Anchor QEA of North Carolina, PLLC
231 Haywood Street
Asheville, North Carolina 28801
828.281.3350

August 26, 2026

Matt Begley
Recovery and Capital Programs Manager
Town of Black Mountain
160 Midland Ave
Black Mountain, North Carolina 28711

Re: Proposal for Assessment and Restoration Options for Flat Creek Greenway

Dear Matt,

Anchor QEA of North Carolina, PLLC, is pleased to provide the Town of Black Mountain (Town) with the following proposal for restoration of the Flat Creek Greenway (Project or Greenway). The purpose of this effort is to perform a thorough post-storm detailed damage assessment and provide the preferred method of repair to portions of the Flat Creek Greenway that were damaged by flooding related to Tropical Storm Helene in September 2024.

Extreme flooding caused Flat Creek to escape its banks along the Greenway corridor with the creek abandoning its previous course, flooding residences, and destroying portions of the paved greenway trail. The Town anticipates receiving FEMA-PA (Federal Emergency Management Agency – Public Assistance) funding to complete the design and implementation of this recovery project. Anchor QEA will contract with the Town to perform Phase 1 of the restoration to include a damage assessment and provide alternatives for repair. We will then meet with the Town and FEMA representatives to review funding eligibility and will then develop the Phase 2 scope to advance through the detailed design under a contract amendment.

The proposed scope of work summarized below is based on our preliminary Site reconnaissance visit, conducted on September 5, 2025. This scope of work for the initial phase assumes that Anchor QEA will perform a detailed review of existing data, perform a detailed Site assessment, produce a Damage Description and Dimensions document, and provide repair alternatives with planning-level cost estimates. As the proposed alternatives have not been evaluated and the proposed solution has not yet been determined, the following scope of work does not include the completion of the Damage Assessment Report, a detailed design (including hydrologic and hydraulic modeling and no-rise evaluation) or subsequent phases of permit finalization, construction specifications and bidding, construction management, and closeout, which will be scoped once the preferred alternative is selected.

This scope of work (SOW) includes the following tasks:

1. Existing Data Review

2. Site Assessment
3. Damage Description and Dimensions Report
4. Alternative Methods of Repair
5. Damage Assessment Report
6. Project Management and Meetings

Scope of Services and Deliverables

Through Phase 1 of this restoration project, Anchor QEA will perform the following tasks.

Task 1—Existing Data Review

This task will consist of reviewing existing available data.

Subtask 1.1 Existing Data Review

Anchor QEA will request, acquire, and review available existing data the design team deems necessary for understanding existing and pre-storm conditions at the Site. Potential items Anchor QEA may request and review include:

- Historic and current aerial imagery
- LiDAR elevation data
- Stormwater input locations
- Soils mapping
- Historic storm and precipitation data
- FEMA mapping and published models
- Infrastructure and parcel mapping
- Design or construction documentation of the pre-Helene conditions

Assumptions

- We will rely on Town staff to provide documentation they have available, or contacts for holders of existing data.

Deliverables

There are no deliverables associated with this task.

Task 2—Site Assessment

Anchor QEA will perform a detailed assessment of the Site with the intent of documenting the damage to the Greenway from Tropical Storm Helene.

Anchor QEA staff will photo document the Site and will prepare the preliminary impact understanding.

Assumptions

- Right of entry will be coordinated by the Town of Black Mountain.

- Anchor QEA will have access to the Site but will remain on publicly owned premises.
- Two members of the Anchor QEA design team will be on site for 1 half day.
- No PLS (professional land surveyor) will be contracted at this time. PLS survey will be included, if necessary, as part of the detailed design to be scoped separately.

Deliverables
There are no deliverables associated with this task.

Task 3—Damage Description and Dimensions Report

Anchor QEA will acquire, review, and verify the previously completed (by others) Damage Description and Dimensions (DDD) Report. This report documents the type, location, extent, and estimated costs of damage, following the standardized framework for FEMA-PA assessments. We will begin with a structured Initial Damage Assessment (IDA), incorporating geotagged photographs, GIS mapping, and field inspections to capture the magnitude of damage to the greenway, adjacent streambanks, public and private structures, and associated infrastructure. We will categorize the Site in accordance with FEMA's PA work eligibility matrices and supporting documentation checklists, resulting in an analysis that provides sufficient technical justification for federal disaster grant consideration.

Assumptions

- Anchor QEA will follow FEMA guidance when verifying the Damage Description and Dimensions Report.
- Anchor will summarize the findings of the DDD verification in a 1-page summary memo.

Deliverables
Anchor QEA will deliver the revised Damage Description and Dimensions Report in PDF format and verification summary memo, via email.

Task 4—Alternative Methods of Repair

Anchor QEA will provide the Town with proposed alternative methods of repair which will include:

- A clear rationale and explanation of damages, and
- Why the proposed repair alternatives are appropriate and reasonable
- Concept figure depicting the proposed alternatives

To determine the proposed repair alternatives, Anchor QEA will assess options including returning the damaged infrastructure to its pre-storm level of function or rebuilding the greenway infrastructure to a level of service that will provide enhanced resiliency to future flooding events by acquiring adjacent property.

These recommendations will address FEMA guidance and will support the Town's position to secure FEMA funding for design and implementation.

An order-of-magnitude (OOM) cost for design and implementation of the proposed repair alternatives will be developed to support subsequent phases of this project. The OOM cost will follow the American Association of Cost Estimation International Recommended Practices for Cost Estimating System[1] for a Class 5 estimate with an expected accuracy range of -50% at the low end and +100% at the high end to identify the typical variation of expected cost at this level of project definition.

Assumptions

- Repair alternatives will be summarized in a memorandum (up to 6 pages and 2 figures) that will later be incorporated into the Damage Assessment Report.
- Alternatives will be presented to the Town Council prior to selection of a preferred alternative and development of a design and implementation cost estimate. This presentation will be a part of Task 6.

Deliverables

Anchor QEA will provide the repair alternatives in a summary memo in PDF format, delivered via email.

Task 5—Damage Assessment Report

Anchor QEA will integrate the DDD and Alternative Methods of Repair into a Damage Assessment Report that aligns with FEMA's Preliminary Damage Assessment (PDA) Guide requirements. This report will document the type, location, extent, and estimated costs of damage to Site infrastructure, propose and evaluate different methods of repairing the damage, and provide cost estimates for implementing the Town-approved method of repair.

The final Damage Assessment Report will provide the Town with a defensible and FEMA-ready submittal package that expedites eligibility under the Stafford Act. By aligning with FEMA's documentation standards and validation practices, the report will not only support the Town's immediate recovery needs but also position the project for hazard mitigation funding to reduce vulnerability to future storm events.

Assumptions

- Anchor QEA will follow FEMA guidance for the development of the Damage Description and Dimensions Memorandum.

Deliverables

Anchor QEA will deliver the Damage Assessment Report in PDF format, via email.

[1] This system is a series of recommended practices that classifies estimates based on the maturity of the project definition scope and accuracy. The system has five classes of estimates, from Class 5 (Least Defined) to Class 1 (Most Defined).

Task 6—Project Management and Meetings

The intent of this task is to facilitate efficient and effective work within a defined schedule and budget to meet the project objectives. This task includes the following:

- Update meetings with Town representatives as needed (up to 2 hours over 4 30-min meetings)
- Develop and maintain a project schedule and conduct budget reviews (up to 10 hours total labor)
- Respond to miscellaneous project communications outside of the scope identified above (up to 2 hours)
- Anchor QEA staff will present alternative methods of repair to the Town Council at 1 Council or Agenda meeting.

General Assumptions

Completion of the work in accordance with the estimated budget and schedule is based on the foregoing descriptions and following assumptions:

- Anchor QEA will be provided access to all portions of the site on an agreed-upon date without delay.
- Weather events will not hinder performance of the surveys.
- Pre-design investigations, including geotechnical assessment and topographic surveying are not included in this phase.
- Permit application, pre-permitting meetings, or applicable fees are not included in this phase.
- The development of engineering plans, detailed design, including utility design, or specifications is not included in this phase.
- No cultural or archaeological study or threatened and endangered species assessments are included.
- FEMA will accept at least one of the proposed recommendations with only minor discussion or negotiation. If FEMA requires major revisions (exceeding 2 hours of work) Anchor QEA will require negotiation of a change order.
- Modifications or additional iterations of proposed recommendations by FEMA, the Town, or other stakeholders, will require additional scope and budget.

Estimated Costs

Based on the scope described herein, our estimated fees are summarized in Table 1. The project will be invoiced on a time and materials basis. If, during the work, we identify conditions that differ from those addressed in this proposal, Anchor QEA will notify the Town and obtain written approval prior to continuation of out-of-scope services. Although Anchor QEA will track budgets at the task level, invoicing for work from this project will be provided at the project level. Invoicing for work from this project will be provided monthly. Invoicing conditions are stated in the Standard Agreement.

Table 1
Task and Fee Breakdown

Task Number	Task Name	Estimated Cost
Task 1	Existing Data Review	$1,650
Task 2	Preliminary Site Assessment	$3,450
Task 3	Damage Description and Dimensions	$4,400
Task 4	Alternative Methods of Repair	$7,800
Task 5	Damage Assessment Report	$3,400
Task 6	Project Management and Meetings	$4,500
	TOTAL	**$25,200**

Schedule

Anchor QEA will target completion of the work within 8 weeks of contract execution.

If you have any questions regarding these findings, please contact me at 828-989-4587, or via email at cengle@anchorqea.com. We appreciate the opportunity to perform this work.

Sincerely,



Chris Engle, PE
Project Manager