CITY OF PORTSMOUTH, NH

RFP #27-17

REQUEST FOR PROPOSALS

PROFESSIONAL PLANNING SERVICES

HISTORIC PROPERTIES CLIMATE CHANGE VULNERABILITY ASSESSMENT AND ADAPTATION PLAN

The City of Portsmouth is seeking an experienced and qualified consultant team to identify the potential future impacts of climate change on the City of Portsmouth's historic properties. The intent of this project is to have mitigation measures and an adaptation plan that can be used to develop local design guidelines, zoning ordinances and building code changes to enhance the resilience of Portsmouth's historic resources.

Sealed Request for Proposals, plainly marked RFP # 27-17, "Historic Properties Climate Change Vulnerability Assessment and Adaptation Plan" on the outside of the mailing envelope, addressed to the Finance/Purchasing Department, City Hall, 1 Junkins Avenue, Portsmouth, NH 03801 will be accepted until 2:00 p.m. on Monday February 6, 2017.

BACKGROUND/PURPOSE

The City of Portsmouth is rich in historic resources including National Register listed and National Register eligible individual properties, neighborhood districts and resource-specific (railroad) districts, and eight National Historic Landmarks. Portsmouth's authentic historic character is an important part of what makes the City a popular tourist destination as well as contributing to the quality of life for residents and businesses.

This historic character is thus important to the City, and a great deal of effort has been put into maintaining it. For several decades the City has had a local Historic District within which any exterior changes to properties must be reviewed and approved by the City's Historic District Commission. The zoning regulations for the Historic District have been updated and refined several times in the past decade.

There is also a fairly complete understanding of the extent of historic resource in the Historic District. In 1982 an inventory of all structures within the District was completed. Recently, the New Hampshire Division of Historical Resources completed an updated survey of Portsmouth's historic areas including the waterfront, city center and surrounding downtown neighborhoods for a nomination to the National Register of Historic Places. This soon-to-be-listed National Register district is distinct from, but overlaps with, the established local Historic District.

A recent study, completed in April 2013 [1], provides new information about the potential impacts to the City from climate change. This study found that coastal flooding is the primary area of vulnerability for the City and in particular the Historic District. Both episodic coastal storm surges and longer term sea level rise impacts have been identified as the primary impacts facing the City. For the Historic District, primary factors for consideration are: temperature increase, extreme weather, and sea level rise. Secondary factors are increase in groundwater table, seepage, and impacts to the stability of foundations and chimneys. These vulnerabilities require a more in depth survey specific to the vulnerability of known historic structures within the Historic District to identify mitigation opportunities and complete an adaptation plan for climate change.

SCOPE OF WORK

The City of Portsmouth Planning Department is requesting proposals from qualified firms to work with staff to assess the Historic District's (and other areas in the city with historic resources) vulnerability to climate change, in particular, coastal flooding and inundation using a place-based approach. The contractor team should consist of: a consultant who meets the Secretary of Interior's Professional Qualification Standards [2], an engineering firm, a planning firm, and an architectural historian and/or archeologist (to ensure that any adaptation strategies envisioned by this project are sensitive to the possibility of existing archeological artifacts in its design). This team will complete the project tasks with input and oversight from City Staff and a Local Advisory Committee.

The GIS work for this project has been started and will continue to be undertaken by City staff with input from the contractor team. The historic district and the areas included in the studies completed or underway were reviewed and the properties that were described in these study were the properties that were the starting point for the mapping effort. Then using the data from the City's Coastal Resilience Initiative the historic properties and sites that were at or above the 11.5'contour interval in addition to ones above the 13.5' contour interval to create a selected set of properties vulnerable to coastal flooding. This set was further attributed to include age of historic structures and foundation type where available.

Below are the minimum tasks required; consultants may expand upon this scope but may not reduce it.

Task 1 Mapping Synthesis

Risk map for flooding

- Overlay the depth of flooding map on the historic inventory and thus identify relative risk/vulnerability for each property by giving a score from low to high in terms of vulnerability to coastal flooding. The GIS base layer for this task has been completed by

[1] City of Portsmouth Coastal Resilience Initiative: Climate Change Vulnerability Assessment and Adaptation Plan http://www.planportsmouth.com/cri/index.html

[2] National Park Service Secretary of the Interior's Standards and Guidelines https://www.nps.gov/history/local-law/arch_stnds_9.htm

the City. As part of this step, the GIS data the City created will need to be reviewed and ground-truthed to insure the appropriate properties are included.

1.1 Historic Value Map

- Conduct a value assessment to determine the most important resource, and prioritize the resources. This assessment shall consist of the following factors:

  1) A property valuation based on City assessed values
  2) A historic resource value for each structure based on the survey data and Secretary of the Interior Standards for Identification
  3) NH-specific guidance as determined by the Coastal Risk and Hazards Report[3].
  4) A community and cultural value (as determined through public outreach and the LAC.
  5) Insurance rating based on the FEMA flood hazard maps.

1.2 Map of surrounding natural resources and topographic features that are associated with and connected to the historic district (e.g., trees, soil, groundwater, groundcover, wetlands, shoreline type).

1.3 Utility map of water and sewer lines within the study area.

1.4 Combine the risk/vulnerability assessment with the historic assessment, natural resource and topographic inventory, and utility inventory to get an overall prioritization and score of historic vulnerability and produce a report with the results.

Task 2 Scenario models

2.1 Provide projected trends for the status of historic properties within the 11.5-foot and 13.5 foot flood elevation scenario.

2.2 Provide projected trends for the impact of tide-induced groundwater seepage due to sea level rise on historic structures.

2.3 Provide A report identifying and explaining the factors contributing to vulnerability of historic structures and the relationship between these various factors (such as, but not limited to: the interaction between freshwater and saltwater, interaction between humidity and sump-well recharge rates).

Task 3 Mitigation Strategies

3.1 Identify indicators for measuring vulnerability of historic structures (such as, but not limited to: stability of foundations, exposure of cavities to weathering, moisture saturation of materials).

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[3] NH Coastal Risk and Hazard Commission Report http://nhcrhc.stormsmart.org/category/commission-report/

3.2 Establish standards and incorporate measurement tools and techniques to monitor pertinent historic resources over time

3.3 Analyze the potential for mitigation on each property or group of properties.

3.4 Consider and evaluate the potential of mitigation measures such as elevating utilities and mechanical equipment, structural measures such as elevation changes, dry flood proofing, relocating buildings.

3.5 Develop approaches for collaborative monitoring and mitigation among individual historic properties and landscapes.

3.6 Provide a report detailing the mitigation strategies developed and how they might be implemented.

Task 4 Adaptation

4.1 Develop adaptation strategies using the 2013 Climate Change Vulnerability Assessment as a starting point.

- Recommend "hard" and "soft" or active and passive adaptation methods.
- Categorize adaptation approaches by "defend", "accommodate", "retreat", and "change in policy" and specify which approach is most suitable for each historic structure or resource.
- Utilize information generated from the property owners' vulnerability survey in order to address and adapt to emerging threats from each case.

4.2 Create an overall Adaptation Plan for historic resources after reviewing the adaptation strategies with the local advisory committee. The Adaptation Plan shall look at the engineering and preliminary design and cost of construction of the identified adaptation strategies. This includes determining preliminary costs for the measures identified such as new seawalls, elevated structures or groups of structures, new or enhanced tide gates, elevated streets and sidewalks and possibly neighborhoods or blocks.

4.3 Recommend approaches for incorporating best practices into local design guidelines, zoning ordinances and building code changes. Provide draft language or examples from other communities where climate change adaptation is being implemented within their historic districts.

4.4 Recommend an emergency preparedness management and evacuation plan for valuable historic assets in the case of a 100-year storm.

4.5 Incorporate all of the adaptation strategies, plans and approaches described above into a report.

Task 5 Outreach

5.1 Help establish and work with the Local Advisory Committee (LAC) throughout the process by soliciting feedback during each task, where appropriate.

5.2 Initiate involvement of the LAC and seek input specific to cultural context, sense of place, and place attachment through the use of online feedback forms or other methods.

5.3 Consider how specifically the selection of the different types of adaptation strategies and methods can be best developed with input from members of the community and community boards.

5.4 Conduct a visual preference survey or other method to guide the selection of the most appropriate adaptation strategies.

Task 6 Data Visualization

Document the progress and outcomes of this project using interactive visual tools, such as the ESRI Story Map.

Examples:

- The University of Connecticut's coastal land use change history map: http://clear3.uconn.edu/viewers/Coast1934/

- Flooding Hazards in New Hampshire's Manufactured Homes: Dylan Kelly http://unhcoopext.maps.arcgis.com/apps/Cascade/index.html?appid=c6d6f2a034a84aeda3e40557e645d499

SCHEDULE

The contractor team should consist of: a consultant who meets the Secretary of Interior's Professional Qualification Standards, an engineering firm, a planning firm, and an architectural historian and/or archeologist (to ensure that any adaptation strategies envisioned by this project are sensitive to the possibility of existing archeological artifacts in its design). This team will complete the project tasks with input and oversight from City Staff and a Local Advisory Committee.

Once a contractor team has been selected an initial meeting will take place to go over the project tasks and schedule. After mapping has been synthesized the next step is to develop the mitigation potential for historic structures followed by a set of adaptation strategies. Input will be provided by staff and the local advisory committee and is projected to take three months. Upon completion of this process a draft adaptation plan will be developed which will solicit public input and comment through a public outreach process. The plan will be reviewed by the National

Park Service at 80% complete and will comply with the Secretary's Standards for planning[4] and National Park Service Cultural Resource Spatial Data Transfer Standards.[5] The work will also comply with 44 CFR Section 201.6, FEMA's Local Mitigation Plan requirements. The draft plan development and outreach element will take another three months to complete. At the end of this process the adaptation plan will be finalized and published to the City's website. Finalization of the plan is anticipated to take two months.

Task	**Start Date**	**Completion Date**	**Duration**
Release of RFP and selection of Consultant Team	January 2017	February 2017	2 Months
Mapping synthesis (Task 1)	March 2017	March 2017	1 Months
Development of Scenario Models (Task 2) Mitigation Measures and Adaptation Strategies (Task 3)	April 2017	June 2017	3 Months
Creation of Draft Adaptation Plan and Outreach (Task 4&5)	July 2017	September 2017	3 Months
Final Adaptation Plan (Task 4-6)	October 2017	November 2017	2 Months

(Total 11 Months)

CITY ROLE

City Staff who will work in this project include the Principal Planner who provides staff support to and oversees applications to the Historic District Commission, the City's Environmental Planner who oversaw the existing Climate Change Vulnerability Assessment, the City's GIS Coordinator, who will oversee completion of the base maps and the Planning Director who will provide oversight to insure the work will assist future implementation efforts. Planning Department staff will be responsible for administering the project and overseeing the consultant's work on this project. Input will be solicited from a variety of City Departments, including but not limited to the Public Works, Health, Inspections, Fire and Police Departments.

In addition to City Staff, the project will convene a local advisory committee to assist with project development. A committee will be assembled to include a one representative from the Portsmouth City Council , Historic District Commission, Conservation Commission, Strawbery Banke Museum Friends of the South End and Portsmouth Advocates, one or two business

[4] National Park Service Archeology and Historic Preservation: ***Secretary of the Interior's Standards and Guidelines*** https://www.nps.gov/history/local-law/arch_stnds_1.htm

[5] National Park Service Spational Data Transfer Standards https://www.nps.gov/hdp/standards/crgisstandards2.htm

members, one or two residential members and additional ad hoc membership from NHDHR, PanAm railroad, National Park Service and Portsmouth Public Works. The size and scope of the committee may be expanded based on input from the selected members. In addition to providing feedback for the project this group will be instrumental in facilitating public outreach efforts for the Adaptation Plan.

The following information is available for review at Portsmouth City Hall, 1 Junkins Avenue Portsmouth, NH from 8:00 a.m. to 4:30 p.m. Monday through Friday.

- Portsmouth Hazard Mitigation Plan
- Citywide GIS data layers available:
    - City-owned properties
    - Wetland Inventory 2003
    - Parcels
    - Streets
    - Conservation lands
    - Utilities (water, sewer, stormwater, pump stations, treatment plants)
    - Topography (2' contour intervals)
    - Digital orthophotos 2000, 2003, 2005, 2006, 2010
- 2013 Climate Change Vulnerability Assessment report, maps, and GIS data layers.
- Historic District Survey, 1982
- Historic District Survey, 2016
- Comparison of 1982 and 2016 Inventory of Historic Districts.
- Assessor's Data: Current Property Values, Valuation History, Building Information and Land Use

Please contact Peter Britz at (603)610-7215 to make an appointment to review any of this information.

Additional information that will be available for this project includes recent LIDAR (Light Detection and Ranging) for coastal New England as well as a study titled *Climate Change in the Piscataqua/Great Bay Region.*[6]

SUBMITTAL REQUIREMENTS

Proposals shall include the following and shall be organized using each of the required elements as section headings in the order in which they appear below:

A. Firm Description – provide a brief description of the firm including firm size and area of specialization.

B. Project Team – Provide names and resumes of key professionals who would be assigned to the project. Resumes shall be included for key project personnel only. Each team member's education and experience shall be listed. The project manager shall be designated and a description of relevant previous projects, and the project staff that have played a central role in those projects shall be provided. Any sub-consultants shall be identified and a description of relevant previous projects provided.

C. Statement of project understanding – State in succinct terms the consultants' understanding of what is required by this Request for Proposals.

D. Scope of Services – Describe the consultant's approach and technical plan for accomplishing the work listed herein broken out by task. The consultant is encouraged to elaborate and expand on the tasks listed in the RFP.

E. Detailed schedule by task and subtask.

F. A lump sum proposal price itemized by task, and hourly rates for project personnel. Please note the Funding and Payment section below for divisions of budget tasks and subtasks.

G. Three (3) references, including current contact name and phone number for similar projects which the project manager has managed.

The proposal shall be printed on two sides of the page and shall not have a plastic cover. Four (4) hard copies and a digital copy of the proposal in a PDF format shall be submitted.

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[6] *Climate Change in the Piscataqua/Great Bay Region: Past, Present, and Future*, Wake, Cameron P., Elizabeth Burakowski, Earth Systems Research Center, University of New Hampshire, September 2011.

EVALUATION CRITERIA

Proposals will be evaluated by a team of City staff according to the following:

1. Responsiveness to submission requirements. 15 points
2. Qualifications of firm and project team members including any proposed sub consultants. Particular attention will be given to the experience and ability of the project manager. 25 points
3. Previous related work. 15 points
4. Understanding of project goals and issues. 20 points
5. Proposal price. 25 points

The City, at its discretion, may select a firm outright or select a finalist(s) for in-person and/or telephone interviews.

The City of Portsmouth reserves the right to reject any or all proposals, to waive technical or legal deficiencies, and to accept any proposal that it may deem to be in the best interest of the City.

The City reserves the right to undertake such investigation as it deems necessary to verify qualifications.

The City reserves the right to negotiate directly with the firm(s) selected for additional project work.

CONTRACT DOCUMENT

Upon selection, the successful Consultant will be sent a contract for execution. When the contract is executed by both parties, the Consultant will be instructed to commence providing the work outlined in the contract. All information, data, documents, photos, computer records, and other materials of any kind acquired or developed by the consultant pursuant to this project shall be the property of the City of Portsmouth. Contractor shall be required to carry insurance; see attached "Insurance Coverage Requirements".

FUNDING AND PAYMENT

This project has been made possible by a grant from the National Park Service's Hurricane Sandy Initiative through the New Hampshire Division of Historic Resources under grant number P14AP00013 and CDFA number 15.957.

The amount of funds budgeted for a contractor to complete tasks 1 through 6 is $31,400.

ADDITIONAL INFORMATION

Questions must be submitted in writing by January 27, 2017 and answers will be posted in addenda to the City of Portsmouth website by February 1, 2017. Addendums will only be posted to the City's website and not sent out to responders directly.

Requests for additional information should be directed to Peter Britz, Environmental Planner/Sustainability Coordinator at (603)610-7215.

INSURANCE COVERAGE REQUIREMENTS

1. Consultant shall carry Comprehensive General Liability Insurance with combined single limits not less than $1,000,000 per occurrence for Bodily Injury and Property Damage and $2,000,000 for general aggregate.

2. Consultant shall carry Automobile Liability Insurance, including owned and hired motor vehicles, on an occurrence form with a combined single limit of not less than $1,000,000 for Bodily Injury and Property Damage.

   The City of Portsmouth shall be named as an additional insured on these liability policies. Coverage amounts can be met through umbrella/excess policies.

3. Consultant shall carry Worker's Compensation Insurance for all persons employed under this contract in accordance with the statutory requirements.

Applicable to all insurance requirements:

The City of Portsmouth shall be identified as a certificate holder on all policies as follows: City of Portsmouth, Attn: Legal Department, 1 Junkins Avenue, Portsmouth, NH 03801.

Consultant shall provide proof of insurance coverage satisfactory to the City of Portsmouth.

Coverages shall remain in effect for a period consistent with the Statues of Limitations under the Law of New Hampshire.