

# CITY OF HIGH POINT

## AGENDA ITEM



**Title:** Schematic Design Contract – HH Architecture

**From:** Lee Tillery –Parks and Recreation Director

**Meeting Date:** May 4, 2020

**Public Hearing:** N/A

**Advertising Date:** N/A

**Advertised By:** N/A

**Attachments:** Attachment A – Contract w HH Architecture – Schematic Design (CLP)

Attachment B – City Lake Park Master Plan

<https://www.highpointnc.gov/DocumentCenter/View/13127/City-Lake-Park-Master-Plan-2019?bidId=>

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### **PURPOSE:**

Proposed contract with HH Architecture to perform schematic design services for the High Point City Lake Park Site Master Plan Phase 1. Phase 1 of this plan was identified as one of the 2018 approved Municipal Bond projects.

### **BACKGROUND:**

The City Lake Master Plan was finalized and approved by City Council in August 2019. The plan outlined two phases to complete necessary renovations and improved amenities at City Lake Park. There are three planning phases that will prepare us to bid Phase 1 of the project: Schematic Design, Design Development and Construction Documentation. This contract is for schematic design only which will account for about 25% of the total design. The reason to only move forward with schematic design is to better understand our needs according to the plan and increase our understanding on current costs before moving forward to the next design phase. The estimated time frame to complete this contract is 16 weeks.

### **BUDGET IMPACT:**

Funds for this project are included with the approved 2018 Municipal Bond projects for the renovation of City Lake Park. This initial contract will coincide with the associated Capital Project Ordinance and Reimbursement Resolution.

### **RECOMMENDATION / ACTION REQUESTED:**

Staff recommends City Council approve contract with HH Architecture in the amount of \$250,500.

HH ARCHITECTURE

~~March 17, 2020; April 1, 2020;~~ Revised April 16, 2020

Lee Tillery  
High Point Parks and Recreation Director  
136 Northpoint Avenue  
High Point, NC 27262

RE: High Point City Lake Park Renovation  
HH Project number: 20-022

Dear Mr. Tillery,

HH Architecture is pleased to present this proposal for the schematic design services of the High Point City Lake Park, phase one scope from the August 2019 Master Plan.

### 1.) Basic Scope:

This schematic design phase will provide additional investigation and detail to the phase one of the Master Plan and provide an updated cost estimate.

The scope of work as defined in the Master Plan includes:

- Renovate the 6,800 square foot gymnasium space into a Multipurpose assembly area, catering kitchen, and office space.
- Renovating the two existing Pool Locker Rooms, each building is approximately 2,470 square feet.
- Add a small concession building to the Pool Deck, approximately 750 square feet.
- Remodel the existing swimming pool and pool deck to meet the Owner's budget and goals. The following items were discussed during the Master Plan:
  - Redesign of the existing pools to remain in a similar shape as the exiting pool to respect the heritage for this facility, however, provide the new structure that accommodates the approved master plan amenities
  - Design new interactive Splash pad on upper entry deck.
  - Design new competition/multipurpose pool with recreational amenities. Desired recreational amenities might include Ninja Cross and other participatory features
  - Leisure/Lifestyle Pool with extended lazy river.
  - Attractions or features to develop durable entertaining destination developing iconic appeal for the community.
  - Pool entry plaza and service entrance
- All-inclusive playground
- Lawn, stage, plaza, and event space
- Expanded parking

- Bridge connection to Bicentennial Greenway and Piedmont Environmental Center
- ADA connections and access to the renovated gymnasium entrance and pool
- Stormwater Control Measure
- Landscaping (code required and enhanced)
- Pedestrian connections to the surrounding park
- Stormwater and sanitary sewer infrastructure

#### Architecture scope includes:

- Overall leader of the project
- Confirm programmatic requirements from Master Plan
- Assist with questions
- Provide schematic design level plans, elevations, and sections required for cost estimating.

#### Civil Engineering and Landscape scope includes:

##### Master Plan Refinement:

The design team will digitalize the proposed elements as depicted in the Master Plan. Based on any comments from the City during the kick-off meeting, the results of any detailed investigations, current data or studies completed since the date of the master plan, or any other information impacting the Phase I project limits, the design team will refine the master plan design. This digitalized, refined concept design will serve as the basis for 30% construction drawings.

The scope of this task includes two rounds of City comments received from:

- The project kick-off meeting
- Review of the digitalized concept plan

##### Schematic Design Drawings:

- The drawings will provide 30% design for site engineering, stormwater engineering, landscape architecture, details and plan notes at a level of detail that will allow for accurate cost estimating of all projects.
- Drawings to include:
  - Existing Conditions Plan (Site Survey)
  - Demolition Plan
  - Utility Plan (sanitary sewer and water connections)
  - Grading with rough cut/fill quantities
  - Stormwater collection and conveyance (piping) on Grading Plan with preliminary pipe sizing
  - Erosion control plan and sequence for the project
  - Site Plan
  - Hardscape Plan
  - Landscape Plan – Code Required
  - Landscape Plan – Enhanced
  - Site lighting and furnishings Plan
  - Limited Details

##### Preliminary Stormwater Design:

- Prepare preliminary design drawings for one above ground SCM for Phase 1, based on the approved conceptual master plan for Phase I of the park. Drawings will be completed to a 30% level of detail and suitable for cost estimating. Scope includes coordination with regulatory agencies as may be required to verify requirements for managing stormwater runoff from the site.

#### Preliminary Civil + Infrastructure Design + Engineering:

- Prepare preliminary design drawings for park features and infrastructure based on the approved refined conceptual master plan to be prepared by McAdams. It is assumed that preliminary design drawings will be completed at a 30% level of detail. These documents will also be suitable for cost estimating. This phase will also include realignment of the access road leading to the parking lot north of the recreation center.

#### Preliminary Landscape Architecture & Park Features:

- Prepare Landscape Architecture Schematic Construction Documents (30% level of detail) setting forth in the requirements of construction for landscape and hardscape elements including:
  - Sidewalk, terraces, and pedestrian paving and detailing
  - Interface between the proposed pool and surround site
  - All-inclusive playground
  - Event lawn
  - Building entrance
  - Hardscape materials and furnishings pallet
  - Ramps and handrails, seat walls, raised planters, retaining wall system (height and aesthetic only; coordinated with structural design and details)
  - Landscape buffers and other plantings required by the City's Unified Development Ordinance (plant type only)
  - Landscape plantings above and beyond code requirements (location and type only with a selected plant pallet and precedent imagery)
  - Limited pedestrian and landscape lighting (location and fixture selection only – parking lot lighting, wiring and electric engineering by others)

#### Utility + Agency Coordination:

- Preliminary coordination with agency regulators to understand all regulatory requirements. Following preliminary design coordinate preliminary plan review of projects with appropriate governing bodies to review schematic plans with local regulations. Agencies to include within this general review step (but are not limited) to; NCDOT, NCDEMLR, NCDEWQ, City of High Point Technical Review Committee, City of High Point Parks and Recreation Department Staff and Maintenance, and Guilford County.

#### Detailed Corridor Study:

- For the High Point City Lake, the Team will conduct site tours to ground-proof the existing conditions, opportunities and constraints of the proposed alignment as a basis for planning. Throughout these site visits, the Team will document observed conditions via digital photography and field notes. Field reviews will be evaluated based on available access. These areas will be selected to be the most representative of the overall greenway or trail corridor. The following areas are anticipated to be included in site visit / tour:
  - Key sections along stream corridors.
  - Key intersections and any on-road requirements.
  - Key destinations and connections.
- The preferred alignment recommendation will be based on best practices for greenway location given topography, floodplain impacts, road crossings, tributary stream crossings, major stream crossings, wetlands, lake crossings, crossings beneath existing road / rail bridges, adjacent land uses and overall user experience. Analysis will be developed with permitting, construction, maintenance and user experience in mind. While alternatives evaluated will be noted, detailed analysis will be developed for the preferred alternative only.
- The Team will prepare a detailed corridor map for City Lake Park Greenway. This tool will assist the City in acquiring necessary property / easements (if required); budgeting for

design, construction and maintenance; identifying and pursuing appropriate funding and communicating with the public and elected officials. The cut sheet will include:

- A detailed corridor map identifying:
  - Existing streams, roads, neighborhoods, schools, and population centers from GIS data
  - Existing bike/ped facilities such as trails, bike lanes, and sidewalks from GIS data
  - Proposed bike/ped facilities from past planning efforts
  - Proposed / preferred trail alignment including the location of possible:
    - Pedestrian bridges / boardwalks
    - Pedestrian underpasses
    - Crosswalks and at grade crossings
  - Routing challenges and opportunities addressing:
    - Topography
    - Stream crossings
    - Floodplain impacts
    - Observed wetlands
    - Road crossings
  - Photos of key elements along the segment
- A general written description of corridor
- Project "Snapshot" to include info on length of segment, estimated construction year, etc.
- List of previous planning efforts
- Summary of potential Right of Way needs including:
  - Total estimated area needed based on GIS data
  - Number of impacted parcels that are not owned by the City based on GIS data
  - Number of impacted property owners based on GIS data
- List of potential permitting needs
- Cost Estimate Summary Table including:
  - Construction cost in current year dollars - Construction costs are based on a linear length of segment
  - Escalated construction cost to year of construction based on input from the City
  - Contingency based on escalated construction cost
  - Land acquisition and/or Right of Way costs – based on available tax values
  - Engineering / Design costs – a range based on construction costs will be provided
  - Construction Engineering and Inspections (CEI) costs based on escalated construction costs
  - List of potential funding sources based on segment

Structural Engineering scope includes:

- Preliminary structural design for the SD phase of the City Lake Park renovation.
- Review site details for footings, site walls, raised planters, retaining walls, columns, and play equipment/shade structure.
- Structural deliverables will include a narrative and preliminary plans for the renovation.

#### MEP Engineering scope includes:

Plumbing, mechanical, electrical engineering for the building renovations.

The Schematic Design phase of the project will include a narrative including the following scope

- Selecting the parking lot lighting and running photometric calculations for the pedestrian and landscape lighting. Work with site designer who will select and locate the pedestrian and landscape lighting.
- Provide electrical and plumbing connections for swimming pool new pumps and pool equipment.
- Field investigations to obtain existing conditions. Unless specifically noted otherwise, our site visit(s) to observe/confirm the existing conditions will be limited by what we are able to reasonably verify in exposed or readily accessible areas.

#### Aquatic Design scope includes:

Water Technologies Incorporated (WTI) will consult with the Client to confirm project goals and requirements and develop the spatial relationships of the aquatic components of the project. For the Schematic Design (SD) phase, WTI will perform the following tasks:

- Confirm Aquatic Program and Capacities and Mechanical Program
- Develop Water Rides, Activities and Features
- Define Pool Zones, Depths and Turnover Rates
- Develop Pool Wall Profile Options
- Select Preliminary Mechanical Equipment
  - Identify pool filtration, heating and lighting methodologies
- Develop Preliminary Mechanical Equipment Layout
- Develop Aquatic Drawings
  - SD Level Plans, Sections, and Details
- Develop Preliminary Utility Requirements
- Develop Rough Order of Magnitude (ROM) Aquatic Construction Cost Opinion

#### Cost Estimating scope includes:

- MBP will provide a cost estimate and written report, including assumptions and clarifications for the schematic design phase of Phase 1 of the City Lake Park Master Plan.

## **2.) Additional Scope:**

While the following are not required to be performed by the design team, these tasks must be completed in order to prepare 30% construction drawings and an accurate cost estimate.

#### Drone Topographic Survey:

- UAS Flight and Data Services - McAdams UAS flight crews will perform all flights under Part 107 regulations and will acquire if necessary, the FAA airspace authorizations to perform such tasks. Once any necessary authorization has been granted flight plans will be prepared to complete the project mission. LiDAR and aerial photography will be collected within the project limits. Ground control points and photo identification points will be established for the project site, recording the northings, eastings, and elevations for each on NAD83(2011) and NAVD88 datum. The data collected from the UAS will be validated with the collected points. Aerial data will be processed in accordance to ASPRS Accuracy Standards for Digital Geospatial Data, as well as any regulation required by the Board of Examiners for Engineers and Land Surveyors. Ground classification will be extracted from the LiDAR data and merged with information collected from the UAS Supplement Ground Survey task. Deliverable will be a signed and sealed topographic survey map.

- UAS Supplement Ground Survey - Perform a topographic survey on the ground to supplement the UAS survey. Features to be located will include critical routes including accessibility routes, roads/travel lanes, and handicap ramps. These features will be incorporated into the UAS survey data and included on the topographic survey map.

#### Utility Designation (Private Utility Locating/Quality Level B):

- Conductive utilities will be marked utilizing geophysical prospecting techniques in conjunction with radio, audio, and electromagnetic equipment. Multiple utility sweeps will be performed to identify any unknown conductive utilities. All non-conductive utilities will be identified utilizing above ground features, utility plats and or as-built, and staff recollections. Client should make every possible effort to supply McAdams with private utility records prior to the start of any level B field investigation. McAdam's SUE field crews cannot confirm whether any utility is active or inactive.
- Should a non-conductive utility not be locatable by the above-mentioned practices, the client will be contacted to discuss alternative methods (GPR) and additional fees. Utilities will be marked utilizing standard marking paint and/or flags and whiskers in accordance with APWA standard code to ensure accuracy in the collection of the information. Basic Maintenance of Traffic will be provided. Basic MOT includes the following: cones and signs as needed.
- McAdams makes clear that utility designation or quality level B services are by no means a guarantee of 100% accuracy of the horizontal location of any given utility. Further, we cannot guarantee that utilities not shown on utility as-builts or records will be "electronically visible" in our manual sweeps or utilizing the ground penetrating radar.
- Quality level A (also known as pot holing) is the only way to verify the horizontal accuracy of Quality level B efforts.

#### Detailed Surface Water/Wetland Delineation and Desktop Surface Water/Wetland Verification:

- A detailed delineation of surface waters and wetlands present on the tract will be completed in general accordance with 1987 Corps of Engineers Wetland Delineation Manual and the appropriate regional supplement and the NC Division of Water Resources Methodology for Identification of Streams.
- Sequentially numbered flags will be hung in the field around the boundaries of wetlands and at the start/end points of stream channels. A report of our findings will be provided including the stream types present, flag numbers and features to be surveyed, general permitting guidance, and a map of the surface waters, wetlands, and riparian buffers present on the property.
- With property owner permission, the delineation along with the appropriate wetland data, stream identification and jurisdictional determination forms will be provided to the USACE for a desktop verification of the delineation and issuance of a preliminary jurisdictional determination that is suitable for site plan approval and permitting purposes. If a field verification is required, see the allowances below for additional fees.

#### Geotechnical Investigation:

- The geotechnical investigation will consist of a single site visit to perform reconnaissance and a "Desktop Study" utilizing published data available on the internet to gain inferences about site features and past site uses. During the site visit, the team will perform various hand auger, probe rod, dynamic cone penetrometer (DCP) and/or rod sounding tests to determine subsurface information related to rock depth, subgrade soils, allowable bearing capacity, or other potential conditions identified during our site recon or of concern to the design team.
- We propose borings at the following locations based on preliminary descriptions of the project: potential retaining walls, proposed parking lot, proposed great lawn area, proposed playground area, and proposed waterslide. A total of 6-10 test locations will be included depending on depth and test methods employed.

### CCTV Storm + Sanitary Sewer CCTV

- Given the age of the storm and sanitary sewer systems and the lack of data regarding existing infrastructure, this proposal includes the cleaning and video of storm and sewer infrastructures. This exploration will allow a greater degree of accuracy when designing storm and sanitary sewer systems and prevent costly change orders by contractors due to unknown conditions of the existing infrastructure.
- Vision NC will attempt to clean and camera all accessible structures without major obstructions. Vision NC will attempt to complete all surveys in one direction, though some may require a reversal inspection should they encounter a collapsed pipe, intrusions, etc. The camera systems used by Vision NC conform to most municipal specs, and each of the camera operators are PACP certified by NASSCO. Each pipe segment will have its own CCTV asset and reports including all PACP coding/conditions.

### **3.) Phases:**

**Schematic Design:** Develop an understanding of Owner's goals and objectives by using the Phase One Scope in the City Lake Park Master Plan dated August 2019. Provide code summary sheet, floor plans, elevations, wall sections, and project narrative which will allow for accurate Schematic Design cost estimating. Attend up to four (4) meetings with the Owner. Submit to Owner for review and coordinate for approval.

### **4.) Consultants:**

For Civil Engineering and Landscape Design, we propose:

**McAdams Company**

Contact: Rachel Cotter, RLA  
2905 Meridian Parkway  
Durham, NC 27713  
Phone: (919) 361-5000 ext. 132

For Structural Engineering, we propose:

**Lynch Mykins Structural Engineers**

Contact: Anna Lynch, PE  
415 Hillsborough St., Suite 101  
Raleigh, NC 27603  
Phone: (919) 782-1833

For Plumbing, Mechanical, and Electrical Engineering, we propose:

**Crenshaw Consulting Engineers**

Contact: Paul Szalanski, P.E. LEED AP BD+C  
3516 Bush Street, Suite 200  
Raleigh, NC 27609  
Phone: (919) 871-1070 ext. 103

For Aquatic Design and Consulting, we propose:

**Water Technology Inc.**

Contact: Doug Whiteaker  
100 Park Avenue, PO Box 614  
Beaver Dam, WI 53916  
Phone: (920) 210-1110



For Cost Estimating, we propose:

**MBP**

Contact: Chris McLuckie  
3200 Beechleaf Court, Suite 910  
Raleigh, NC 27604  
Phone: (919) 875-0124

**5.) Fee:**

For the scope detailed above, we propose the following lump sum fees:

<b>Basic Fee</b>	
Schematic Design	<u>\$211,100</u>
<b>Subtotal Basic Fee</b>	<b>\$211,100</b>
 <b>Additional Fees</b>	
Drone Survey	\$9,000
Utility Designation	\$5,700
Wetland Delineation	\$6,900
Geotechnical Investigation	\$6,400
CCTV Storm + Sanitary Sewer	<u>\$11,400</u>
<b>Subtotal Additional Fees</b>	<b>\$39,400</b>
 <b>Total - Basic + Additional</b>	 <b>\$250,500</b>

It is understood that the Master Plan estimated this phase of work to be \$14M, which is what the design team used as a basis for this schematic design phase. However, it is understood that the City's budget is \$10M and future design phase fees will be based on that budget.

Reimbursable Expenses

We will bill additionally for reimbursable expenses at 1.25 times the cost. Reimbursable expenses include, but are not limited to:

- Printing costs
- Shipping costs
- Mileage
- Miscellaneous smaller reimbursables

**6.) Schedule:**

The following is an estimated schedule for the scope:

Schematic Design	16 weeks
Owner Review	4 weeks

A design amendment will be issued for the Design Development thru Construction Administration phases with the revised project scope.

**7.) Assumptions**

- Assumes that any new building structures will be sited such that it is not in a flood hazard area.
- Assumes that McAdams will perform the topographic survey via drone as described in the Additional Project Scope section above.
- A separate contract will be necessary for preparation of future design phases (i.e. Design Development, Construction Documents, bid phase services, construction administration along with the design of any identified offsite improvements (e.g. utility extensions, offsite roadway/intersection improvements, signal modifications, etc.).
- If changes in the project scope result from significant modifications to specific project site plans as directed by the Owner or other unforeseen influences to the design and management scope of the project, additional services by the consultant will be warranted. A supplemental scope and fee estimate will be provided as necessary.
- The City shall provide access to the sites and any adjacent areas which may be applicable to completing the enclosed scope of services. This may require the City to gain permission from landowners for access to the properties which are not owned by City of High Point.
- Stormwater Assumptions:
  - Water quality treatment to meet Water Supply Watershed requirements will only apply to areas with increases in Built Upon Area (BUA)
  - The Stormwater Control Measure (SCM) for Phase I is expected to be one extended dry detention facility.
  - Development of design drawings for the SCM in Phase 2 is not included in the scope of services of this Agreement.
  - FEMA floodway exists upstream and downstream of High Point Lake. No encroachments into the regulatory floodway are anticipated with Phase I of this project. No flood studies or flood study modifications are included within the scope of this Agreement
  - Structural design of any SCM elements is excluded.
  - Detention (flood control) for the 10-year storm is not anticipated for this project
- CCTV Assumptions:
  - All structures are accessible by truck
  - Storm sewer infrastructure does not exceed 1,000 linear feet
  - Sanitary sewer infrastructure does not exceed 1,000 linear feet
  - Vision NC will be mobilized no longer than two days or additional charges in the form of a change order may be required

## 8.) Excluded Services

The following services can be provided for additional fees:

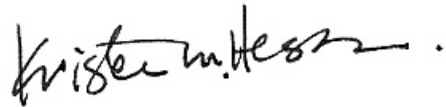
- Design beyond Schematic Design
- Assistance with bidding
- Construction administration
- Closeout and record drawings
- 3-Dimensional Plans or Renderings
- Traffic planning / engineering services (i.e. traffic impact analysis, design of offsite traffic improvements, signal design, etc.) are outside the scope of this agreement.
- Surface Water/Wetland Verification Site Meeting. A site meeting with a USACE representative may be required for issuance of the preliminary jurisdictional determination. A site meeting will be only be conducted if requested by the USACE.
- Cultural Resources Consultation & Protected Species Survey
- Permitting services are not included within this scope of work.
- Addressing comments received by the City, or required updates based on utility and agency coordination are excluded and will be performed as part of the Design Development (DD / 60%) construction drawing phase.

- Asbestos Survey
- Phase I Environmental Investigation
- Preparation of Rezoning or Zoning Amendment documents for subject properties
- Lot recombination or preparation of exhibits for same
- Off-site utility extensions specific design
- Traffic or Transportation Analysis
- Off-site roadway improvements specific design
- Permitting Services aside those specifically stated herein
- Permit application fees
- Legal advertisements for construction contracts
- Construction period services
- Court appearances for litigation, or preparation for same
- Assistance with acquisition of right-of-way or off-site easements; preparation of exhibits for same
- Revised directives not outlined in this proposal from Owner after project process has begun
- Any other services not specifically described in the scope of work
- Detailed irrigation design
- This proposal does not include historical, archeological, insect, or terrestrial or aquatic animal surveys that
  - require highly specialized expertise; and
- Utility locating by Vision NC through CCTV
- Commissioning
- Sprinkler, Structural, Telecommunications, Security, Acoustical and LEED design.
- Scissor lift rental for field verification
- Book specifications (for SD phase)
- Theatrical or special lighting design
- Generator or UPS design
- PME utility design
- Detailed coordination with utility companies (i.e. electrical load sheets)
- Building envelope energy code compliance (provided by architect)
- Energy Modeling: We have assumed energy code compliance will use the prescriptive method.
- Hazardous location design or classification
- Work outside the area of work in scope listed above
- Cathodic protection
- Security system, IDS, & CCTV design
- Access control system design
- Public address system design
- Telecommunications design
- Lightning protection design
- Photovoltaic design
- Solar hot water heating
- Electrical coordination study & arc-fault analysis
- LCCA
- Energy Analysis of alternate HVAC systems
- 24/7 HVAC for specialty server room / IT room
- Removal of fixed building elements and survey or confirmation of concealed or inaccessible locations is not included. In those locations, we will base our understanding of the existing conditions on previous plans, information from site personnel or inference from known information. If during the course of construction the inaccessible or concealed areas are exposed and/or systems are found to be different than expected and the contractor cannot address the discrepancies with field modifications, we can be engaged upon request to visit the site and update our drawings and calculations on an hourly additional basis or by another arrangement.

- Additional review cycles or changes to plans once substantial progress has been made will be considered additional services. We will notify you immediately if this situation arises.

Please let me know if you need additional information. Thank you so very much for this opportunity. We are excited to begin this project.

Sincerely,

A handwritten signature in black ink that reads "Kristen M. Hess" followed by a period. The signature is written in a cursive, flowing style.

Kristen M. Hess, AIA, LEED AP  
Principal