

# **Request for Qualifications**

## **Professional Services for Geotechnical Peer Review of Calculations, Designs, and Permitting Documents for the Upper River Gorge Drive Extension Servicing Future Development on Aetna Mountain**

**Contract  
Number: T-18-001**

**Chattanooga Department of Transportation  
City of Chattanooga, Tennessee**

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**April 2018**



# **Section 1**

## **Introduction**

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# REQUEST FOR QUALIFICATIONS

## PROFESSIONAL SERVICES FOR Geotechnical Peer Review of Calculations and associated Design Documents of the Upper River Gorge Drive Extension on Mount Aetna

### CONTRACT NO. T-18-001 CHATTANOOGA DEPARTMENT OF TRANSPORTATION CITY OF CHATTANOOGA, TENNESSEE

#### 1.0 **INTRODUCTION**

#### 1.1 **BACKGROUND**

Upper River Gorge Drive (URGD) is a 1.6-mile mountain roadway (boulevard style) with an approximate 920-foot vertical change from base to top. URGD will serve future development on Black Creek Mountain (“Aetna Mountain”) as an extension to developable lands.

URGD formerly “Aetna Mountain Road” is currently an unmaintained dirt roadway unpassable by standard motor vehicle traffic. URGD will include a revised alignment and revised right of way to support the design roadway up the mountain.

The roadway alignment includes both cuts and fills to maintain required highway design parameters (grades, superelevation, etc). The local subsurface stratigraphy includes varying depths of overburden material (colluvium deposits) over shale and limestone. The roadway will incorporate a combination of open and closed drainage systems to convey stormwater run-off down the mountain to the appropriate discharge point. Various retaining systems are incorporated (i.e. soil nail walls, rock anchors and reinforced soils slopes) to support the roadway alignment.

#### 1.2 **PURPOSE OF RFQ**

The City of Chattanooga Department of Transportation (CDOT) is requesting proposals to provide a geotechnical peer review of the “Upper River Gorge Drive Extension at Black Creek Mountain” design, calculations, and associated permitting documents. The purpose is to provide an independent verification of the geotechnical Interpretation and Geotechnical Design of the roadway extension and supporting land development improvements to ensure they are in general conformance with applicable local, state and federal codes, and all related geotechnical codes and technical standards.

The City of Chattanooga wishes to enter into a professional services contract for the work described in this request. All work shall comply with the procedures, requirements and regulations of the City of Chattanooga, Hamilton County, State of Tennessee and applicable federal agencies as required. The intent and scope of work will include a geotechnical peer review of plans, calculations, and documents submitted for the subject roadway extension.

It is the goal of this RFQ to obtain a Geotechnical Plan Review Report to assist the City in the detailed review and permitting of the Upper River Gorge Drive Extension. Ultimately, the Report will support the City’s Land Disturbance Permit for the construction of the planned extension.

#### 1.3 **PROJECT OBJECTIVES**

A. Geotechnical Peer Review Comments:

Upon review of the submitted documents by the Geotechnical Engineer of Record, the Review Engineer shall prepare a comment letter on the related aspects of the review that require additional detail, correction, or clarification. Upon delivery of the comment letter to CDOT, the Review Engineer shall be available to discuss their letter with the Geotechnical Engineer of Record for any elaboration or clarification needed on either behalf. The Geotechnical Engineer of Record will respond as necessary and if required re-submit associated geotechnical engineering documents in support of said response.

**B. Review Engineer Plan Review Report:**

Upon review of the response and final documents, the Review Engineer shall submit a Plan Review Report to CDOT outlining the details of the review and stating whether the geotechnical design shown on the plans and specifications generally does or does not conform to the geotechnical requirements of the Tennessee Building Code and applicable codes and was prepared in accordance with generally accepted engineering practices.

The report shall demonstrate, at a minimum, compliance with items 1 through 8 of “Extent of the Geotechnical Peer Review” above. In addition, the report shall also include the following:

1. The codes and standards used in the geotechnical design of the project.
2. The geotechnical design criteria, including geotechnical parameters and performance requirements.
3. The basis for design criteria that are not specified directly in applicable codes and standards. This should include geotechnical reports and related investigation documentation. Generally, the report should confirm that existing conditions at the site have been investigated sufficiently and that the design of the defined site improvements are in general conformance with these conditions.

#### **1.4 PROPOSAL SCOPE OF WORK**

A. The selected consultant shall review the reports, plans, calculations, and specifications submitted with the permit application for compliance with geotechnical provisions of the Tennessee Building Code, and all related geotechnical codes and technical standards. The Reviewing Engineer shall perform the following “Extent of the Geotechnical Peer Review” at a minimum:

1. Confirm applicable geotechnical codes and standards.
2. Confirm that other geotechnical design criteria and design assumptions conform to the applicable codes and are in accordance with generally accepted engineering practice.
3. Review geotechnical and other engineering investigations performed by others that are related to the site improvements and confirm that the design properly incorporates the results and recommendations of the investigations.
4. Perform independent calculations for a representative fraction of the design to check the accuracy of the design with regard to slope stability, roadway base strength, retaining structures, and other elements, to ensure safety and stability of the roadway and adjacent disturbed slopes. The representative fraction verified shall be sufficient to form a basis for the reviewer’s conclusions.

5. Verify that performance-specified geotechnical components have been appropriately specified.
6. Review the design plans and calculations. Confirm that the geotechnical provisions are in general conformance with interpretations and design requirements.
7. Confirm that all items defined related to geotechnical design are in accordance with Tennessee codes and all related geotechnical codes and technical standards.
8. Attest to the general completeness of the geotechnical elements of the plans and specifications. Confirm applicable geotechnical codes and standards.
9. The geotechnical calculations prepared by the Geotechnical Engineer of Record shall be submitted upon the Reviewing Engineer's request. The Reviewing Engineer shall perform Quality Assurance/Quality Control checks on these calculations to verify accuracy. If the design criteria and design assumptions are not shown on the drawings or in the computations, the Geotechnical Engineer of Record shall provide a statement of these criteria and assumptions to the Reviewing Engineer.

## **1.5 RESPONSABILITIES**

- A. Geotechnical Engineer of Record:  
The Geotechnical Engineer of Record shall retain sole responsibility for the geotechnical design. The activities and reports of the Reviewing Engineer shall not relieve the Geotechnical Engineer of Record of this responsibility.
- B. Reviewing Engineer:  
The Reviewing Engineer's Plan Review Report states his or her opinion regarding the design by the Geotechnical Engineer of Record. The standard of care to which the Reviewing Engineer shall be held in the performance of the Geotechnical Peer Review and associated report is the level of skill and care consistent with Geotechnical Peer Review services performed by professional engineers licensed in the State of Tennessee for similar types of projects. The Plan Review Report by the Reviewing Engineer may be referenced by the City in other development review comments for future phases of this development.
- C. The City shall provide a PM as the central point of contact for the consultant.

## **1.6 CONTENTS OF SUBMITTAL FOR REVIEW**

- Roadway Engineering Plans and Details
- Geotechnical Interpretive Report(s)
- Engineering Calculations and available Technical Project Documentation

## **1.7 PROJECT REVIEW SCHEDULE**

Upon authorization between CDOT and the Reviewing Engineer and delivery of review material, the Reviewing Engineer shall provide a completeness review of all submitted materials and request any additional documentation from the Geotechnical Engineer of Record within 14 calendar days. Within 30 days of receipt of all required geotechnical documents and calculations, the Review Engineer shall perform the initial review and provide the comment letter to CDOT and the Geotechnical Engineer of Record. The Review Engineer shall provide the final Geotechnical Plan Review Report after they are

satisfied with all submittals and are able to render an opinion. It is the intent that this contract not last more than a total of 60 days from the initial receipt of the review material to the submittal of the final Geotechnical Plan Review Report.

**Section 2**  
**Qualifications Package Instructions**

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## **2.0 QUALIFICATIONS PACKAGE INSTRUCTIONS**

### **2.1 GENERAL**

**Five (5) unbound original copy, and an electronic copy in PDF format** of the QP shall be submitted. The QP should be limited to the requested content.

All QPs shall be submitted in a sealed envelope or box marked "Geotechnical Peer Review Upper River Gorge Road Extension"

All QPs shall be submitted no later than **4:00 p.m. EDT, on Friday, June 8, 2018**

City of Chattanooga  
Debbie Talley  
Purchasing Department  
101 E. 11<sup>th</sup> Street, Suite G13  
Chattanooga, TN 37402  
Phone No.: 423-643-7230 Fax  
No.: 423-643-7244

### **2.2 QP WITHDRAWAL PROCEDURE**

QPs may be withdrawn up until the date and time set above for opening of QPs. Any QP not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of (90) days to provide the services set forth in the QP or until one of the QPs has been accepted and a contract has been executed between the City and the successful QP submitter.

### **2.3 RESERVATION OF CITY RIGHTS**

- A. The City reserves the right to request clarification of submitted information and to request additional information of one (1) or more QPs.
- B. The City reserves the right to negotiate an Agreement/Contract for the Geotechnical Peer Review services with the next most qualified finalist if the successful finalist does not execute an Agreement/Contract within seven (7) days after submission of an Agreement to such offer. The City reserves the right to negotiate all elements of work that comprise the selected QP submitter.
- C. The City reserves the right, after opening the QPs or at any other point during the selection process, to reject any or all QPs, modify or postpone the proposed project, evaluate any alternatives offered or accept the QP that, in the City's sole judgment, is in its best interest.
- D. The City reserves the right to terminate the Agreement if the Consultant fails to commence the work described herein upon giving the Consultant a 30 day written Notice of Award

## 2.4 ADDITIONAL REQUESTS FOR INFORMATION

Any additional requests for information must be directed in writing to the City by **12:00 p.m. EDT, on Thursday, May 17th, 2018**. The requests will be addressed to the fullest extent possible by the City in writing and sent to each responder to the RFQ by **end of day on Friday, May 24th, 2018**. After that time, no further requests for information will be received or responded to.

Requests for information or clarification shall be sent to:

City of Chattanooga  
Debbie Talley  
Purchasing Department  
101 E. 11th Street, Suite G13  
Chattanooga, TN 37402  
Phone No.: 423-643-7230  
Fax No.: 423-643-7244

The City specifically requests that any contact concerning this RFQ be made exclusively with Debbie Talley, or designee, until selection has been completed. Failure to honor this request will be negatively viewed in the selection process.

## 2.5 AFFIRMATIVE ACTION PLAN

The City is an equal opportunity employer and during the performance of this Contract, the Consultant agrees to abide by the equal opportunity goals of the City of Chattanooga as follows:

- A. The Consultant will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, or handicap. The Consultant will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, national origin, or handicap. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination, rates of pay or other forms of compensation, and selection for training including apprenticeship. The Consultant agrees to post in conspicuous places, available to employees and applicants for employment, notices setting forth the provisions of this nondiscrimination clause.
- B. The Consultant will, in all solicitations or advertisements for employees placed by or on behalf of the Consultant; state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, national origin, or handicap.
- C. The Consultant will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising said labor union or workers' representatives of the Consultant's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

- D. In all construction contracts or subcontracts in excess of \$10,000 to be performed for the City, any Consultant and/or subcontractor is further required to file in duplicate within ten (10) days of being notified that it is the lowest responsible bidder, an affirmative action plan with the EEO Director of the City of Chattanooga. This plan shall state the Consultant's goals for minority and women utilization as a percentage of the work force on this project.
- E. This plan or any attachments thereto, shall further provide a list of all employees annotated by job function, race, and sex who are expected to be utilized on this project. This plan or attachment thereto, shall further describe the methods by which the Consultant and/or subcontractor will utilize to make good faith efforts at providing employment opportunities for minorities and women.

During the term of this Contract, the Consultant upon request of the City will make available for inspection by the City copies of all payroll records, personnel documents, and similar records or documents that may be used to verify the Consultant's compliance with these Equal Opportunity provisions.

**Section 3**  
**Qualifications Package Contents**

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### **3.0 QUALIFICATIONS PACKAGE CONTENTS**

#### **3.1 GENERAL INFORMATION**

The following will be considered the minimum contents of the proposal and must be submitted in order listed:

- A. A statement of the objectives, goals and the firm's understanding of the nature of the project.
- B. A description of deliverables to be provided by firm.
- C. An outline of the firm's background and experience with similar projects. (minimum of 3 examples and descriptions of each).
- D. A list of personnel who will conduct the project, their training and work experience as it relates to the project. The Project Manager (point of contact) assigned to project must be stated in proposal and shall continue through project as long as he/she is employed by the firm.
- E. The consultant shall show the hourly rate for each employee category and will also break out/list any direct expenses that may be anticipated.
- F. Provide a breakdown of anticipated coordination meetings/correspondence required outside of listed deliverables in order to ensure a successful project. These could include meetings between review engineer and CDOT, review engineer and engineer of record and all three parties. The breakdown should include an estimate of the duration of each meeting and cost of each meeting for the review engineer. These meetings could be teleconferences, phone calls, face to face, etc.
- G. Any optional/suggested work tasks shall be indicated as such and separate from the desired information or stated objectives above.
- H. Executed agreement between City and Third Party Consultant.

#### **3.2 QUALIFICATIONS AND EXPERIENCE**

The Geotechnical Peer Review shall be performed by a qualified independent geotechnical engineer licensed in the State of Tennessee. This Review Engineer shall meet specific qualification requirements, including demonstrable experience in the geotechnical design and/or peer review of geotechnical systems similar in scope and complexity and familiarity with construction on colluvial soils and steep slopes. Therefore, a meeting/interview with the City will be scheduled prior to award of the contract.

#### **3.3 TERMS AND CONDITIONS**

The terms and conditions shall be those addressed in the City standard engineering contract/agreement unless otherwise listed below.

- A. The Consultant shall at all times during the term of the Contract or agreement

and for a period of five (5) years after the end of the contract, keep and maintain records of the work performed pursuant to this Contract or Agreement. This shall include proper records of quotations, contracts, correspondence, invoices, vouchers, timesheets, and other documents that support actions taken by the Consultant. Documents shall be maintained by the Consultant necessary to clearly reflect all work and actions taken. All such records shall be maintained in accordance with generally accepted accounting principles. The Consultant shall at its own expense make such records available for inspection and audit (including copies and extracts of records as required) by the City at all reasonable times and without prior notice.

- B. The obligations of this Section shall be explicitly included in any Subcontracts or Agreements formed between the Consultant and any subcontractors or suppliers of goods or services to the extent that those Subcontracts or Agreements relate to fulfillment of the Consultant's obligations to the City.
- C. Costs of any audits conducted under the authority of this section and not addressed elsewhere will be borne by the City unless the audit identifies significant findings that would benefit the City. The Consultant shall reimburse the City for the total costs of an audit that identifies significant findings that would benefit the City.
- D. This Section shall not be construed to limit, revoke, or abridge any other rights, powers, or obligations relating to audit which the City may have by Federal, State, or Municipal law, whether those rights, powers, or obligations are express or implied.

### **3.4 LENGTH OF CONTRACT**

The end of the Contract shall be approximately twelve (3) months after Notice of Award for the CEI services.

## **Section 4**

# **Review and Evaluation of QPs**

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## **4.0 REVIEW AND EVALUATION OF QPs**

### **4.1 REVIEW COMMITTEE**

A review committee consisting of individuals selected by the City shall receive and review all submitted QPs. The City, in its sole judgment, shall decide if a QP is viable.

### **4.2 FORMAL PRESENTATIONS**

After reviewing each QP submittal, the City may prepare a short list of up to three (3) qualified firms for formal interviews. The City reserves the right to invite more or less than this number if the quality of the QPs so merits, or not to prepare a short list and require formal presentations. No formal presentations for this RFQ are foreseen at this time.

### **4.3 SELECTION CRITERIA**

Consultant selection will be based on an objective evaluation of the following criteria:

- A. Past experience in projects similar in nature
- B. Qualification and availability of staff
- C. Demonstrated ability to meet schedules without compromising sound engineering practice
- D. Evaluations on prior City projects, if applicable
- E. Other factors approved by CDOT
- F. Evaluation proceedings shall be conducted within the established guidelines regarding equal employment opportunity and discriminatory action based upon the grounds of race, color, sex, creed, or national origin.

### **4.4 SELECTION OF FINALIST**

After the review of the QPs by the Review Committee the City may, at its sole option, elect to reject all QPs or elect to pursue the project further. In the event that the City decides to pursue the project further, the City will select the highest ranked finalist to negotiate an Agreement.

**No Contact/No Advocacy Affidavit**

City of Chattanooga  
Purchasing Division

State of \_\_\_\_\_

County of \_\_\_\_\_

\_\_\_\_\_ (agent name), being first duly sworn, deposes and says that:

(1) He/She is the owner, partner, officer, representative, or agent of \_\_\_\_\_  
\_\_\_\_\_ (business name), the Submitter of the attached sealed solicitation  
response to Solicitation # \_\_\_\_\_;

(2) \_\_\_\_\_ (agent name) swears or affirms that the Submitter  
has taken notice, and will abide by the following No Contact and No Advocacy clauses:

**NO CONTACT POLICY:** After the posting of this solicitation, a potential submitter is prohibited from directly or indirectly contacting any City of Chattanooga representative concerning the subject matter of this solicitation, unless such contact is made with the Purchasing Division.

**NO ADVOCATING POLICY:** To ensure the integrity of the review and evaluation process, companies and/or individuals submitting sealed solicitation responses, as well as those persons and/or companies formally/informally representing such submitters, may not directly or indirectly lobby or advocate to any City of Chattanooga representative.

**Any business entity and/or individual that does not comply with the No Contact and No Advocating policies may be subject to the rejection or disqualification of its solicitation response from consideration.**

Submitter Signature:

Printed Name:

\_\_\_\_\_

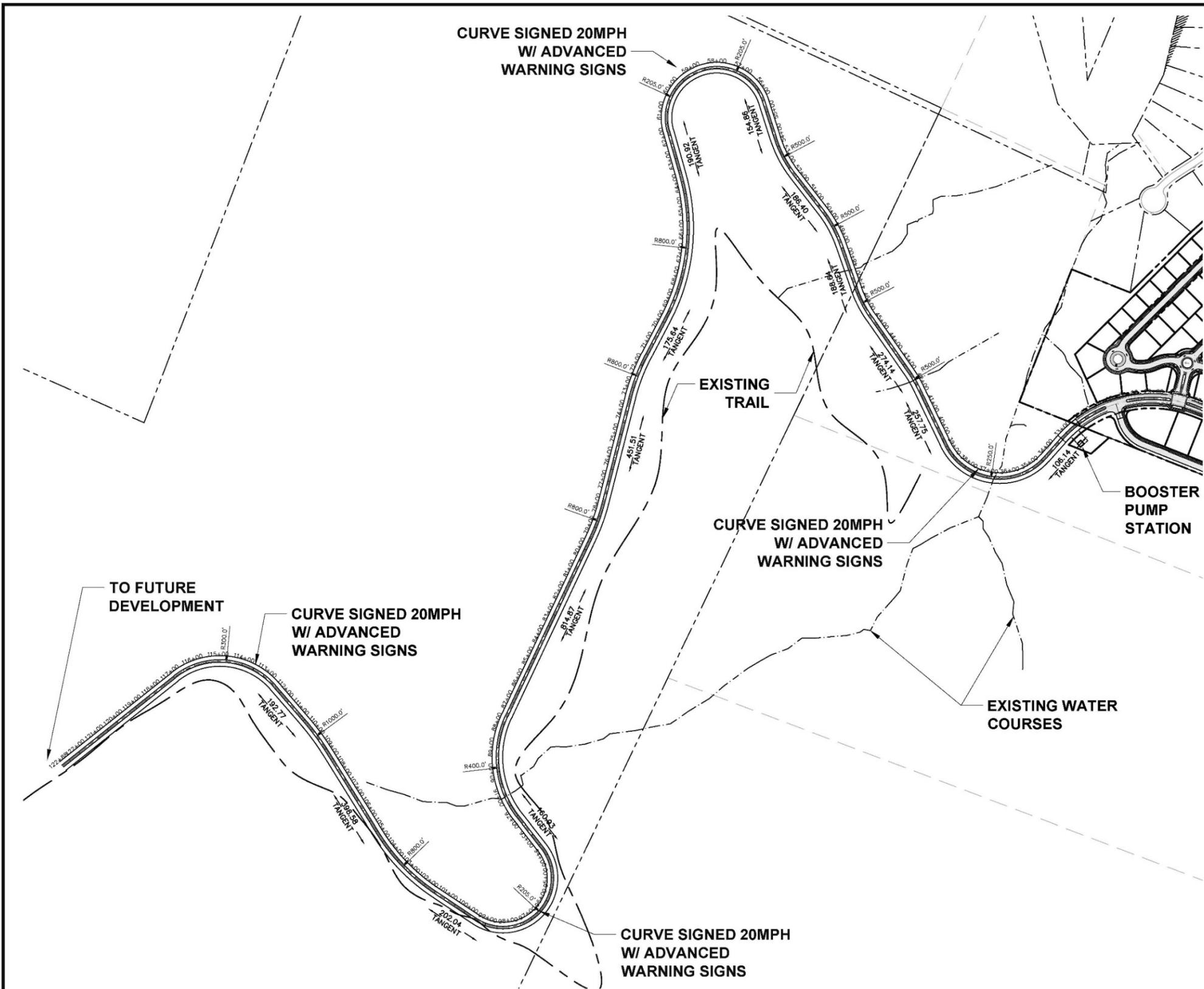
\_\_\_\_\_

Title: \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 2\_\_\_\_.

Notary Public: \_\_\_\_\_

My commission expires: \_\_\_\_\_

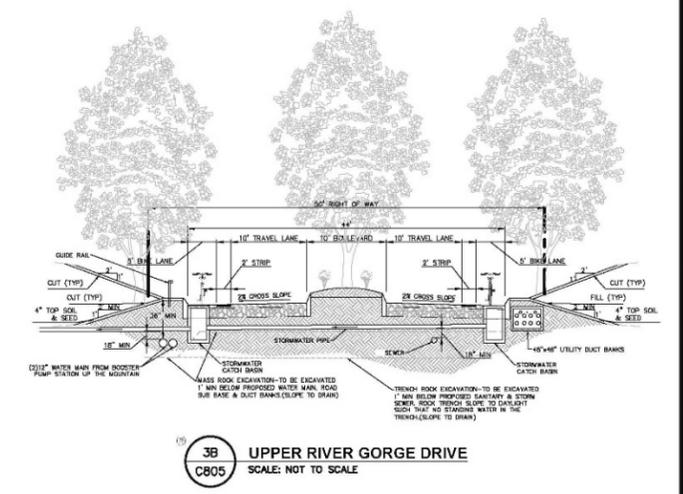


**ROAD DESIGN CRITERIA: POSTED 25MPH & 20MPH CURVES**  
 25MPH DESIGN SPEED  
 K VALUE = 12 CREST / 26 SAG  
 MIN CL RADIUS=205MIN  
 MAX 14% GRADE  
 MIN 4% GRADE  
 BREAKS IN MEDIAN EVERY 1000'±  
 NO HYDRANTS ALONG ROUTE-HIGH PRESSURE WATER MAINS

**PRELIMINARY EARTH WORK:**  
 MAX CUT DEPTH 45'  
 MAX FILL DEPTH 30'

11,200LF ROAD

**PRELIMINARY LAYOUT:**  
 \*CUT SLOPES ARE SET AT 2:1  
 \*FILL SLOPES ARE SET AT 2:1  
 WALLS & VERTICAL ROCK CUTS ARE ANTICIPATED

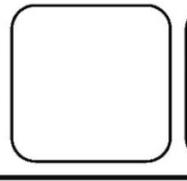


CONCEPT PLAN - NOT FOR CONSTRUCTION

KNOW WHAT'S BELOW  
CALL BEFORE YOU DIG

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 A Chazen Company  
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 Planners  
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 Landscape Architects

**CHAZEN ENGINEERING CONSULTANTS, LLC**  
 1705 Division Street, Nashville, Tennessee 37203  
 PHONE: (615) 953-4909

**New York Locations:**

|   |  |   |   |
|---|--|---|---|
| <b>Madison Valley Office:</b><br>21 Fox Street<br>Poughkeepsie, New York 12601<br>Phone: (845) 454-3880 | <b>Capital District Office:</b><br>847 River Street<br>Troy, New York 12180<br>Phone: (518) 273-0555 | <b>North Country Office:</b><br>378 Bay Road<br>Queensbury, New York 12904<br>Phone: (518) 812-0513 | <b>Central NY Office:</b><br>721 East Genesee Street<br>Syracuse, New York 13204<br>Phone: (315) 231-1013 |
|---|--|---|---|

| rev. | date | description |
|------|------|-------------|
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**RIVER GORGE DRIVE EXTENSION AT BLACK CREEK MOUNTAIN  
 PHASE 8 - UPPER RIVER GORGE DRIVE**

**25 MPH ROAD W/ SIGNED 20MPH CURVES**

CITY OF CHATTANOOGA, HAMILTON COUNTY, TENNESSEE

|                         |                   |
|-------------------------|-------------------|
| designed<br>TCC         | checked<br>MF     |
| date<br>7/1/2017        | scale<br>1"=200'  |
| project no.<br>11605.04 | sheet no.<br>C805 |