

September 18, 2024

RE: Request for Qualifications Professional Planning Services Mountain Bike Trail

To Whom It May Concern:

The County of Onslow is seeking qualified consulting firms to construct a single-track mountain bike trail within the N.A. Burton Industrial Park located in Onslow County. Attached you will find a "Request for Qualifications", which identifies the project anticipated to be undertaken by the County.

In order to be considered all responses must be submitted in writing no later than **2:00 PM (EST) on September 27**, **2024**. Firms mailing responses should allow delivery time to ensure timely receipt of their proposals. The responsibility for getting the response to the Onslow County Purchasing Department on or before the specified time and date is solely and strictly the responsibility of the responding firm. The County will in no way be responsible for delays caused by any occurrence. Responses may be emailed to:

Christina\_Russell@onslowcountync.gov Onslow County Purchasing Department Attn: Christina Russell 234 NW Corridor Blvd. Jacksonville, NC 28540

Firms providing responses shall be licensed and responsible for complying with North Carolina laws, regulations, and local ordinances. The County of Onslow reserves the right to waive any informalities, to reject any and all responses to the Request for Qualifications, and to accept any responses which in its opinion may be in the best interest of Onslow County.

No responses to the Request for Qualifications will be received or accepted after 2:00 PM, EST, September 27, 2024.

Thank you,

Christina Russell, CLGPO Purchasing Division Head

Attachments: Big Branch Bike Park, Phase 2 Trail Construction Plan

## REQUEST FOR QUALIFICATIONS FOR PROFESSIONAL PLANNING SERVICES MOUNTAIN BIKE TRAIL

## I. PROJECT DESCRIPTION

The County of Onslow is seeking a mountain bike trail construction firm to provide labor, supervision, materials, and equipment to perform specified trail construction for a single-track mountain bike trail within the County's Burton Park. The project is the second phase of the Big Branch Bike Park. Phase 1 was completed in June 2021 and consists of approximately 6.2 miles of single-track trail.

Burton Park is located off of US-258/NC-24, approximately 3 miles west of the City of Jacksonville. The Park consists of 730 +/- acres and is home to the Onslow County Government Center, Onslow County School's Regional Skills Center, and several other office and industrial facilities. The proposed trail network will be constructed on a parcel that consists of approximately 150 acres located directly adjacent to the Government Center and Regional Skills Center. The site has a diversity of slopes and aspects, with elevation changes of 25+ feet within relatively short distances. The site has direct access from Northwest Corridor Boulevard, WC Jarman Drive, and Luther Midgett Drive.

## II. SITE CONDITIONS

The proposed trail traverses through Burton Park and runs through a series of bluffs that follow Big Branch Creek. Vegetation consists of a mix of pines and hardwoods with some dense low-lying vegetation along the creek and adjacent low-lying areas. Soil conditions vary between sand and loamy soils.

## III. SCOPE OF SERVICES

Overall, the project's scope of work will include a site analysis and construction of a single-track mountain bike trail. All trail design and construction will conform to the IMBA's trail building guidelines and specifications.

The project is expected to consist of three phases. The first phase will consist of an evaluation of the proposed trail design and conducting a site analysis to confirm the trail layout. The second phase will be construction of the single-track trail; the third phase will be the construction of an elevated crossing across Big Branch Creek.

It is anticipated the new single-track trail will be approximately 5 miles in total length, based upon the Phase II design. Trail construction shall be sustainable, constructed to minimize erosion, and require little maintenance. A copy of the Phase 2 Trail Construction Plan is attached hereto for more detail on the site characteristics and overall trail design.

## IV. SUBMISSION

- A. Submittals: Submit one electronic copy only. Electronic submittal should be emailed to: christina\_russell@onslowcountync.gov . Submittals must be received no later than 2:00 PM EST, September 27, 2024.
- B The subject line on the email should read: "RFQ # 002-24(2) Bike Trail Phase 2."

- C. Time is of the essence and any proposal or addenda pertaining thereto received after the announced time and date for submittal, whether by mail or otherwise, will be rejected. It is the sole responsibility of the firm to ensure that their proposal is received by the Purchasing Department personnel before the deadline indicated above. There is nothing in this RFQ that precludes the County from requesting additional information from firms at any time during the qualification process.
- D. Nothing herein is intended to exclude any responsibilities or in any way restrain or restrict competition. On the contrary, all responsible firms/individuals are encouraged to submit responses. The County of Onslow reserves the right to waive any informalities, to reject any and/or all proposals, and to accept any proposal which in its opinion may be in the best interest of the County.
- E. Qualification packages may be withdrawn by written request prior to submittal deadline.

## V. PREPARATION

- A. Firms are to submit qualification packages which present their qualifications and understanding of the Work/Services to be performed. Emphasis should be placed on completeness of services offered and clarity of content.
- B. Qualification packages should be prepared simply and economically. All data, materials, and documentation shall be available in a clear, concise form. *Brevity will be appreciated*. Submittals shall be limited to 50 pages, 8 ½ x 11, minimum 11-point font. Covers and dividers do not count in the 50 pages total.
- C. Firms requiring clarification or interpretation of this RFQ shall make a written request, which shall reach the Onslow County Purchasing Department no later than the date and time for submittal of written questions.
- D. Any interpretation, correction or change of this RFQ will be made by Addendum. Addenda will be mailed or delivered to all who are known by the County Purchasing Department to have received the RFQ document. It is the responsibility of the firm to ensure that all Addenda were received.
- E. All submittals shall provide a straightforward, concise description of firm's ability to satisfy the requirements of the RFQ.
- F. Qualification Packages must be made in the official name of the individual, firm, or corporation under which the business is conducted (showing official business address) and must be signed in ink by a person duly authorized to legally bind the business entity submitting the qualification.
- G. Submittals shall be typewritten, or computer generated.

## VI. GENERAL TERMS AND CONDITIONS

## A. NON-COLLUSION AFFIDAVIT

Each qualification package must be accompanied by a notarized affidavit on non-collusion, executed by the firm or in the case of a corporation, by a duly authorized representative of said corporation. The Non-Collusion Affidavit is provided herein.

## B. ADDENDA/CHANGES

Any additions, deletions, modifications or changes made to this RFQ shall be issued by the Onslow County Purchasing Department. It is the responsibility of the firm to ensure that all addenda have been received.

## C. QUESTIONS

Questions concerning this RFQ should be submitted in writing to:

Onslow County Purchasing Department Attn: Christina Russell 234 NW Corridor Blvd. Jacksonville, NC 28540 E-mail: Christina Russell@onslowcountync.gov

# All questions pertaining to this RFQ must be submitted <u>in writing</u> no later than Monday, September 23, 2024, by 12:00 noon.

Only written questions will be considered formal. **Any information given by telephone will be considered informal**. Any questions that the County feels are pertinent to all proposers will be mailed as an addendum to the RFQ.

## D. **PROPRIETARY INFORMATION**:

Trade secrets or proprietary information submitted by a firm in connection with a procurement transaction shall not be subject to the public disclosure under the North Carolina Public Records Act pursuant to NC General Statutes §66-152(3). However, the firm must invoke the protection of this section prior to or upon submission of the data or other materials, and must identify the data on other materials to be protected and state the reasons why protection is necessary. **Each individual page considered a trade secret or proprietary information must be labeled "Confidential" in the top right corner.** 

## E. MINORITY BUSINESSES

The County of Onslow encourages all businesses, including DBE, minority, and womenowned businesses to respond to all Request for Qualifications.

## F. AWARD/CONTRACT TIME

No part of this solicitation is to be considered part of a contract nor are any provisions contained herein to be binding of Onslow County.

Award shall be made to the responsible firm whose qualifications are determined to be the most advantageous to the County, taking into consideration the evaluation factors set forth in the RFQ.

The County wishes to enter into an agreement with one firm which will be responsible for the work associated with this RFQ.

A notice of contract award is anticipated by October/November 2024. The detailed Scope of Work and schedule of deliverables shall be negotiated with the successful firms for each specified phase.

## G. CONTRACT DOCUMENT

The successful firms will be required to enter into a consultant services agreement. A copy of the County's standard Agreement for consulting services is attached.

## H. SUBCONSULTANTS

If any subconsultants will be used for the various phases, the successful firm shall provide to the Purchasing Division Head a list of names of any of the intended subconsultants/subcontractors, and a description of the work to be done by each subconsultant.

The successful firm shall be responsible for all services performed by a subcontractor as though they had been performed by the successful firm. The successful firm shall not substitute other subconsultants without the written consent of the County.

If at any time the County determines that any subconsultant is incompetent or undesirable, the County shall notify the successful firm accordingly, and the successful firm shall take immediate steps for cancellation of the subcontract and replacement.

It shall be the successful firm's responsibility to ensure that all terms required in the attached contract are incorporated into all subcontracts.

## I. INSURANCE

The selected firm shall purchase and maintain in force, at his own expense, such insurance as will protect the firm and the County, to include professional liability (E&O), from claims which may arise out of or result from the firm's execution of the work, whether such execution be by himself, his employees, agents, subcontractors/engineers, or by anyone for whose acts any of them may be liable. The insurance coverage shall be such as to fully protect the County, and the general public from any and all claims for injury and damage resulting by any actions on the part of the firm or its forces as enumerated above. See Sample Contract for additional information regarding insurance coverages and limits.

The selected firm shall furnish a copy of an original Certificate of Insurance, naming the County of Onslow as an additional insured. Should any of the policies be canceled before the expiration date, the issuing company will provide thirty (30) days written notice to the certificate holder. The firm shall furnish insurance in satisfactory limits, and on forms and of companies which are acceptable to the Onslow County Purchasing Division Head and shall require and show evidence of insurance coverage on behalf of any subcontractors (if applicable), before entering any agreement to sublet any part of the work to be completed under this contract.

## VII. STATEMENT OF QUALIFICATIONS REQUIREMENTS

Interested consulting firms desiring to provide services should include the following with its

Statement of Qualifications. In order to evaluate responses efficiently and equitably, responses <u>must be tabbed as identified below</u>.

## Tab 1: Introduction: Company Information

- Firm's name and business address, including telephone, email address, website address.
- The type of firm (individual, partnership, corporation, etc.) and list the names of all partners, principals, etc.
- Year established. Include former firm/company name(s) and year(s) established, if applicable.
- The name, title, address, and telephone number of the firm's authorized negotiator. The person identified must be empowered to make binding commitments for the firm.
- Letter of Interest

## Tab 2:Qualifications: Portfolio

- Portfolio containing descriptions and pictures of at least three past projects similar to this project. Project descriptions shall include short explanation of work performed, client, project location, dates, original contract cost, final contract cost, and time for completion.
- Provide an organizational chart, resumes, and summary of staff qualifications. Provide a list of staff members and resumes of those persons who will be assigned to work with the County on the project. Include an Organizational Chart but do <u>not</u> include resumes or list of personnel who will not be assigned to these projects.
- References: Three (3) references from previous trail construction projects.

## Tab 3:Subcontractors

- Names of sub-consultants/subcontractors who would be involved to provide services required for the project. Provide a brief synopsis for each consultant to include the following information:
  - A resume or brief description of the individual's previous experience as it relates to his/her role in the project.
  - For any proposed sub consultants, indicate how long your firm has worked with the sub-consultant on previous projects.

## Tab 4: Project Schedule

• Project schedule and timetable after contract award.

## Tab 5: Other Requirements (Weight 5 points)

- Information concerning any pending, ongoing, or prior litigation within the last 5 years.
- Acknowledgment and the ability of the firm to obtain a Performance Bond, and Labor and Material Bond for 100% of the project amount, if requested by the County.
- The firm must include the willingness to affiliate with DBE, minority or women-owned
- Submission of a proposal indicates acceptance by the firm of the terms, conditions, and requirements described in this RFQ unless clearly and specifically noted in the

submittal. Any and all exceptions/deviations to the required Scope of Services and/or the <u>Sample Agreement</u> shall be documented on a separate page.

#### VIII. EVALUATION PROCESS:

Following the deadline for submittal of qualifications, a review of the submitted qualifications will be by a selection committee established by the County. The selection committee will review, analyze and rank all submittals based on their response to the information requested. The selection shall be made in order of preference based on criteria established herein.

If desired, the selection committee may short list the number of qualified firms. The County reserves the discretion to determine the number of firms that will be on the short list. The County may engage in individual discussions with two or more offerors deemed fully qualified, responsible, and suitable on the basis of initial responses and with emphasis on professional competence to provide the required services. Interviews are not anticipated; however, the selection committee may schedule interviews if required in the selection process. Such offerors shall be encouraged to elaborate on their qualifications and performance data or staff expertise pertinent to the proposed project, as well as alternative concepts.

The selection committee may conduct discussions with the firm(s) submitting responses regarding the contract and shall select from among the firm(s) deemed most qualified to provide the required services. At the discretion of the County, the discussions with the firm(s) may consist of written questions and responses, and/or personal interviews with members of the firm(s). If personal interviews are required by the County, the persons proposed to be responsible for performing the work required herein shall attend the interview. If requested, firms should be prepared to submit financial status information, which shall be held in confidence.

Should the County be unable to negotiate a satisfactory contract with the firm considered to be most qualified, negotiations with that firm shall be formally terminated.

Negotiations will then proceed with the remaining ranked firms in the same manner until an agreement is reached, unless it is determined by the committee that it is in the best interest of the County that the process be terminated or modified.

The County of Onslow reserves the right to reject any and/or all submittals, and to waive defects, technicalities and/or irregularities in any submittal. The County reserves the right to finalize a contract based on all factors involved in the written qualification submittal without further discussion or interviews.

## **RESPONDER'S CERTIFICATION FORM**

I have carefully examined the Request for Qualifications; the sample Agreement for Consulting Services and any other documents accompanying or made a part of this Request for Qualification.

I hereby propose to furnish the professional design consultant services for Onslow County in accordance with the instructions, terms, conditions, and requirements incorporated in this Request for Qualification. I certify that all information contained in this response is truthful to the best of my knowledge and belief. I further certify that I am duly authorized to submit this response on behalf of the firm as its act and deed and that the firm is ready, willing and able to perform if awarded the contract.

NAME OF FIRM:
BY: (printed name)
SIGNATURE:
MAILING ADDRESS:
CITY/STATE/ZIP CODE:
TELEPHONE NUMBER:
FAX NUMBER:

## ACKNOWLEDGEMENT OF ADDENDA

Responder hereby acknowledges receipt of all Addenda through and including:

Addendum No. Date

\_\_\_\_\_

Acknowledgement

#### NON-COLLUSION AFFIDAVIT

State of North Carolina County of Onslow

RFQ No. 002-24(2)

\_\_\_\_, being first duly sworn, deposes and says that:

Ι.	He/She is the	(title) of	_(firm's name), the
	responder that has submitted the atta	ached response;	

- 2. He/She is fully informed respecting the preparation and contents of the attached response and of all pertinent circumstances respecting such response;
- 3. Such response is genuine and is not a collusive or sham response;
- 4. Neither the said responder nor any of its officers, partners, owners, agents, representatives, employees or parties in interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other responder firm or Person to submit a collusive or sham response in connection with the contract for which the attached response has been submitted or to refrain from responding in connection with such contract, or has in any manner, directly or indirectly sought by agreement or collusion of communication or conference with any other responder, firm or person to fix the price or prices in the attached response, if applicable, or of any other responders, or to fix any overhead, profit or cost element of the response price of the response, if applicable, of any other responder or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the County of Onslow or any person interested in the proposed contract; and

	Signature
NOTARIZE	Title
Subscribed and sworn to before me,	
This day of	, 20
Notary Public	
My Commission Expires:	

## Sample – Do Not Fill In – Any exceptions must be listed in Tab 5.

NORTH CAROLINA

## CONSULTING CONTRACT

#### **ONSLOW COUNTY**

**THIS CONTRACT** is made, and entered into this the day of , by and between the **COUNTY of ONSLOW**, a political subdivision of the State of North Carolina, (hereinafter referred to as "**COUNTY**"), and , (hereinafter referred to as "**COUNTY**").

For and in consideration of mutual promises to each as herein after set forth, the parties hereto do mutually agree as follows:

**1. SCOPE OF SERVICES.** CONSULTANT hereby agrees to provide the services under this Contract pursuant to the provisions identified in "Attachment 1" (hereinafter collectively referred to as "Services"). Attachment 1 is hereby incorporated herein and made a part of this Contract. Time is of the essence with respect to all provisions of this Contract that specify a time for performance.

**2. TERM OF CONTRACT.** The Term of this Contract for services is from to , unless sooner terminated as provided herein.

This Contract is subject to the availability of funds to purchase the specified services and may be terminated at any time during the term upon thirty (30) days notice if such funds become unavailable.

**3. RATE, SOURCES, AND METHODS OF PAYMENT.** CONSULTANT shall receive from COUNTY a sum not to exceed Dollars (\$) as full compensation for the provision of Services. COUNTY agrees to pay at the rates specified for Services, satisfactorily performed, in accordance with this Contract. Unless otherwise specified, CONSULTANT shall submit an itemized invoice to COUNTY by the end of the month during which Services are performed. A Purchase Order number may be assigned to encumber the funds associated with this Contract and must appear on all invoices and correspondence mailed to Purchaser. Payment will be processed promptly upon receipt and approval of the invoice by COUNTY.

4. INDEPENDENT CONTRACTOR. COUNTY and CONSULTANT agree that CONSULTANT is an independent contractor and shall not represent itself as an agent or employee of COUNTY for any purpose in the performance of CONSULTANT's duties under this Contract. Accordingly, CONSULTANT shall be responsible for payment of all federal, state and local taxes as well as business license fees arising out of CONSULTANT's activities in accordance with this Contract. For purposes of this Contract taxes shall include, but not be limited to, Federal and State Income, Social Security and Unemployment Insurance taxes.

**5. TERMINATION OF CONTRACT.** This Contract may be terminated by either party upon seven (7) days written notice should the other party fail substantially to perform in accordance with its terms through no fault of the party initiating the termination. Upon such termination, the parties shall be entitled to such additional rights and remedies, as may be allowed by relevant law. The COUNTY shall have the right to terminate this Contract at any time without cause so long as the COUNTY is not in breach of any of its material obligations hereunder. CONSULTANT shall be compensated in full for work completed. Termination of this Contract shall not form the basis of any claim for loss of anticipated profits by either party.

6. INDEMNITY AND INSURANCE. To the fullest extent permitted by laws and regulations, the CONSULTANT shall indemnify and hold harmless the COUNTY and its officials, agents, and employees from and against all claims, damages, losses, and expenses, direct, indirect, or consequential (including but not limited to fees and charges of engineers or architects, attorneys, and other professionals and costs related to court action or arbitration) arising out of or resulting from the performance of this Contract or the actions of the CONSULTANT or its officials, employees, or contractors under this Contract or under the contracts entered into by the CONSULTANT in connection with this Contract. This indemnification shall survive the termination of this Contract.

In addition, CONSULTANT shall comply with the North Carolina Workers' Compensation Act and shall provide for the payment of workers' compensation to its employees in the manner and to the extent required by such Act. Additionally, CONSULTANT shall maintain, at its expense, the following minimum insurance coverage:

\$250,000/\$500,000 – Professional Liability - Error and Omissions.

CONSULTANT, upon execution of this Contract, shall furnish to the COUNTY a Certificate of Insurance reflecting the minimum limits stated above. The Certificate shall provide for thirty-(30) days advance written notice in the event of a decrease, termination or cancellation of coverage. Providing and maintaining adequate insurance coverage is a material obligation of the CONSULTANT. All such insurance shall meet all laws of the State of North Carolina. Such insurance coverage shall be obtained from companies that are authorized to provide such coverage and that are authorized by the Commissioner of Insurance to do business in North Carolina. The CONSULTANT shall at all times comply with the terms of such insurance policies, and all requirements of the insurer under any such insurance policies, except as they may conflict with existing North Carolina laws or this Contract. The limits of coverage under each insurance policy maintained by the CONSULTANT shall not be interpreted as limiting the CONSULTANT's liability and obligations under the Contract.

7. NONDISCRIMINATION IN EMPLOYMENT. CONSULTANT shall not discriminate against any employee or applicant for employment because of age, sex, race, creed, national origin, or disability. CONSULTANT shall take affirmative action to ensure that applicants are employed and that employees are treated fairly and legally during employment with regard to their age, sex, race, creed, national origin, or disability. In the event CONSULTANT is determined by the final order of an appropriate agency or court to be in violation of any non-discrimination provision of federal, state or local law or this provision, this Contract may be canceled, terminated or suspended in whole or in part by COUNTY, and CONSULTANT may be declared ineligible for further COUNTY contracts.

**8. OWNERSHIP OF WORK.** All Work and any documents prepared by the CONSULTANT for or on account of this Contract shall be the owned by the COUNTY, and the COUNTY shall have all common law, statutory and other reserved rights, including copyright.

Submission or distribution of documents to meet official regulatory requirements or for similar purposes in connection with the project is not to be construed as publication in derogation of the COUNTY's reserved rights.

**9. SUCCESSORS AND ASSIGNS.** CONSULTANT shall not assign its interest in this Contract without the written consent of the COUNTY.

**10. COMPLIANCE WITH LAWS.** CONSULTANT represents that it is in compliance with all Federal, State, and local laws, regulations or orders including, Executive Order 11246, as amended or supplemented, which is hereby incorporated by reference. The implementation of this Contract will be carried out in strict compliance with all Federal, State, or local laws regarding discrimination in employment.

**11. GOVERNING LAW.** Unless otherwise specified, this contract shall be governed by the laws of the State of North Carolina. All litigation arising out of this contract shall be commenced in the appropriate division of the General Court of Justice in Onslow County, North Carolina.

**12. E-VERIFY.** As a condition of payment for services rendered under this agreement, CONSULTANT shall comply with the requirements of Article 2 of Chapter 64 of the General Statutes. Further, if CONSULTANT provides the services to the County utilizing a subcontractor, CONSULTANT shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the General Statutes as well. CONTRACTOR shall verify, by affidavit, compliance of the terms of this section upon request by the County.

**13. IRAN DIVESTMENT ACT.** CONSULTANT certifies that they are not listed on the Final Divestment List created by the State Treasurer pursuant to N.C.G.S. 143-6A-4. Individuals or companies on the Final Divestment List are ineligible to contract or subcontract with Local Government Units. (G.S. 143C-6A-6(a).) It is the

responsibility of each CONSULTANT to monitor compliance with this restriction. Contracts valued at less than \$1,000.00 are exempt from this restriction.

**14. DIVESTMENT FROM COMPANIES THAT BOYCOTT ISRAEL.** The CONSULTANT certifies that it has not been designated by the North Carolina State Treasurer as a company engaged in the boycott of Israel pursuant to N.C.G.S. 147-86.81. It is the responsibility of each CONSULTANT to monitor compliance with this restriction. Contracts valued at less than \$1,000.00 are exempt from this restriction.

**15. GOOD STANDING WITH COUNTY**. CONSULTANT certifies that it is not delinquent on any taxes, fees, or other debt owed by CONSULTANT to COUNTY. CONSULTANT covenants and agrees to remain current on any taxes, fees, or other debt owed by CONSULTANT to COUNTY during the Term of this Contract.

**16. NOTICES.** All notices which may be required by this contract or any rule of law shall be effective when received by certified mail as follows:

COUNTY OF ONSLOW ATTN:

## **CONSULTANT:**

**17. AUDIT RIGHTS.** For all work being performed under this contract, the COUNTY has the right to inspect, examine, and make copies of any and all books, accounts, records and other writing relating to the performance of the Services. Audits shall take place at times and locations mutually agreed upon by both parties, although the CONSULTANT must make the materials to be audited available within one (1) week of the request for them.

**18. ANNUAL APPROPRIATIONS AND FUNDING.** This Agreement may be subject to the annual appropriation of funds by the Onslow County Commissioners. Notwithstanding any provision herein to the contrary, in the event that funds are not appropriated for this Agreement, then County shall be entitled to immediately terminate this Agreement, without penalty or liability, except the payment of all contract fees due under this Agreement up to and through the last day of service.

**19. SAFETY.** CONSULTANT and its employees will observe the posted safety requirements of the COUNTY and those required by law. CONSULTANT is responsible for the safety of its employees at all times while on the COUNTY's premises.

**20. COUNTY NOT RESPONSIBLE FOR EXPENSES.** COUNTY shall not be liable to CONSULTANT for any expenses paid or incurred by CONSULTANT unless otherwise agreed in writing.

**21. EQUIPMENT.** CONSULTANT shall supply, at its sole expense, all equipment, tools, materials, and/or supplies required to provide contracted services unless otherwise agreed in writing.

**22. ENTIRE CONTRACT.** This Contract, including Attachment 1, shall constitute the entire understanding between COUNTY and CONSULTANT and shall supersede all prior understandings and agreements relating to the subject matter hereof and may be amended only by written mutual agreement of the parties.

**23. HEADINGS.** The subject headings of the paragraphs are included for purposes of convenience only and shall not affect the construction or interpretation of any of its provisions. This contract shall be deemed to have been drafted by both parties and no purposes of interpretation shall be made to the contrary.

**24**. **EXISTENCE**. CONSULTANT warrants that It is a corporation duly organized, validly existing, and in good standing under the laws of the State of North Carolina and is duly qualified to do business in the State of North Carolina and has full power and authority to enter into and fulfill all the terms and conditions of this Contract.

**25**. **CORPORATE AUTHORITY.** By execution hereof, the person signing for CONSULTANT below certifies that he/she has read this Contract and that he/she is duly authorized to execute this Contract on behalf of the CONSULTANT.

IN TESTIMONY WHEREOF, the parties have expressed their agreement to these terms by causing this Consulting Contract to be executed by their duly authorized office or agent.

Reviewed by Department Head	CONSULTANT By:
Date Reviewed:	Printed Name:
	Title: ONSLOW COUNTY
This instrument has been preaudited in the	By:
manner required by the Local Government and Fiscal Control Act	Printed Name:
Onslow County Finance Officer	Title:

#### **"ATTACHMENT 1 to follow**

# BIG BRANCH BIKE PARK PHASE 2

# DRAFT 1/19/22

**TRAIL CONSTRUCTION PLAN** 



## Prepared By:

Craig Brickser, MSP Community Trail Design

## Contact :

**P**: 850.264.7355

- E: craig@communitytraildesign.com
- W: community traildesign.com



# **BIG BRANCH BIKE PARK**

# **TRAILS - PHASE 2**

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# **PROJECT OVERVIEW**

Professional contracting services for the Phase One trails at Burton Park wrapped up in June, 2021 with a total of 6.1 miles of new singletrack constructed. During this time, Onslow County staff also completed the development of a parking lot, bathroom, bike wash, and various other trailhead facilities (including wayfinding) before hosting a public grand opening on June 26, 2021. As part of the formal public opening, Burton Park and its trails were aptly named Big Branch Bike Park by Onslow County. As such, this document will hereby reference the park by its new official name- Big Branch Bike Park, or Big Branch for brevity.

Following the grand opening of Phase One, Onslow County, (The Owner) requested further design services for a second phase of trail development. The development area for Phase Two was selected by The Owner and evaluated by Community Trail Design (CTD) for feasibility. Field-level design of the corridor was performed by Community Trail Design staff in December 2021. The project site was ground-truthed for a constructible corridor, marked with intervisible flagging ribbon and recorded with GPS. Additional features necessary to complete the trail's construction were also recorded such as armored drainage culverts (C), boardwalks (BW), bridges (B) and critical areas through utility easements and naturally sensitive areas.

Venturing north, Phase Two continues a pattern of trail development similar to that of Phase One by utilizing the hardwood slopes and bluffs surrounding Big Branch Creek. Because the property for Phase Two does not follow a perimeter of peninsular land like Phase One, a wetland crossing consisting of a wooden dock, floating causeway or bridge will be necessary to establish a functional loop. Further, establishing a loop in this landscape will require a brief use of North Carolina Department of Transportation right-of-way along WC Jarman Drive. These terrain chokepoints were discussed with The Owner as acceptable design elements critical to the trail's functionality.

# **EXPERIENCE NARRATIVE**

## Goals

The addition of Phase Two is intended to further establish Big Branch Bike Park as a regional mountain bike destination, tourism draw, economic stimulator, and recreational asset for Onslow County. Phase Two can help accomplish these goals through the following:

- Increasing total trail mileage
- Providing an added level of bike-optimized trail progression

- Showcasing natural assets and ecological zones
- Harnessing the gravity, speed, and flow of the natural topography
- Creating unique rideable trail features with wood and rock
- Investing in trail alignments that require more infrastructure/cost to develop than standard contouring alignments

With Phase One providing a gateway of progression for entry-level and intermediate cyclists in conjunction with multi-user access, Phase Two is an opportunity to provide a trail experience more suited to the skilled and adventurous mountain bike user. This cohort of the off-road cycling base is highly mobile, experience-oriented, and vocal about their interactions with trail systems. In the past, riders often discovered or tried new trails by word of mouth. With the advent of social media, trails are now highly sought after through the sharing of photography, videos, and reviews. Phase Two presents the opportunity to make Big Branch Bike Park a marketable destination that appeals to a broad spectrum of users with trails dedicated and optimized for skilled mountain bike use.

## Stacked Loops

Phase Two will consist of two (2) distinct directional, advanced level, bike-optimized loops (See Loop A and Loop B, (Map-1). The Advanced Loop system begins after a brief bi-directional access segment. After the first junction, the trail will continue west (left) and become directional (Loop A) in a clockwise pattern. Following this directional loop clockwise will take the rider behind the Onslow County Skills Center, through ravines, over ridgelines and eventually over Big Branch Creek by using the right-of way on WC Jarman Drive.

After transitioning to the north bank of Big Branch Creek, Loop A travels to its farthest extent eastward before a major junction that allows the user to either cross Big Branch Creek along a floating bridge/ dockway back to the parking lot or continue eastward on optional Loop B. Loop B will take riders further away from the built environment into one of the most remote landscapes of the whole project; along the bluffs of the New River before returning to the floating bridge junction with Loop A.

## Trail Alignment and Topography

In an attempt to differentiate itself from Phase One, Phase Two will implement a more dramatic tour across the ridges and ravines that make up the terrain around Big Branch Creek. Where Phase One trails primarily followed contours around nose slopes and back up into ravines, Phase Two trails will take a more perpendicular approach over ridges, across ravines and back up the slopes on the opposing side. These diving ravine crossings will allow for brief bursts of speed essentially turning each ravine into a roller coaster-like feature. This alignment also provides the opportunity for a rider to maintain more speed throughout the trail, and to ride the trail more aggressively with a reduction in pedaling. Some of these ravines will provide the opportunity for "luge" runs where the trail runs the length of the ravine and uses the embankments as natural berms turns.

Using the topography this way will require some additional structures and culverts when crossing the ravine channels. In some places a culvert may be sufficient, while in others a low-height boardwalk or puncheon will be the best solution for elevating the tread surface at the bottom of the ravine, allowing water to flow underneath. Each ravine is unique and conditions vary widely.

Further, this type of alignment will require more low-angle slope use as opposed to bench cut construction as it passes over the crests of ridges. After removing organic material from the surface, the tread may rest below the surrounding grade in which mineral soil can be borrowed from the surrounding corridor and added to the tread surface as a construction technique.

## Scenic Value

Contouring the trail to the landscape's sideslopes in Phase One allowed for extra scenic value due the trail's alignment taking users around nose-slopes with wetland views. Phase Two's alignment will focus primarily on the fastest, most playful use of the landscape with a lower emphasis on exposure to natural scenery. However, there is still plenty of scenic beauty to be had along the way. The floating bridge across Big Branch Creek will create a popular wildlife viewing area that will surely be a highlight of the trail.

## **IMPLEMENTATION CONSIDERATIONS**

Slightly more complex than Phase One, Phase Two passes through several areas that will require additional review and careful implementation. Areas requiring extra attention are highlighted in Figure 1 on page 4.

## Segment 1

Segment 1 is a confined area of sloping terrain immediately behind the Onslow County Skills Center. Land development for the Skills Center has resulted in disturbances that leave a very narrow vegetative buffer between the wetlands below. The ravines behind the Skills Center have undergone extensive wetland remediation and have erosion and sedimentation dams and devices installed. Trail corridor through this area will likely require sedimentation wattles, coirs or jute blanket during excavation. Disturbance of pre-existing erosion control and wetland plantings can be mitigated by bridging over the ravines entirely. Review of this area should be carried out by local officials for BMPs and disturbance limits.

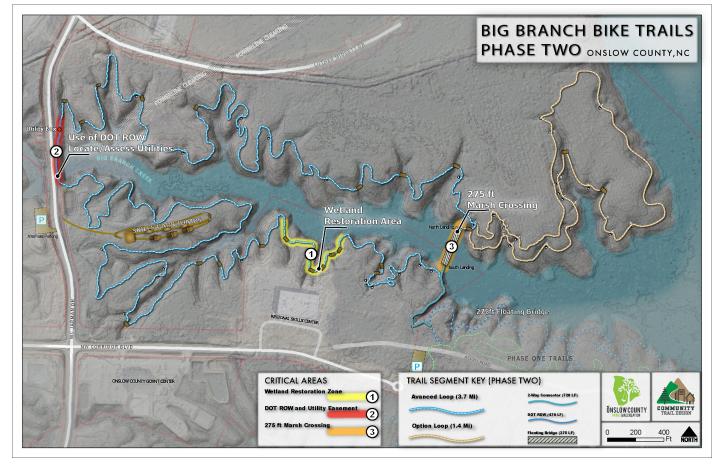
## Segment 2

Segment 2 is the western crossing of Big Branch Creek via road shoulder. WC Jarman Drive passes over Big Branch Creek and has a wide, grassy shoulder over the creek with a protected guardrail separating trail users from vehicle traffic. We recommend using this grassy shoulder to establish a very lightly graded trail surface over Big Branch Creek before reaching the northern bank and transitioning back under tree canopy slopes away from the road. Along this segment are several underground utilities including power, communications, and natural gas. This segment should be evaluated by utility professionals for disturbance allowance and depth.

## Segment 3

Segment 3 is the greatest infrastructure challenge of the project, a roughly 275 foot-long wetland marsh crossing over Big Branch Creek. Two landing points were selected for a bridge based on the most feasible transition from the slopes down to the water. The Owner has discussed the possibility of implementing a floating bridge or dock system based on initial conversations. A permanent wooden walkway is also a possibility through further permitting and funding. The final implementation of this bridgeway is to be determined and is not scoped or budgeted in this document.

## FIGURE 1



# DRAINAGE CROSSINGS

There are 67 planned drainage crossings that will require some form of infrastructure to span numerous ravine channels and gullies. A large majority of the ravine channels are dry, show little sign of water movement, and may only carry surface water during heavy rain events. However, a few ravines are wet in the center channel, have perennial seep springs and moist banks. Based on experience in Phase One, it can be assumed that all ravine channels have the potential to become wet, if not muddy, from subsurface water during periods of prolonged rainfall and should include some form of elevated treatment including a boardwalk, bridge, or culvert in each location.

Some of these drainage crossings will be the centerpoint of a turn as the trail transitions from one embankment to another. Installing bridges and boardwalks that align well with the turn radius, approach, and exit angle will be crucial to the user experience and effectiveness of the structure. A slight inslope or curvature to these structure in conjunction with a surface mounted hardware cloth would benefit these features.

## Culverts

In an attempt to reduce the quantity of wooden structures, culverts are prescribed for the majority of ravine channel crossings. Culverts should be a minimum of 24" diameter and long enough to support elevated fill slopes over the top without being inundated by fill dirt (Figure 2). Many of the culverts will reside in areas with low angle slopes and will require fill dirt ramps on the trail's approach and exit over the culvert. This fill dirt can be harvested on site using borrow pits in non sensitive areas. Borrow pits should be dug outside of the drainage channel and renaturalized. Final installation will include a layer of rip rap protecting fill dirt around the head and tail of the culvert mouth (Figure 2).

## FIGURE 2

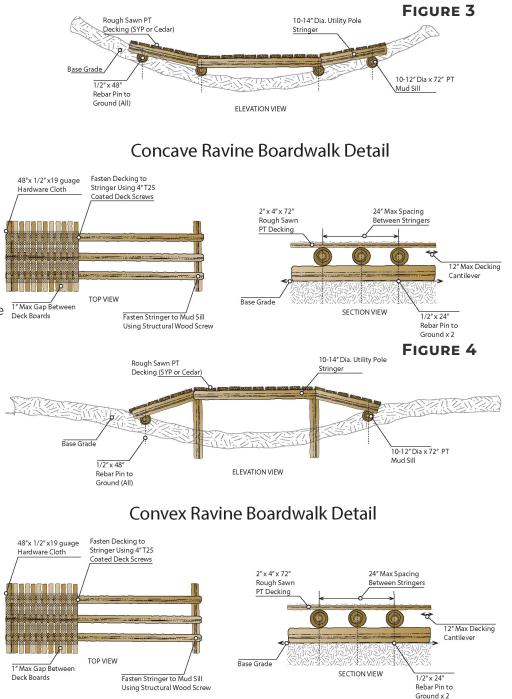


## Boardwalks

Boardwalks are planned to span wide, low-lying ravine channels with relatively low angle embankments. Primarily used where surface water and runoff is minimal or nonexistent, boardwalks are meant to provide a low-height riding surface that can easily conform to the direction and flow of the trail and cover long spans between dry slopes or banks. Boardwalks can be built with sleepers placed directly on the ground for support. The frame should be built with pressure treated (PT) poles or stringers at a higher level of pressure treatment than big-box stores provide, such as UC4B or greater.

Decking should be of similar PT rating, however naturally rot resistant lumber such as eastern red cedar is an acceptable alternative. Rough sawn finish for decking is also preferred.

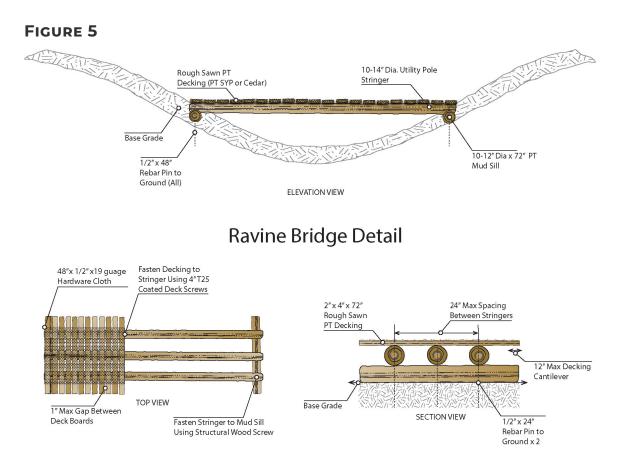
Sleepers or sills resting on the base grade should be pinned and stabilized in place with rebar to the earth below. Effort should be made to construct boardwalks to follow the natural curvature of the trail with minimal turning required onto and off the structure at both the entry and exits. Boardwalks have the potential in certain locations to become technical trail features such as rollers, jumps, and tabletops.



## Bridges

Similar in scale to the boardwalks, a few channels are deep and abrupt enough to warrant a structure that most closely resembles a bridge, with abutments or sills at either end to span a gully. None of the bridges are significant in height above the ground, but are needed primarily to span over wetland channels or perennial streams. In this case, the bridge should completely span any sensitive habitat below and land on non-sensitive dry banks outside of any wetland vegetation or moist soil.

As a cost saving measure, utility poles make excellent high strength stringers, sills, and sleepers and are often available for discount or donation by local utility companies.

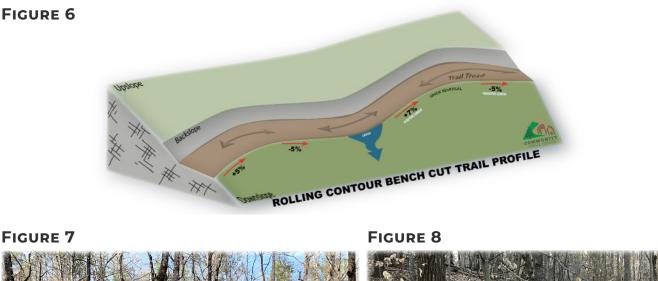


# **TRAIL TREAD CONSTRUCTION**

**Advanced Loops:** Trail construction will fluctuate between low angle slopes and side-slope bench cut excavation frequently along the corridor.

Bench cut trail excavation is ideal for many practical reasons, including its ability to shed water across the trail effectively. Using frequent grade reversals, the bench cut can also break the trail surface into a series of watersheds, dispersing the water more frequently and evenly.

Sections of trail that traverse low angle slopes may require elevated tread construction through borrow pit and cap style construction. When possible, borrow pits should be dug trail-adjacent on the downslope edge of the trail tread, and can serve as drainage points. All borrow pits should be renaturalized and backfilled with organic material, and any vertical pit walls tapered back to 45 degrees.







## The following guidelines are recommended for trail construction:

- Overall trail characteristic resembling a USFS Trail Class 3
- 24-36" trail tread width
- Unavoidable obstacle max height main trail: 8"
- Unavoidable obstacle max height optional lines: 12"
- Trail optimized for directional travel (clockwise)
- Average grade target: 7-10%
- Grade reversals or drains approximately every 50-75'
- Maximum transverse grade 5% (inslope/outslope)
- Vibratory compaction of all tread and fill slopes
- Renaturalized disturbances, spoils, and borrow pits with native organics
- Backslope/fillslope 1:1 or angle of repose
- 12" maximum Diameter Breast Height (DBH) tree removal
- Protection of mature tree root balls with reduced tread width or fill cap
- 10' corridor centerline allowance, left or right of flagline.
- 8' minimum trail corridor ceiling
- Pruning and limbing of all branches flush with bark collar
- 5' fall zone clear of all hazards, stobs, protrusions
- Implementation of erosion control devices where necessary
- Maintain less than 3,000 sq. ft. of broken, uncompacted soil at any time

# **BUDGET, COSTS, AND DELIVERABLES**

## Summary

The construction of Big Branch Phase Two will build upon lessons learned from Phase One with an increased understanding of the conditions, materials and labor associated with developing trails in this location. The added costs associated with above-ground structures will unlock new user experiences and enhance the landscape's potential for progression. However, the key to success will be a working budget and contract environment that allows contractors the flexibility to exercise creativity and cover their costs. To help facilitate this, we recommend a per-unit contract structure where tread, structures, and infrastructure can be billed at a linear-foot or per-unit rate rather than a lump sum.

The advantage of this method is that contractors are compensated for exactly what they build, and The Owner receives exactly what they pay for. Further, this method also allows the contractors to collaborate with The Owner on alternatives and costs in real time to manage the budget.

## **Project Challenges**

With persistent supply chain shortages and wildly fluctuating commodity prices impacting the construction industry over the past two years, planning for material costs will be a moving target for Phase Two and difficult to estimate accurately until orders are placed. At the time of this document (January 2022) estimated costs reflect current market rates, which are subject to change. As a result, the estimates in the document are good for 60 days from time of submittal.

During Phase One, long term housing was difficult for contractors to secure. Overcrowded campgrounds and lack of bathroom facilities due to the pandemic added stress and discomfort for crew members. AirBNB rates and hotel stays ate deeply into profit margins and long commutes to the jobsite meant reduced productivity.

To combat this, The Consultant recommends a dedicated housing and mobilization budget for invoicing purposes that can be used either as a stipend or pool for contractors to secure accommodations. Phase Two may require the services of two or more contractors.

## **Owner-Sourced Materials**

The Owner has expressed verbal interest in offsetting costs by procuring select materials. The estimated costs in this document reflect those cost savings and internal procurement. The materials in question are green utility poles and rip rap. Both of these materials are difficult to transport and bulky, which makes sourcing them locally an advantage. Further, these materials tend to be easy to source at a discount or donation.

# TABLE 1: TRAIL CONSTRUCTION PAY ITEMS

Pay Item	Dimensions (ft)	Material	Estimated Cost (Labor + Materials)
Trail Tread	L x W		Rate- \$6.50/LF
Segment A	7,638' x 36"	Native Subsoil	\$114,647
Segment B	7,006' x 36"	Native Subsoil	\$45,539
Segment C	692' x 36"	Native Subsoil	\$4,498
Segment D	470' x 36"	Native Subsoil	\$3,055
Drainage	Dia. x L		Rate: \$875 Each
Culverts 1-39		HDPE Doublewall	
	24"× 10'	Corrugated Pipe	\$34,125
Boardwalks	L x W		Rate- \$145/LF
BW-I	30' x 6'	UC4B Lumber	\$4,350
BW-2	40' x 6'	UC4B Lumber	\$5,800
BW-3	40' x 6'	UC4B Lumber	\$5,800
BW-4	20' x 6'	UC4B Lumber	\$2,900
BW-5	30' x 6'	UC4B Lumber	\$4,350
BW-6	24' x 6'	UC4B Lumber	\$3,480
BW-7	24' x 6'	UC4B Lumber	\$3,480
BW-8	30' x 6'	UC4B Lumber	\$4,350
BW-9	40' x 6'	UC4B Lumber	\$5,800
BW-10	20' x 6'	UC4B Lumber	\$2,900
BW-II	20' x 6'	UC4B Lumber	\$2,900
BW-12	30' x 6'	UC4B Lumber	\$4,350
BW-13	20' x 6'	UC4B Lumber	\$2,900
BW-14	24' x 6'	UC4B Lumber	\$3,480
BW-15	40' x 6'	UC4B Lumber	\$5,800
BW-16	24' x 6'	UC4B Lumber	\$3,480
Bridges	L x W		Rate- \$145/LF
B-I	24' x 6'	UC4B Lumber	\$3,480
B-2	24' x 6'	UC4B Lumber	\$3,480
B-3	24' x 6'	UC4B Lumber	\$3,480
B-4	30' x 6'	UC4B Lumber	\$4,350
B-5	30' x 6'	UC4B Lumber	\$4,350
B-6	30' x 6'	UC4B Lumber	\$4,350
B-7	20' x 6'	UC4B Lumber	\$2,900
B-8	30' x 6'	UC4B Lumber	\$4,350
B-9	20' x 6'	UC4B Lumber	\$3,480
B-10	30' x 6'	UC4B Lumber	\$4,350
B-II	30' x 6'	UC4B Lumber	\$4,350
B-12	24' x 6'	UC4B Lumber	\$3,480
			Total- \$314,384

# **CONSTRUCTION PHASE 2- (5.1 MILES)**

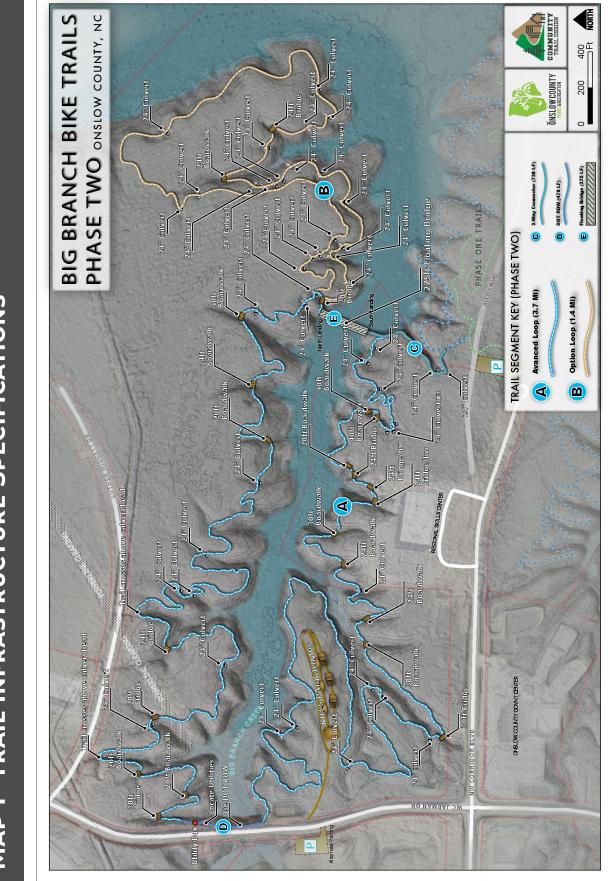
Description		Cost
Advanced Loop Construction		
• 25,806 LF rolling contour mineral soil trail constr	uction	\$167,739
Advanced Loop Culvert Install With Rip Rap		
• 39 Culverts with Rip-Rap Armoring		\$34,125
Advanced Loop Bridge/Boardwalk Install		
• 4,632 Sq Ft or 772 LF of boardwalk surface		\$112,520
	SUBTOTAL	\$314,384

## **OWNER-SOURCED MATERIALS**

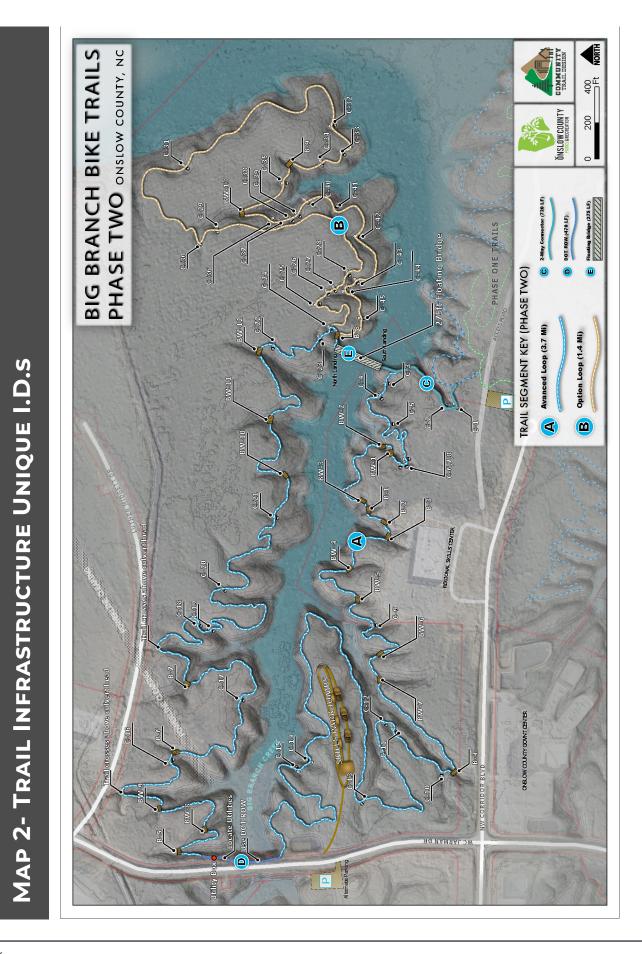
Description		Cost
Rip Rap or Recycled Concrete Surge Rock		
• 100 Tons		-
Utility Pole Stringers		
• 35-50 poles, 40 feet or longer 8-12" Butt		-
	SUBTOTAL	\$0

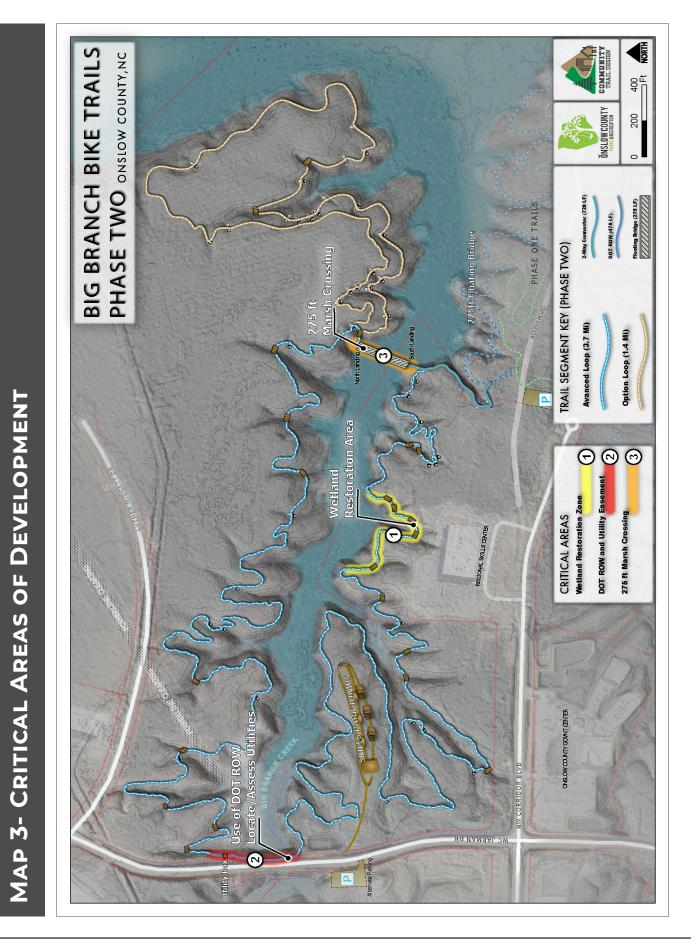
## **MOBILIZATION COSTS PHASE 2**

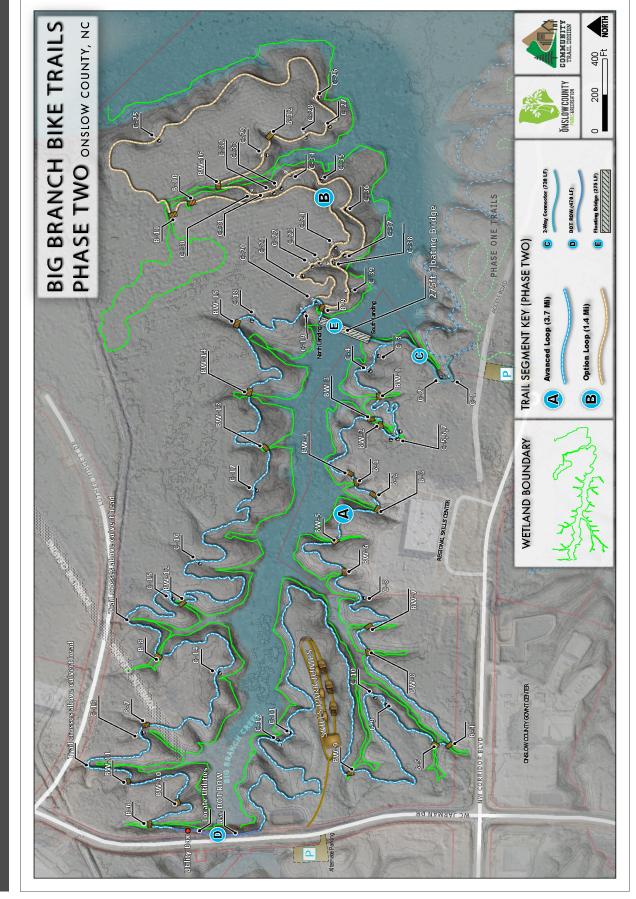
Description		Cost
Mobilization		
• (Per Instance) Up to two instances per contractor	r, up to three contractors.	\$7,500
Housing Stipend		
• Pool of funds that can be used to secure long term housing for the build duration		\$10,000
	SUBTOTAL	\$17,500
	TOTAL PROJECT COST	\$331,884



MAP 1- TRAIL INFRASTRUCTURE SPECIFICATIONS







# MAP 4- WETLAND DELINEATION OVERLAY

## **END OF DOCUMENT**



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