HAMPTON VA
CITY MANAGER'S OFFICE

September 3, 2021

Virginia Department of Conservation and Recreation
Attention: Virginia Community Flood Preparedness Fund
Division of Dam Safety and Floodplain Management
600 East Main Street, 24th Floor
Richmond, Virginia 23219

To whom it may concern:

On behalf of the City of Hampton, I authorize the request for funding for three grant proposal submissions to the Virginia Community Flood Preparedness Fund: Honor Park Resilience Project; Mill Point Living Shoreline; and Downtown Hampton, Phoebus, and Buckroe Beach Water Plan.

If awarded, and subject to execution of a grant agreement, the City of Hampton pledges its commitment to provide funding to meet the match requirement established by the 2021 Grant Manual for the fund. City funds have been budgeted and appropriated for Fiscal Year 2022 ending June 30, 2022. As the City's grant application provides, such matching fund will be provided for each project in the following amounts:

- ***Honor Park Resilience Project:*** The City of Hampton will provide $36,998.60, a 20% match based on the project total cost of $184,993.00.
- ***Mill Point Living Shoreline:*** The City of Hampton will provide $31,700, a 20% match based on the project total cost of $158,500.
- ***Downtown Hampton, Phoebus and Buckroe Beach Water Plan:*** The City of Hampton has already allocated funding for this plan in the amount of $89,500, which is approximately a 36.7% match based on the total project cost of $244,125.

We appreciate this opportunity to seek funding in support of our ongoing efforts to increase Hampton's resilience and preparedness for flooding impacts.

Sincerely,

Mary B Bunting
City Manager, City of Hampton

OFFICE OF THE CITY MANAGER
22 Lincoln Street | Hampton, Virginia 23669
P: (757) 727-6392 | F: (757) 728-3037

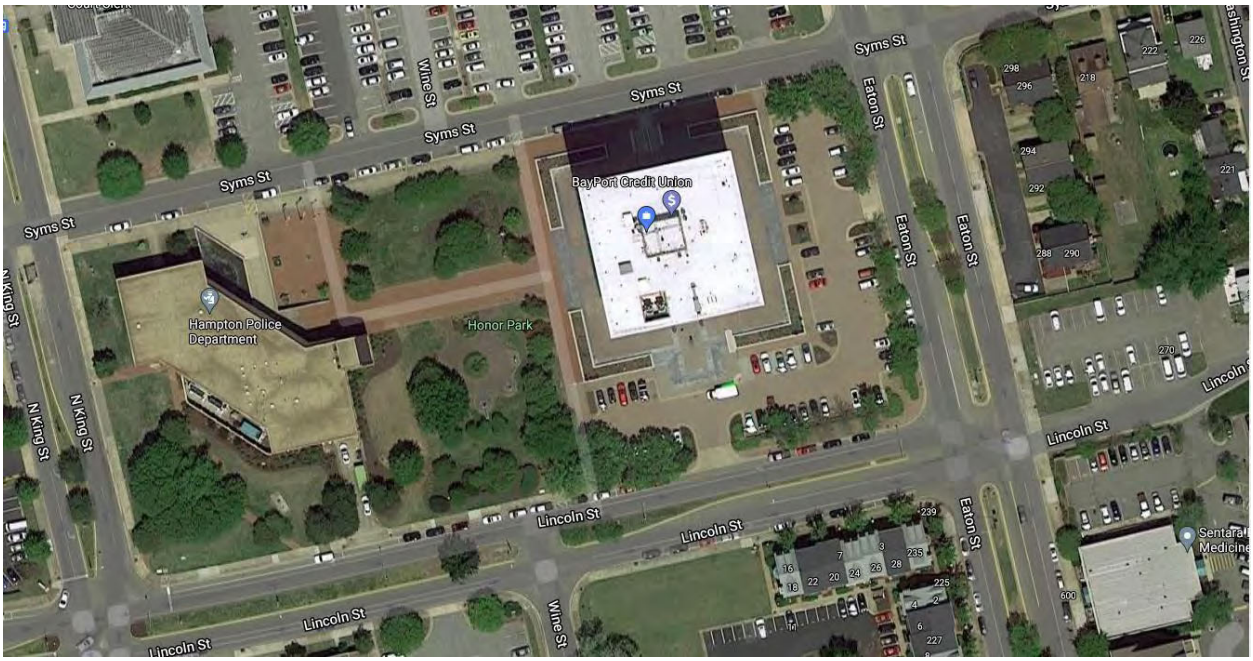
Honor Park Resilience Park

The Honor Park Resilience Park (HPRP) will consist of the transformation of the existing Honor Park located between Hampton City Hall and The Hampton Public Safety Building into the Honor Park Resilience Park. The property is owned by the City of Hampton. The HPRP will be designed in accordance with the ***City of Hampton Resilience Plan*** to holistically demonstrate Hampton's resilience strategies of managing water, utilizing the concepts of Slow, Store, Redirect and Adapt outlined in the ***Living with Water Hampton: A Holistic Approach to Addressing Sea Level Rise and Resiliency*** and improving the quality of life in Hampton. Nature based and green infrastructure will be utilized in this project to meet the project goals and objectives.

The project has been conceptually designed. The total project costs are estimated at $3,335,650 for the design and construction of this project. This proposal will advance the design from Conceptual thru 50% Preliminary Engineering Design which will include geotechnical testing to verify the project viability prior to committing to full project implementation. This proposal is requesting $184,993.00 for the Preliminary Engineering of the project thru 50%.

Project Data

This project is located at 22 Lincoln Street in Hampton, VA, population 131,686 (2025 projection Weldon Cooper Center.) The site is located in Census Tract 106.01 which is identified as low income opportunity zone and has a Social Vulnerability Index Score of 1.3 The project site is currently located in Flood zone AE-07 and X-500, Site elevations are 7-8', NAVD 88. There is no information on flood damage history to the adjacent structures. There are no Repetitive Loss or Severe repetitive Loss properties in the project area. The adjacent structures are City Hall and The City Public Safety building. Both of this facilities are Critical Facilities that will benefit from the reduced surface flow on Lincoln Street and Syms Street.



Project Site - 22 Lincoln Street, Hampton VA

The total project construction costs will be $3,335,647. Annual Maintenance costs are estimated at $9,538. This project will provide water quality and quantity benefits and are eligible costs for The Stormwater Utility Fee. Construction and Maintenance will be paid with proceeds from the Stormwater Utility fee.

The City of Hampton's Floodplain Ordinance can be found at https://library.municode.com/va/hampton/codes/zoning?nodeId=CH9OVDI_ARTIVDILOZOOV

The Regional Hazard Mitigation Plan is located on the Hampton Roads Planning Commission website at the following link. The Plan is currently in the process of the regularly scheduled update.

https://www.hrpdcva.gov/library/view/620/2017-hampton-roads-hazard-mitigation-plan-and-appendices/

The Current Hampton Community Plan (Comprehensive Plan) can be found at

chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/viewer.html?pdfurl=https%3A%2F%2Fhampton.gov%2FDocumentCenter%2FView%2F535%2F2011-community-plan-update%3FbidId%3D&clen=8574837

Project Description

The HPRP will consist of the transformation of the existing Honor Park into the Honor Park Resilience Park. The current park is located between Hampton City Hall and the Public Safety Building. The park commemorates the sacrifices of Hampton's Police Officers and Firefighters who bravely provided the ultimate sacrifice in the line of duty. This park also memorializes the sacrifices of Hamptonians who served in the World Wars and the Korean War. The new proposed park will keep the memorials intact and add resilience features to create a stormwater park that will redirect, slow store and utilize adaptations to create a multifunctional public space. Elements of the project will include a constructed wetlands and amphitheater type structure that is designed to store water during rain events, but at other times will serve as a performance area with open seating where people can gather on the grass, enjoy lunch, or exercise. The park will also replace existing paving with pervious pavers reducing runoff and providing more storage. This site will be showcased at Hampton's City Hall and demonstrate Hampton's commitment to resilience and demonstrate how resilience can be integrated into existing facilities and shows how community, resilience and recreation can be accommodated within existing public spaces.

The Honor Park Resilience Park project will consist of 24,000 SF of permeable pavers, including replacing approximately 14,000 SF of existing impervious paving around City Hall. The constructed wetlands, approximately 4,800 SF, will take water from the Lincoln Street collection system and provide treatment.

Proposed Honor Park

A pedestrian bridge/boardwalk over the constructed wetlands will provide connection between Lincoln Street and Syms Street along with a vista of the wetlands. Another feature of the Stormwater Park will be a turf grass storage structure, Approximately 4,700 SF that will act as an overflow storage area adjacent to the wetlands providing storage during rain events and a recreational area during drier periods. A concrete overflow structure will double as a performance stage within the storage basin. The area will be stepped to provide seating adding and increase the storage volume.

Stage Store Area

On the north side of the park, a combination of permeable pavers, approximately 10,000 SF, and approximately 14,500 SF of bio retention system will extend under the permeable pavers to enhance the storage volume. This system will take runoff from Syms Street to treat, store and release runoff. After the treated water leaves the Honor Park Resilience Park, it will head east along Syms Street and Lincoln Street to the Hampton River.

Bio Retention/Arboretum

Other alternatives considered include the city purchasing existing commercial property to create a storage facility. This will have the cost of excavation, demolition, and construction plus the loss of taxable revenue from property and sales taxes. Upgrading the collection system to increase pipe sizes to increase capacity has issues with cover over the pipes and existing utility conflicts.

Goals and Objectives

This is a water quality and quantity project, Hampton's Resilience strategies will be addressed as follows:

Slow – water is being redirected from Syms Street and Lincoln Street, slowing the water by increasing the flow path the water will take, this increase the travel time which will have an overall peak runoff reduction at the outfall into the Hampton River. The addition of pervious pavers will also reduce the runoff produced.

Store – the wetlands, Stage storage and bio retention will add storage to the Lincoln Street drainage system discharging runoff into the Hampton River.

Redirect – Water will be redirected from Syms Street and Lincoln Street into the wetlands, bio retention and stage storage systems.

Adapt – This project is a multi-dimensional exercise in adaptation. There are many community scale benefits, the stage storage area will double as an outdoor meeting and entertainment

venue, the wetlands and boardwalk demonstrate the concept of living with water and will provide and educational platform to demonstrate the importance of nature based solutions to the city's flooding issues. The bio retention arboretum will provide meeting places and shade, the trees will absorb the runoff and transpire it naturally back into the environment.

The Honor Park Resilience Park will be a signature feature demonstrating many techniques and practices that are scalable and usable throughout the City.

Water quality and storage are two other goals. The water quality goals will be critical to the City meeting it's 40% reduction goals for the James River Watershed, for the Chesapeake Bay TMDL. This is a regulatory requirement of our DEQ MS-4 permit.

Water Quality: The nutrient reductions anticipated from the wetlands, pervious pavers and bio retention are:

Total Phosphorous - 2.75 (lbs/yr)

Total Nitrogen – 17.02 (lbs/yr)

Total Suspended Solids- 1,164.6 (lbs/yr)

Water Storage: The additional storage estimated

Wetlands – 2, 378 Gallons, 318 Cubic Feet

Stage storage Facility – 105,475 Gallons, 14,100 Cubic Feet

Bio retention – 795 Gallons – 5,947 Cubic Feet

Runoff Reduction

Wetlands – 2, 378 Gallons, 318 Cubic Feet

Bio-Retention – 8,510 Gallons, 1,138 Cubic Feet

Permeable Pavers – 11,889 Gallons, 1,589 Cubic Feet

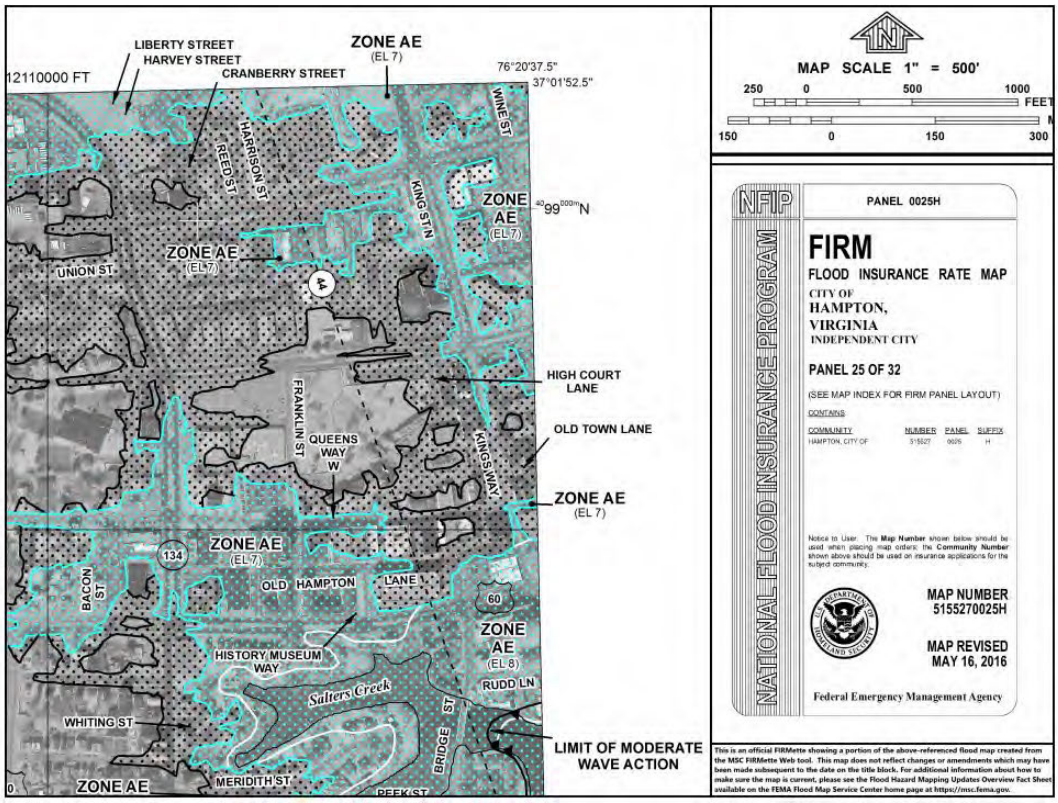
The total project construction costs will be $3,335,650. Annual Maintenance costs are estimated at $9,538.

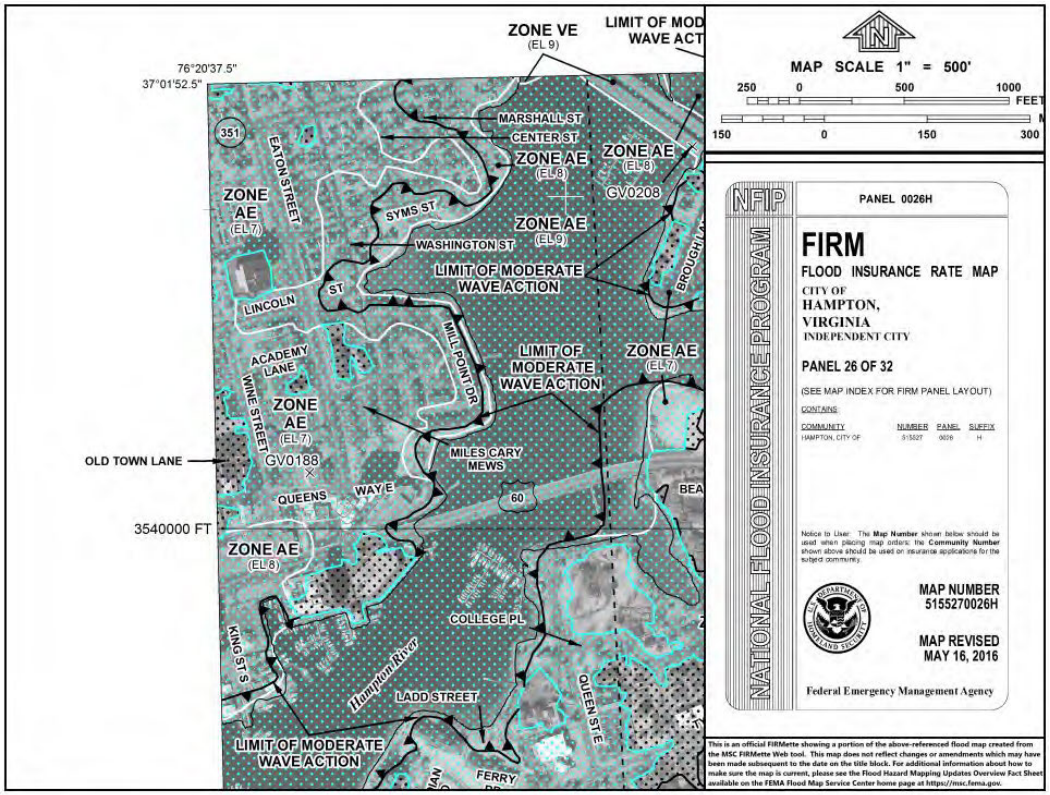
Maintenance costs for the project based on a fifty-year project life. The total Maintenance costs for the 50 year life of the project life of will be $457,800. Maintenance will be the responsibility of the Hampton Public Works Department. It is anticipated that regular maintenance of the constructed wetlands will require yearly inspection, replacement of diseased or dead plant material, removal of litter and floatables. Maintenance of the permeable pavers will require regular vacuum sweeping, removal of any vegetation growing between the units and annual inspection to ensure settlement of the pavers does not result in trip hazards. Annual maintenance of the bio retention will require annual inspections to insure water is not holding for extended periods, inspection of the trees for signs of distress, regular pruning of the trees and collection of leaf litter and debris. Additional bio retention soils will be required every 5 years as the tress grow and convert nutrients in the soil into biomass. These costs have been factored into the Annual maintenance costs and amortized over the 50 year project life.

Project Benefits were calculated annually and projected over the project's life. The total benefits of this project are $1,177,342:

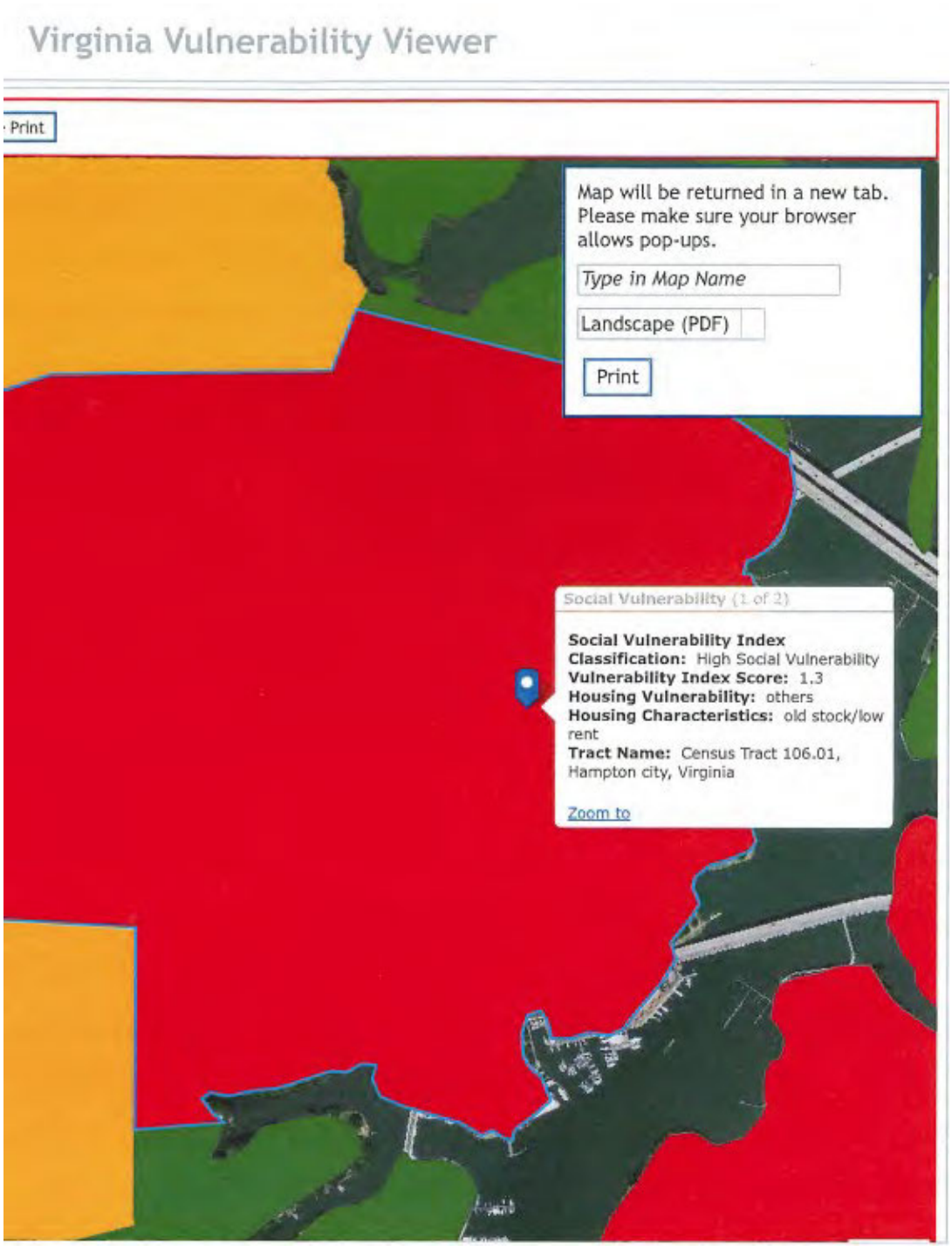
Environmental Services	$ 81,500
Air Quality	$ 25,910
Water Quality	$ 32,517
Water Quality Nutrient Credit	$ 277,200
Climate Reduced CO2	$ 3,359
Reduced Grey Infrastructure costs	$ 386,596
Recreational	$ 283,140
Aesthetic Quality	$ 87,120
Total	$1,177,342

Appendix A - FIRMettes





Appendix B – Social Vulnerability Index



Appendix A: Application Form for Grant Requests for All Categories

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Name of Local Government:

City of Hampton

Category of Grant Being Applied for (check one):

____Capacity Building/Planning

X Project

_____Study

NFIP/DCR Community Identification Number (CID) 515527

If a state or federally recognized Indian tribe, Name of tribe_____

Name of Authorized Official: Brian DeProfio, Assistant City Manager

Signature of Authorized Official: _____

Mailing Address (1): 22 Lincoln Street

Mailing Address (2): _____

City: Hampton State: Virginia Zip: 23669

Telephone Number: (____) _____ Cell Phone Number: (____) _____

Email Address: _____

Contact Person (If different from authorized official): Scott A. Smith, PE, LS

Mailing Address (1): 22 Lincoln Street

Mailing Address (2): _____

City: Hampton State: Virginia Zip: 23669

Telephone Number: [redacted] Cell Phone Number: [redacted]

Email Address: [redacted]

Is the proposal in this application intended to benefit a low-income geographic area as defined in the Part 1 Definitions? Yes X No ____

Categories (select applicable project):

Project Grants (Check All that Apply)

- ☐ Acquisition of property (or interests therein) and/or structures for purposes of allowing floodwater inundation, strategic retreat of existing land uses from areas vulnerable to flooding; the conservation or enhancement of natural flood resilience resources; or acquisition of structures, provided the acquired property will be protected in perpetuity from further development.
- Ξ Wetland restoration.
- ☐ Floodplain restoration.
- ☐ Construction of swales and settling ponds.
- ☐ Living shorelines and vegetated buffers.
- ☐ Structural floodwalls, levees, berms, flood gates, structural conveyances.
- Ξ Storm water system upgrades.
- ☐ Medium and large scale Low Impact Development (LID) in urban areas.
- ☐ Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool.
- ☐ Dam restoration or removal.
- ☐ Stream bank restoration or stabilization.
- ☐ Restoration of floodplains to natural and beneficial function.
- ☐ Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.

Study Grants (Check All that Apply)

- ☐ Studies to aid in updating floodplain ordinances to maintain compliance with the NFIP or to incorporate higher standards that may reduce the risk of flood damage. This must include establishing processes for implementing the ordinance, including but not limited to, permitting, record retention, violations, and variances. This may include revising a floodplain ordinance when the community is getting new Flood Insurance Rate Maps (FIRMs), updating a floodplain ordinance to include floodplain setbacks or freeboard, or correcting issues identified in a Corrective Action Plan.
- ☐ Revising other land use ordinances to incorporate flood protection and mitigation goals, standards and practices.
- ☐ Conducting hydrologic and hydraulic studies of floodplains. Applicants who create new maps must apply for a Letter of Map Revision or a Physical Map Revision through the Federal Emergency Management Agency (FEMA). For example, a local government might conduct a hydrologic and hydraulic study for an area that had not been studied because the watershed is less than one square mile. Modeling the floodplain in an area that has numerous letters of map change that suggest the current map might not be fully accurate or doing a detailed flood study for an A Zone is another example.
- ☐ Studies and Data Collection of Statewide and Regional Significance.
- ☐ Revisions to existing resilience plans and modifications to existing comprehensive and hazard.
- ☐ Other relevant flood prevention and protection project or study.

<u>Capacity Building and Planning Grants</u>

- ☐ Floodplain Staff Capacity.
- ☐ Resilience Plan Development
  - ☐ Revisions to existing resilience plans and modifications to existing comprehensive and hazard mitigation plans.
  - ☐ Resource assessments, planning, strategies and development.
    - Policy management and/or development.
    - Stakeholder engagement and strategies.

Location of Project (Include Maps): 22 Lincoln Street, Hampton, VA 23669

NFIP Community Identification Number (CID#):(See appendix

F 515527

Is Project Located in an NFIP Participating Community? **X** Yes □ No

Is Project Located in a Special Flood Hazard Area? **X** Yes □ No

Flood Zone(s) (If Applicable): AE07, X

Flood Insurance Rate Map Number(s) (If Applicable): 5155270025, 5155270026

Total Cost of Project: $5,400,000 - Design and Construction

Total Amount Requested $184,993.00 - 50% Design

Appendix B: Scoring Criteria for Flood Prevention and Protection Projects

Virginia Department of Conservation and Recreation
Virginia Community Flood Preparedness Fund Grant Program

Applicant Name:	City of Hampton	
Eligibility Information		
Criterion	**Description**	**Check One**
1. Is the applicant a local government (including counties, cities, towns, municipal corporations, authorities, districts, commissions, or political subdivisions created by the General Assembly or pursuant to the Constitution or laws of the Commonwealth, or any combination of these)?		
Yes	Eligible for consideration	**X**
No	Not eligible for consideration	
2. Does the local government have an approved resilience plan and has provided a copy or link to the plan with this application?		
Yes	Eligible for consideration under all categories	**X**
No	Eligible for consideration for studies, capacity building, and planning only	
3. If the applicant is <u>not a town, city, or county</u>, are letters of support from all affected local governments included in this application?		
Yes	Eligible for consideration	
No	Not eligible for consideration	
4. Has this or any portion of this project been included in any application or program previously funded by the Department?		
Yes	Not eligible for consideration	
No	Eligible for consideration	**X**
5. Has the applicant provided evidence of an ability to provide the required matching funds?		
Yes	Eligible for consideration	**X**
No	Not eligible for consideration	
N/A	Match not required	

Project Eligible for Consideration		☐ Yes ☐ No
Applicant Name:	**City of Hampton**	
Scoring Information		
Criterion	**Point Value**	**Points Awarded**
6. Eligible Projects (Select all that apply)		
Projects may have components of both 1.a. and 1.b. below; however, only one category may be chosen. The category chosen must be the primary project in the application.		
1.a. Acquisition of property consistent with an overall comprehensive local or regional plan for purposes of allowing inundation, retreat, or acquisition of structures.	**50**	
☐ Wetland restoration, floodplain restoration ☐ Living shorelines and vegetated buffers. ☐ Permanent conservation of undeveloped lands identified as having flood resilience value by *ConserveVirginia* Floodplain and Flooding Resilience layer or a similar data driven analytic tool ☐ Dam removal ☐ Stream bank restoration or stabilization. ☐ Restoration of floodplains to natural and beneficial function. ☐ Developing flood warning and response systems, which may include gauge installation, to notify residents of potential emergency flooding events.	**45**	
1.b. any other nature-based approach	**40**	**40**
All hybrid approaches whose end result is a nature-based solution	**35**	
All other projects	**25**	
7. Is the project area socially vulnerable? (Based on ADAPT VA's Social Vulnerability Index Score.)		
Very High Social Vulnerability (More than 1.5)	**15**	
High Social Vulnerability (1.0 to 1.5)	**12**	**12**
Moderate Social Vulnerability (0.0 to 1.0)	**8**	
Low Social Vulnerability (-1.0 to 0.0)	**0**	
Very Low Social Vulnerability (Less than -1.0)	**0**	
8. Is the proposed project part of an effort to join or remedy the community's probation or suspension from the NFIP?		

Yes	10	
No	0	0
9. Is the proposed project in a low-income geographic area as defined in this manual?		
Yes	10	10
No	0	
10. Projects eligible for funding may also reduce nutrient and sediment pollution to local waters and the Chesapeake Bay and assist the Commonwealth in achieving local and/or Chesapeake Bay TMDLs. Does the proposed project include implementation of one or more best management practices with a nitrogen, phosphorus, or sediment reduction efficiency established by the Virginia Department of Environmental Quality or the Chesapeake Bay Program Partnership in support of the Chesapeake Bay TMDL Phase III Watershed Implementation Plan?		
Yes	5	5
No	0	
11. Does this project provide "community scale" benefits?		
Yes	20	20
No	0	
Total Points		**92**

Appendix D: Checklist All Categories

Virginia Department of Conservation and Recreation

Community Flood Preparedness Fund Grant Program

Scope of Work Narrative	
Supporting Documentation	**Included**
Detailed map of the project area(s) (Projects/Studies)	☒ Yes ☐ No ☐ N/A
FIRMette of the project area(s) (Projects/Studies)	☒ Yes ☐ No ☐ N/A
Historic flood damage data and/or images (Projects/Studies)	☐ Yes ☐ No ☒ N/A
A link to or a copy of the current floodplain ordinance	☒ Yes ☐ No ☐ N/A
Non-Fund financed maintenance and management plan for project extending a minimum of 5 years from project close	☒ Yes ☐ No ☐ N/A
A link to or a copy of the current hazard mitigation plan	☒ Yes ☐ No ☐ N/A
A link to or a copy of the current comprehensive plan	☒ Yes ☐ No ☐ N/A
Social vulnerability index score(s) for the project area from ADAPT VA's Virginia Vulnerability Viewer	☒ Yes ☐ No ☐ N/A
If applicant is not a town, city, or county, letters of support from affected communities	☐ Yes ☐ No ☒ N/A
Completed Scoring Criteria Sheet in Appendix B, C, or D	☒ Yes ☐ No ☐ N/A
Budget Narrative	
Supporting Documentation	**Included**
Authorization to request funding from the Fund from governing body or chief executive of the local government	☒ Yes ☐ No ☐ N/A
Signed pledge agreement from each contributing organization	☐ Yes ☐ No ☒ N/A

Commonwealth of Virginia

CFPF, rr <cfpf@dcr.virginia.gov>

City of Hampton (CID# 515527) - Applications to Community Flood Preparedness Fund

2 me age

Heaps, Carolyn <[redacted]> Fri, Sep 3, 2021 at 3:26 PM
To: "cfpf@dcr.virginia.gov" <cfpf@dcr.virginia.gov>
Cc "O'Neill, Terry" [redacted], "Mitchell, Ja on L " [redacted], "Smith, Scott" [redacted], "Bry on, Ja mine" [redacted], "Lewis, Brian" <[redacted]>

Good afternoon,

The City of Hampton is pleased to submit three applications to the Virginia Community Flood Preparedness Fund. Please find attached PDF files corresponding to the following application materials.

- **Honor Park Resilience Project** – CID515527_Hampton_CFPF-1
- **Mill Point Living Shoreline** CID515527 Hampton CFPF 2
- **Downtown Hampton, Phoebus and Buckroe Beach Water Plan** – CID515527_Hampton_CFPF-3

We kindly request that DCR confirm receipt of these materials. Should you have any questions regarding our applications, or difficulty accessing the documents, plea e do not he itate to contact me

Warm regard ,

Carolyn Heap

Carolyn Heap
Resiliency Officer
Resilient Hampton | Community Development Department
22 Lincoln St, 5th floor, Hampton VA, 23669
Phone: Direct [redacted] | Main (757) 727-6140

Visit us on the web: www.hampton.gov

HAMPTON VA

3 attachment

CID515527_Hampton_CFPF-2.pdf
2045K

CID515527_Hampton_CFPF-3.pdf
10052K

CID515527_Hampton_CFPF-1.pdf
1976K

CFPF, rr <cfpf@dcr.virginia.gov> Fri, Sep 3, 2021 at 4:37 PM
To: "Heaps, Carolyn" <[redacted]>

Received
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