org	Evaluation Attachments	City of High Point- Rehabilitation, Restoration and Enhancement- detailed Community Engagement/Outreach Activities	

Comments & attachments

- **Community** — **1 comment, 3 attachments**
- **Mitigation plan** — **1 comment, 3 attachments**
- **Scope of work** — **1 comment, 10 attachments**
- **Budget** — **1 comment, 8 attachments**
- **Cost-effectiveness** — **1 comment, 6 attachments**
- **Evaluation** — **0 comment, 5 attachments**
- **Environmental/Historic Preservation (EHP)** — **0 comment, 16 attachments**
- **Location** — **0 comment, 4 attachments**

Assurances and certifications

OMB number: 4040-0009 Expiration date: 02/28/2025 View burden statement

SF-424D: Assurances - Construction Programs

Content:

OMB Number: 4040-0009
Expiration Date: 02/28/2025

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. §§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. §§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.

Certifications regarding lobbying

OMB Number: 4040-0013
Expiration Date: 02/28/2025

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. 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 an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection

with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid 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 this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions.
3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid 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 this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.