

February 19, 2019

Ms. Nancy Colbert-Puff  
Deputy City Manager  
City of Portsmouth  
1 Junkins Avenue  
Portsmouth, NH

Re: **Implementing the Plan for Prescott Park\_Revised Scope & Fee Proposal**

Per your request we have updated the scope and fee for implementing the Prescott Park Master Plan. Please see the revised information below:

## SCOPE OF WORK

### I. SURVEY AND MAPPING

To date, a comprehensive survey has not been performed at Prescott Park or Four Tree Island. It is important to understand the specifics around property line information, current topography, and site features, as well as conduct a complete utility mapping and analysis. This information will be critical in determining how best to integrate the master plan concepts into the on-the-ground conditions.

#### Topographic Survey

- A. We will perform a topographic / Existing conditions field survey for the previously described project limits. Data will be collected regarding the location of existing physical features and representative ground elevations. Elevations will be referenced to NAVD 88.
- B. We will process field data, perform computations and drafting as necessary to prepare topographic mapping of the subject area. This mapping will be of the following physical features as applicable:
  - 1. Contours of the ground surface at six-inch intervals extending to the project limits.
  - 2. Spot elevations will be taken at approximately fifty (50) foot intervals along sidewalks, curbs, gutter lines, edges, parking areas, centerlines of paved roadways, and open grass field.
  - 3. The location of ditches, channels, existing drainage pipes or culverts passing under or through the site, which are visible and accessible at the time of the field survey or have been identified by City Staff subsurface investigation.
  - 4. The location of fences and guiderails (identifying type and height) along with landscaping edges.
  - 5. The location of utility poles, gate valves, catch basins, manholes, existing utility mark outs, light standards, fire hydrants, pedestals, sprinkler heads (visible), traffic signal boxes and electric hand holes / transformers.
  - 6. Working with the City Arborist, isolated trees (12" caliper or larger) or specimen trees (6" caliper or larger) or as identified as significant by the City Arborist, will be located and identified as to size and general type. No attempt will be made to identify the genus or species of individual trees.

- C. Two temporary bench marks will be established during the field survey and described on the mapping.

#### **Bathymetric Survey**

- A. We will perform a Bathymetric survey for the previously described project limits and hereto attached aerial image. Data will be collected regarding the location of existing physical features and representative river bottom elevations. Elevations will be referenced to NAVD 88.
- B. We will process field data, perform computations and drafting as necessary to prepare topographic mapping of the subject area. This mapping will be of the following physical features as applicable:
1. Contours of the ground surface at one (1) foot intervals extending to the project limits, including the river's edge and top of seawall.
  2. Spot elevations will be taken at approximately fifty (50) foot intervals along the river bottom.

#### **Compiled Utility Mapping:**

- A. As a part of our project we will incorporate maps and other records indicating the location of underground structures and utilities proved to Weston & Sampson by the owner.
- B. In performing our field survey activities, we will locate surficial evidence of below grade structures and utility lines. Surficial evidence will include manholes, storm drain grates, gate valves, access covers, shutoff valves, vault covers, vent grates and painted marks by others representing the location of underground lines that are readily visible at the time of the field work. Field staff will gather data for storm drains and manholes, which are visible, accessible and can be opened without danger to our staff or the public. We will gather such data as is readily available from the ground surface. Due to health and safety considerations, field staff will not enter underground structures of any type.
- C. As a part of our analysis and mapping, we will depict the approximate location of below grade structures and utility lines based on the location of evidence and interpretation of record maps and documents. Since these facilities are not visible and we must rely, on data that will be supplied by your staff, we make no representation as to the completeness or accuracy of the information contained in our mapping regarding below grade features.

#### **Technical Assumptions:**

- Grounds Staff member (DPW or Parks) will be available initially to help with the identifying of underground utility locations.
- Underground utility location service will NOT be required. (existing mark-out will be located if performed prior to the conclusion of the survey proposed field work)
- Structures located in the roadways are free and clear of asphalt paving. DPW or Highway staff will be available if covered or hindered with paving.
- WSE Land Surveyors will make no attempt to uncover any frame or manhole that is fully or partial covered with asphalt or concrete in fear of creating damage to the roadways.
- Manhole structures in the roadways will be accessible without lane closures, police or town escorts to access manholes isn't anticipated in this proposal.

- Real-Time-Kinetic (RTK) GPS methods will be available to establish control.
- Horizontal datum will be NAD83 (New Hampshire state plane coordinate system).
- Vertical datum will be NAVD88.
- Bathymetric survey can be performed with a 14-foot boat, battery trolling motor and a HYDRO-Lite sensor, LIDAR or an outside vendor isn't anticipated in this proposal.
- Record utility drawings will be provided to the survey team prior to the start of the field work.
- The estimated fee is based on the site ground, shoreline and water conditions being free and clear of any snow and/or ice that would limit visibility or access to the features.
- Anything not specifically identified in this scope is excluded.

II. **RESILIENT DESIGN PLANNING**

Advancement of the Prescott Park Master Plan requires a consideration of present and future climate conditions and potential environmental impacts, including extreme precipitation, extreme heat, sea level rise (SLR), and storm surge. The goal is to identify site-specific strategies that eliminate, reduce, and mitigate these adverse impacts, while also supporting the park's intended purpose, function, and programming.

The project team is familiar with climate change planning in New England and has already prepared a list of related resources to support this project. We will conduct a literature review of these resources and prepare a memorandum summarizing reports and previous recommendations related to the Prescott Park area. The purpose of the literature review is to support informed decision-making and consider previously identified coastal resilience solutions proposed for other parks in Portsmouth and for similar sites regionally.

Based on our literature review, we will identify time horizons to consider for the design of Prescott Park flood resilience features. This will be based on existing studies developed locally and regionally, and on the intended useful life of the planned infrastructure. We anticipate selecting present day, 2050, and 2100 time horizons for climate conditions based on a preliminary review of available information.

We will work with a subconsultant, RPS, that specializes in coastal modeling to prepare a model that supports resilient design strategy selection at the site. We propose developing a coastal model with current shoreline configuration and elevations, and assessing the following 10 storm scenarios:

Table 1 – Flood Assessment Scenarios

ID	Shoreline/Elevation Configuration	Mean Seal Level Basis	Tide Level	Storm Water Level
1	Present	Present Day (based on 1983-2001 national tidal datum epoch)	MHHW	10-yr
2	Present	Present Day (based on 1983-2001 national tidal datum epoch)	MHHW	100-yr
3	Present	Year 2050 <b>low</b> SLR estimate	MHHW	10-yr
4	Present	Year 2050 <b>high</b> SLR estimate	MHHW	10-yr
5	Present	Year 2050 <b>low</b> SLR estimate	MHHW	100-yr
6	Present	Year 2050 <b>high</b> SLR estimate	MHHW	100-yr
7	Present	Year 2100 <b>low</b> SLR estimate	MHHW	10-yr
8	Present	Year 2100 <b>high</b> SLR estimate	MHHW	10-yr
9	Present	Year 2100 <b>low</b> SLR estimate	MHHW	100-yr
10	Present	Year 2100 <b>high</b> SLR estimate	MHHW	100-yr

- Low and high SLR are the ends of the range of SLR considered for the site and will be based on literature review
- The 10- and 100-year design storm scenarios were selected based on a preliminary review of available information
- 10-year design storm represents annual 10% probability flood occurrence
- 100-year design storm represents annual 1% probability flood occurrence

RPS will develop a 'quasi'-bathtub assessment that downscales the results of the USACE North Atlantic Coast Comprehensive Study (NACCS) onto high resolution elevation data for the park. NACCS includes state-of-the-art atmospheric, wave, and storm surge modeling to characterize storm hazards in the North Atlantic region, including coastal New Hampshire. Coupled numerical models simulated winds, waves, and water levels along the coast based on 1,050 synthetic tropical storms and 100 historical extratropical storms. The result was a large catalog of storm surge, wave heights, and extremal statistics derived from the model runs and stored at high-resolution stations along the coast. While the NACCS grid does not adequately resolve the area of interest around Prescott Park, there are several save points in the area that could be used to define storm surge heights for the 10 proposed scenarios.

### III. HISTORIC BUILDING ASSESSEMENT

The Shaw and the Sheafe Warehouses are incredibly important historic structures to the City of Portsmouth and Prescott Park. During the Master Plan process, the buildings were evaluated by engineers and architects focused on historic structures. Several recommendations were made to stabilize and protect the buildings. In addition, there was robust discussion about the programming of these two buildings.

The Sheafe was identified for potential uses including a maritime museum, ticket sales for the Gundalow, and a seasonal art gallery. The Shaw would continue to support park maintenance operations, and the Prescott Park Arts Festival may expand their footprint to include "back of house" production programming like changing rooms and costume repair, which is currently accommodated in trailers behind the stage. To determine the feasibility of these proposed programs, a Preliminary Build-Out Design will be completed. This scope would include the research and design necessary to develop a selective retrofit, stabilization, and protection plan.

Work under this task will include:

We understand that all work must be completed in accordance with the US Secretary of Interior's standards as appropriate to preservation, rehabilitation, and reconstruction. We further understand that, as a historic property within the purview of the Charitable Trust Unit, the Attorney General's office will be reviewing all work to ensure it conforms with current interpretations.

Part A: Sheafe and Shaw Documentation:

- Visit site, and measure/photograph the existing buildings.
- Provide floor plans/roof plan, building section and exterior elevations for each warehouse in CAD that is based on the observed existing conditions. Include (1) building section for each warehouse.
- CPS is to provide access and provide clear work areas for TT documentation.
- Intent is documentation of existing conditions; structural engineer will assess integrity of existing conditions. This can be provided through the allowance for structural engineering.

Part B: Sheafe and Shaw Programming/Planning:

- Work with CPS and WS to develop programming for the interior space plan and adaptive re-use of the existing building.
- Develop (2-3) floor plan use options (not detailed plans, but space planning and use distribution options) that evaluate how to re-program the existing buildings. Coordinate floor plan space planning with Part I above.
- Review and make recommendations for ADA accessibility, plumbing fixture count, egress and other “big picture” code requirements. Intent of review is not to provide a code review, but high-level overview of requirements.
- Consultants:
  - \* Code Consultant: Coordination with code review for Building Code / Accessibility Code Review has been included.
  - \* Historic Preservation Consulting: (1) Site visit. Include review of how programming and space planning may impact future historic preservation goals. Historic preservation review is being provided through an allowance and may need to be further evaluated as design progresses.
  - \* Structural Engineer: Review is included and is to be an additional service once programming goals are evaluated. Fee has been provided as an allowance and may need to be further evaluated after programming review.

#### IV. PERFORMANCE STAGE FEASIBILITY STUDY

The approved Master Plan for Prescott Park included a movable stage for seasonal use in a new location. Stage and production consultants were involved in developing a viable strategy that would serve the arts programming within the park at a high level and honor the park-first approach endorsed by the City Council.

The next step in developing this concept is to reengage the team and begin the schematic design around the specific arts programming projected to occur in Prescott Park for the foreseeable future.

As mentioned, in addition to the actual stage, there are many “back of house” activities that are currently accommodated by temporary storage trailers during the high season. These facilities significantly impact the park user experience by cluttering this historic landscape with auxiliary structures. This strategy is not in keeping with a park-first approach. The design exercise of the stage will also include a study of the feasibility of leveraging the Shaw Warehouse to support these activities or identifying alternatives that honor and respect the landscape of Prescott Park.

For this initial scope of work, we propose bring the stage team together and have them complete precedent research of other seasonal stages with covers. This team will include Leslie Chiu, production consultant who has worked on Shakespeare in the Common, and her associate Seaghan McKay; Jon Sharpe, President of United Stage and Rigging, and Ted Touloukian, architect. We are prepared to meet to discuss seasonal outdoor stage opportunities based on the expectations of the Prescott Park Arts Festival (PPAF). This conversation will be followed by another meeting that includes PPAF to discuss future scenarios for a seasonal stage. Weston & Sampson will produce a memorandum that summarizes the outcomes and next steps from the meeting.

#### V. INFRASTRUCTURE SCHEMATIC DESIGN – PARK-WIDE

Each utility system was evaluated and assessed as part of the Prescott Park Master Plan. The systems are in varying condition from stable and functioning to failed. Plans to improve the park are inherently tied to the upgrade of each of these infrastructure systems, which include:

- Water
- Seawall Systems (in coordination with Tighe and Bond)
- Drainage
- Sewer

- Electrical
- WiFi Access Points
- Telecommunications
- Natural Gas

We will design an infrastructure schematic (30% design) for each system in close coordination with the projected loads required for the programming outlined in the master plan, as well as contingency planning for the future. Designs will include locations of structures, rims, and inverts to ensure they comport with the proposed design of the master plan and work with existing outfalls and systems that these improvements will tie into.

Our team will carefully curate the implementation of these improvements in concert with the above-ground park improvements to ensure that we multi-task each construction dollar and achieve the most efficient deployment of funds.

**VI. PHASE ONE BUILD OUT SCOPE**

Through careful understanding of existing site conditions, as well as current thinking related to the various infrastructure improvements throughout the park, Weston & Sampson will discern a Phase One scope of work, including an opinion of probable cost. This scope of work will include infrastructure systems and site features to be upgraded, as well as the interface between new work and later phases of improvement. We will also identify the scope and cost of the Phase One design, permitting, bidding, and construction administration services effort.

**VII. PROJECT SCHEDULE AND PHASING PLAN**

We understand that the City Manager needs to have an accessible and legible document that shows a clear timeline and capital expenditure expectations for the full implementation of the Master Plan. Further, it is important that the phasing ensure that, to the greatest extent possible, no completed construction be redone or disturbed as the phases are built out. The final deliverable will be an 11x17 diagram that illustrates the phases by name with a brief description, the total opinion of the probable cost for that particular phase and the start / end dates associated with it. As the project evolves, this information can be readily updated for ongoing communications.

These seven phases of work will be instrumental in further defining and developing the overall design of Prescott Park in keeping with the approved Master Plan.

Work Task	Fee
I. Survey and Mapping (including utilities)	\$58,600
II. Resilient Engineering and Design (bathtub modeling)	\$59,800
III. Historic Building Assessment	\$17,000
Code Consultant Allowance	\$1,500
Historic Preservation Consultant Allowance	\$3,500
Structural Engineer Consultant Allowance	\$6,500
IV. Seasonal Stage Research and Meeting	\$8,450
V. Infrastructure Schematic Design	\$24,500
VI. Phase One Build Out Scope	\$15,000
VII. Project Schedule and Phasing Plan	\$5,000
<b>Subtotal Basic Services</b>	<b>\$199,850</b>

**AERIAL LIMITS of SURVEY**



ACCEPTANCE BY:

\_\_\_\_\_  
Name, Title

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature