



PROJECT MANUAL
For

ROCKY BRANCH PARK IMPROVEMENTS BLUE ZONE TRAILS

OWNER:
CITY OF BELMONT
115 North Main Street
(P.O. Box 431)
Belmont, North Carolina 28012

PARK AND RECREATION DEPARTMENT:
Zip Stowe
Parks and Recreation Director
115 North Main Street
(P.O. Box 431)
Belmont, North Carolina 28012
704-901-2081
Fax 702-825-0514

March 2021

Address all communications regarding this project to the Parks and Recreation Director at the address listed above.

CITY OF BELMONT

ROCKY BRANCH PARK IMPROVEMENTS BLUE ZONE TRAILS

TABLE OF CONTENTS

<u>Section</u>	<u>Section Name</u>	<u>Starting Page</u>
DIVISION 00 - PROJECT DESCRIPTION AND SCOPE OF WORK		
00 100	Request for Bids	00 100-1
00 200	Location Map	00 200-1
00 300	Scope of Work	00 300-1
DIVISION 01 - BID DOCUMENTS		
01 100	Instructions to Bidders & Contract Conditions	01 100-1
01 200	*Bid Form	01 200-1
01 300	*General Contractor Qualifications Statement	01 300-1
DIVISION 02 - CONTRACT DOCUMENTS		
02 100	Notice of Award	02 100-1
02 200	Agreement	02 200-1
02 300	Certificate of Insurance	02 300-1
02 400	Notice to Proceed	02 400-1
DIVISION 03 - CONTRACT PROVISIONS AND SPECIFICATIONS		
03 100	Contract Considerations	03 100-1
03 110	Application for Payment	03 110-1
03 120	Sales Tax Statement	03 120-1
03 130	Final Receipt	03 130-1
03 140	Measurement and Payment	03 140-1
03 200	Construction Facilities and Temporary Controls	03 200-1
03 300	Bike-Optimized Singletrack Trail	03 300-1
03 400	Signature Trail Features	03 400-1
03 500	Thick Stack Fieldstone Rock	03 500-1
03 600	Wayfinding and Signage	03 600-1
03 700	Trailhead Monument	03 700-1
ATTACHMENTS		
A	Rocky Branch Park – Blue Zone Trails (Design Document)	A-1
B	Trailhead Monument Schematic	B-1
C	Existing Features To Be Removed	C-1
D	Examples of Acceptable Imported Rock	D-1
E	Descriptions of Signature Trail Features	E-1
F	Examples of Wayfinding and Signage	F-1
G	Example Pictures of Blue Zone Hub	G-1

Forms indicated above as * are required for Bid.

DIVISION 00
PROJECT DESCRIPTION AND
SCOPE OF WORK

REQUEST FOR BIDS

ROCKY BRANCH PARK IMPROVEMENTS – BLUE ZONE TRAILS

Sealed bids are requested to be submitted before Tuesday, **March 23, 2021 at 2:00 P.M.**

Bids shall be submitted to Zip Stowe, Park and Recreation Director at City Hall located at 115 North Main Street, Belmont, North Carolina 28012.

Two copies of the Bid Form and General Contractor Qualifications Statement, as included in the Project Manual, shall be completed and submitted in a sealed envelope marked **ROCKY BRANCH PARK IMPROVEMENTS – BLUE ZONE TRAILS**.

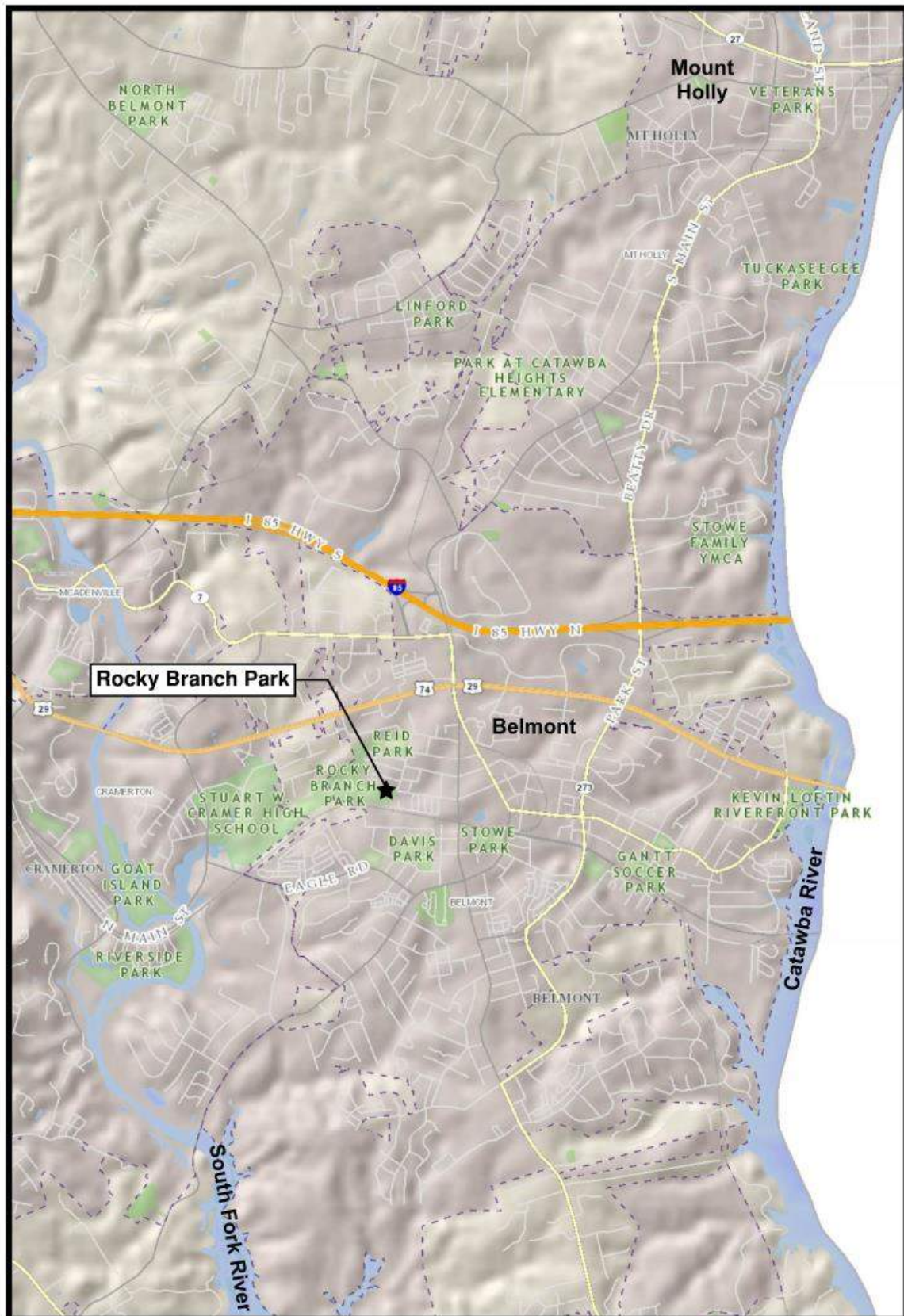
The base bid consists of furnishing all labor, materials and equipment for construction of approximately 7,000 linear feet of intermediate single track mountain biking trail and other ancillary construction necessary for the completion of this work at Rocky Branch Park as specified herein and by the City's Parks and Recreation Director or Designated Agent.. The project includes construction of a 2 to 4 foot wide natural surface single track mountain biking trail constructed primarily using bench-cut rolling-contour techniques with creative implementation of natural elements such as rock, maximization of the landscape's flow and topography, and surface terraforming where necessary. The goal of the blue zone trails is to create a both challenging and highly entertaining experience while providing various opportunities for riders to hone their bike handling skills, test their abilities and experience trail features usually found in the mountains or at bike parks. Technical features in this zone ramp up in intensity, where unavoidable obstacles up to 6" are almost always present in the trail surface, and trail features provide the opportunity for airtime and increased speeds.

The contract also consists of one add alternate bid which includes furnishing all labor, materials, and equipment for construction of the trailhead entry monuments. This add alternate bid will be awarded based on project budget availability.

Applicable bid forms and specifications for this Request for Bids may be obtained from the City of Belmont Finance Office, Belmont City Hall, 115 North Main Street (P.O. Box 431), Belmont, NC 28012 – (704) 825-5586.

North Carolina laws and regulations apply. The right is reserved to reject any or all bids.

LOCATION MAP



SCOPE OF WORK

ROCKY BRANCH PARK IMPROVEMENTS – BLUE ZONE TRAILS

Rocky Branch Park (RBP) is located 12 miles west of Uptown Charlotte at 103 Sacco Street in Belmont, North Carolina. Surrounded by mostly working class residential neighborhoods and quiet streets, RBP is a relatively undeveloped urban greenspace within walking distance to public schools, parks, homes and Belmont's lively Main Street, a mere mile away.

Totaling approximately 41 acres, the park is comprised of wooded, rolling terrain with its namesake stream, Rocky Branch, meandering through the property from east to west. This small urban tributary of the South Fork Catawba River drains a highly developed urban landscape and features a trickling boulder-strewn stream bed.

The Blue Zone Trails is the third phase of a multi-phased plan outlined in the Rocky Branch Trail Enhancement Plan. This once conceptual trail zone are now designed at ground-level and ready for construction. The design document for the Blue Zone is included in Attachment A.

The Blue Zone is an intermediate-level trail corridor intended to be both challenging and highly entertaining while providing various opportunities for riders to hone their bike handling skills, test their abilities and experience trail features usually found in the mountains or bike parks. Its success will be based on the creative implementation of natural elements such as rock, maximization of the landscape's flow and topography, and surface terraforming where necessary.

The designed corridor is located on the southern flank of the park sandwiched between Rocky Branch Creek to the north and the Norfolk Southern right-of-way to the south. The overall theme of the Blue Zone is variety. Much of the overall trail corridor resides on mild slopes with a range of 10-50% found throughout the zone. Trail characteristics for each build segment are defined in the design document where steeper slopes provide opportunity for a bench cut that creates a sense of exposure and lower angle slopes lend themselves to a more traditional Piedmont cross-country style of trail where trail surface texture can be enhanced by plugging rocks and preserving roots. Implementation of rock features as visual anchors, chokes, and technical features will be essential to the success of the trail zone. The Blue Zone Trail is approximately 7,000 linear feet in length and includes the construction of five (5) signature trail features and the integration of imported thick stack fieldstone rock.

The project includes one add alternate that will be awarded depending on project budget availability. The add alternate includes the construction of one rock boulder cairn trailhead entry monuments to frame the entrance of the Carolina Thread Trail. A schematic of the trailhead entry monument is included in Attachment B.

Further details of the bid, contract, and project specifications are included in subsequent sections of this project manual.

DIVISION 01
BID DOCUMENTS

INSTRUCTIONS TO BIDDERS & CONTRACT CONDITIONS

1. DEFINITIONS

Wherever used in this Project Manual and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof.

- 1.1. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 1.2. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 1.3. *Bidder*—The individual or entity who submits a Bid.
- 1.4. *Contract*—The entire and integrated written agreement between the Owner's Designated Agent and Contractor concerning the Work.
- 1.5. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents.
- 1.6. *Contractor*—The individual or entity with whom Owner's Designated Agent has entered into the Agreement.
- 1.7. *Notice of Award*—The written notice by Owner's Designated Agent to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner's Designated Agent will sign and deliver the Agreement.
- 1.8. *Owner*—The City of Belmont.
- 1.9. *Owner's Designated Agent* – Tarheel Trailblazers Mountain Bike Association.
- 1.10. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 1.11. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual is contained in the table of contents.
- 1.12. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 1.13. *Substantial Completion* – Stage when a construction project is deemed sufficiently completed to the point where the owner can use it for its intended purpose.

2. BIDDING DOCUMENTS

Complete sets of Bidding Documents must be used in preparing Bids. Owner assumes no responsibility for misinterpretations resulting from the use of incomplete sets of Bidding Documents. Bidders are responsible

for checking that their bidding documents contain every section listed in the table of contents, and that no pages are missing from any section or its attachments.

3. CONTRACTOR'S LICENSING

The Bidder's (Contractor's) attention is called to the requirements of Chapter 87 of the General Statutes of the State of North Carolina and Regulations of the North Carolina Licensing Boards for Contractors established and empowered by virtue of Chapter 318 of the public laws of 1925, as amended, shall be enforced on this Contract, as applicable.

Due to the value of these contract improvements, the contractor must be licensed as a general contractor in the State of North Carolina or have the ability and qualifications to become licensed as a general contractor in the State of North Carolina prior to the pre-construction meeting. All Bidder's not able to meet this requirement will be considered unqualified to complete the Work.

4. EXAMINATION OF CONTRACT DOCUMENTS AND SITE

It is the responsibility of each Bidder, before submitting a Bid, to (a) examine the Contract Documents thoroughly, (b) visit the site to become familiar with local conditions that may in any manner affect cost, progress, performance or furnishing of the Work, (c) consider federal, state and local laws, ordinances, rules and regulations that may in any manner affect cost, progress, performance or furnishing of the Work; (d) study and carefully correlate Bidder's observations with the Contract Documents, and (e) notify the Parks and Recreation Director of all conflicts, errors or discrepancies in the Contract Documents.

A **virtual pre-bid meeting** will be held on Wednesday, **March 10, 2021 at 2:00 P.M.** via Webex (Web link: <https://meethdr.webex.com/meethdr/j.php?MTID=m62423ce338e3f9bce67856736feb22fc> or Dial-in Number: 1-408-418-9388 with Access Code: 187 504 1717) . During this meeting, contractors will have the opportunity to discuss the proposed improvements with the project team. All questions will be recorded and answers distributed to the bidders after the meeting.

The submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with the requirements of this article, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and such means, methods, techniques, sequences or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions of performance and furnishing of the Work.

5. INTERPRETATIONS AND ADDENDA

All questions about the meaning or intent of the Contract Documents are to be directed to the Parks and Recreation Director. Addenda may also be issued to modify the Bidding Documents as deemed advisable by Parks and Recreation Director.

6. CONTRACT TIME

Bidder shall indicate the number of consecutive calendar days required to complete the Work in the Bid Form (Section 01 200).

7. BID FORM

The Bid Form is included with this Project Manual.

Bids by corporations must be executed in the corporate name by the president or a vice-president and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown with the signature. If requested, the person signing a Bid for a

corporation or partnership must produce evidence satisfactory to the Owner of the person's authority to bind the corporation or partnership.

Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

8. SUBMISSION OF BIDS

Sealed proposals are required and such proposals shall be on the Bid Form bound in this Project Manual.

The Bid Form and General Contractor Qualification Statement shall be completely filled out and submitted with the bid. The bidder shall also acknowledge receipt of addendum if applicable. Failure to submit all forms with the Bid shall be just cause for rejection of the Bid by the Owner.

9. BIDS TO REMAIN OPEN

All Bids shall remain open for ninety (90) calendar days after the day of the Bid opening, but Owner may, at its sole discretion, release any Bid prior to that date. Extensions of time when Bids shall remain open beyond the ninety-day period may be made only by mutual agreement between the Owner and the Successful Bidder.

10. AWARD OF CONTRACT

To the extent permitted by applicable state and federal laws and regulations, Owner reserves the right to reject any and all Bids, to waive any and all informalities not involving price, time or changes in the Work with the Successful Bidder, and the right to disregard all nonconforming, nonresponsive, unbalanced or conditional Bids. Bids may be considered irregular and subject to rejection if they show serious omission, unauthorized alteration of form, unauthorized alternate bids, incomplete or unbalanced unit prices, or irregularities of any kind. Also, Owner reserves the right to reject the Bid of any Bidder if Owner believes that it would not be in the best interest of the Project to make an award to that Bidder, whether because the Bid is not responsive or the Bidder is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by Owner.

The Bidder shall be notified of any errors in the Bid Documents submitted to the Owner which affect his status as low bidder or as may otherwise reduce his total bid. If the corrected total represents an unacceptable amount and the Contractor can substantiate same, totally in accordance with the General Statutes of the State of North Carolina G.S. 143-129.1, the Bidder may then withdraw his bid and the Owner may award the project to the second low bidder or re-let the project.

In evaluating Bids, Owner will consider the qualifications of the Bidders, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices and other data, as may be requested in the Bid Form or prior to the Notice of Award.

If the Contract is to be awarded, it will be awarded to the lowest responsive and responsible Bidder whose evaluation by the Owner indicates to Owner that the award will be in the best interests of the Project.

11. TAXES

The Contractor shall pay all applicable sales, consumer, use and other similar taxes required by law. The Contractor is responsible for reviewing the pertinent State Statutes involving the sales tax and sales tax exemption and complying with all requirements.

12. SIGNING OF AGREEMENT

When Owner gives a Notice of Award to the Successful Bidder, it will be accompanied by the required number of unsigned counterparts of the Agreement with all other written Contract Documents attached. Within ten days thereafter Contractor shall sign and deliver the required number of counterparts of the Agreement and attached documents to Owner with the required Bonds. Thereafter Owner shall deliver one

fully signed counterpart to Contractor. Each counterpart is to be accompanied by a complete set of the Drawings, if applicable, with appropriate identification.

13. EXECUTION OF WRITTEN CONTRACT

The successful bidder will be required to sign a written contract identified as the Agreement.

14. EQUAL OPPORTUNITY – NON-DISCRIMINATION PROVISIONS

The Owner is committed to promoting equal opportunities for all and to eliminating prohibited discrimination in all forms. For purposes of this section, prohibited discrimination means discrimination in the solicitation, selection, and/or treatment of any subcontractor, vendor, supplier or commercial customer on the basis of race, ethnicity, gender, age, religion, national origin, disability or other unlawful form of discrimination. Without limiting the foregoing, prohibited discrimination also includes retaliating against any person, business or other entity for reporting any incident of prohibited discrimination. It is understood and agreed that not only is prohibited discrimination improper for legal and moral reasons, prohibited discrimination is also an anti-competitive practice that tends to increase the cost of goods and services to the Owner and others. As a condition of entering into this Agreement, the Contractor represents, warrants, and agrees that it does not and will not engage in or condone prohibited discrimination. Without limiting any rights the Owner may have at law or under any other provision of this Agreement, it is understood and agreed that a violation of this provision constitutes grounds for the Owner to terminate this Agreement.

As a condition of entering into this Agreement, the Contractor further agrees to: (a) promptly provide to the Owner all information and documentation that may be requested by the Owner from time to time regarding the solicitation and selection of subcontractors; and (b) provide to the Owner within sixty days after completion of performance under this Agreement a Final Payment Affidavit in the form attached to this Agreement. Failure to maintain or failure to provide such information constitutes grounds for the Owner to terminate or withhold payment under this Agreement.

15. CONTRACTOR'S SAFETY

The Contractor shall at all times perform the work subject to this Contract in a safe and proper manner and in compliance with all applicable ordinances, statutes, rules and regulations concerning safety, including but not limited to, such applicable statutes, rules and regulations known as or issued pursuant to, the Occupational Safety and Health Act ("OSHA") (hereinafter "safety standards"). Without limiting the foregoing in any manner, safety standards concerning trenching and excavation are particularly important. The Parks and Recreation Director shall take such action as is reasonably necessary or convenient to require the Contractor to comply with the safety standards in performing all aspects of the work subject to this Contract. If the Parks and Recreation Director or his authorized Inspector(s) become aware of any violation of the safety standards or of any failure by the Contractor to comply with the safety standards, the Parks and Recreation Director and his authorized Inspector(s) may, but shall not be obligated to, report such violation to the regulatory agency. It is expressly understood and agreed that neither the Owner, its officers, employees or representatives have any obligation, duty or responsibility to inspect the work subject to this contract for compliance with this sub-paragraph nor to report violations of this sub-paragraph to the Contractor and/or any regulatory agency.

The Contractor will immediately notify the Owner of any OSHA inspection. In addition, the Contractor will send Owner a copy of any citation upon receipt of the citation (not after settlement of the case).

The Contractor will notify the Owner of any unusual hazards created by the job or found during construction.

The Contractor will provide to Owner a copy of all work permits, if requested.

16. CONTRACTOR'S LIABILITY INSURANCE

The Contractor shall maintain adequate liability insurance for the duration of the Contract. As proof of insurance coverage, Contractor shall deliver certificates of insurance to Owner.

The Contractor shall purchase and maintain with a company acceptable to the Owner and authorized to do business with the state of North Carolina, such as will protect him from:

- Claims for damages of bodily injury or property damage arising out of the ownership, operation or maintenance of a motor vehicle.
- Claims of bodily injury and property damage which arise from operations of this Contract, including products/completed operations, personal injury liability, Contractual liability assumed under the indemnity provision of this Contract, broad form property damage, explosion, collapse and underground utility damage (XC&U).
- Claims under workers' compensation laws, disability benefit laws or other similar employee benefit laws and from Claims for damages because of bodily injury, occupational sickness or disease or death of his employees.

This insurance shall be written for not less than the limits of liability specified below or required by law.

- COMMERCIAL AUTOMOBILE: bodily injury and property damage liability covering all owned, non-owned and hired automobiles for limits of not less than \$1,000,000 bodily injury each person, each accident and \$1,000,000 property damage, or \$1,000,000 combined single limit bodily injury and property damage.
- COMMERCIAL GENERAL LIABILITY: bodily injury and property damage liability as shall protect the Contractor and sub-Contractor performing Work under this Contract from Claims of bodily or property damage which arise from operations of this Contract whether such operations are performed by the Contractor, any Subcontractor or anyone directly or indirectly employed by either. The amount of such insurance shall not be less than \$2,000,000 bodily injury each occurrence/aggregate and \$2,000,000 property damage each occurrence/aggregate or \$2,000,000 bodily injury and property damage combined single limits each occurrence/aggregate. This insurance shall include coverage for products/completed operations, personal injury liability, contractual liability assumed under the indemnity provision of this Contract, broad form property damage, explosion-collapse-underground utility damage (XC&U). Stating if policy is written on a Claims made or occurrence basis.
- WORKERS' COMPENSATION INSURANCE: meeting the statutory requirements of the State of North Carolina. Employers Liability - limit per accident - \$500,000, disease per policy limit - \$500,000, disease each employee limit - \$500,000.

The Contractor shall provide the Owner with Certificates of Insurance certifying that the foregoing insurance is in force; and such insurance certificates shall include provisions that the insurance shall not be canceled, allowed to expire or be materially changed without giving the Owner thirty days advance notice by registered mail.

These policies of insurance shall name Owner as additional insured.

The Contractor is advised that if any part of the Work under the Contract is sublet, he would require the Subcontractor(s) to carry insurance as required. However, this will in no way relieve the Contractor from providing full insurance coverage on all phases of the Projects, including any that are sublet.

Contractor may purchase and maintain excess liability in order to satisfy the required limits of insurance.

Contractor may purchase and maintain excess liability insurance in the umbrella form in order to meet the limits of liability required for the insurance to be purchased and maintained. Evidence of such excess liability shall be delivered to Owner in the form of a certificate indicating the policy numbers and limits of liability of all

underlying insurance. The umbrella liability insurance shall have a combined single limit of not less than \$10,000,000. Any company directing or performing blasting Work shall obtain Commercial General Liability insurance from a surety company acceptable to Owner and licensed to do business in the State of North Carolina with an AM best rating of not less than A. The Commercial General Liability insurance for blasting Work shall meet all requirements of the paragraph within this Section entitled "COMMERCIAL GENERAL LIABILITY:" except that the amount of such insurance shall not be less than \$5,000,000 each occurrence/aggregate.

All insurance policies provided by the Contractor shall contain provisions to the effect that the insurer waives all rights of subrogation against any of the insured, additional insureds, and the officers, directors, partners, employees, agents, consultants, and sub-consultants of each and any of them.

17. CONTRACTOR'S RESPONSIBILITIES

Regular working hours are defined as 8 hours per day, Monday through Friday, excluding Owner's holidays, between the hours of 8:00 AM and 6:00 PM. Requests to Work other than regular working hours shall be submitted to Owner not less than 48 hours prior to any proposed weekend Work or scheduled extended work weeks.

Contractor shall reimburse the Owner for additional design and/or inspection costs incurred as a result of overtime Work in excess of the regular working hours. At Owner's option, overtime costs may either be deducted from the Contractor's monthly payment request or deducted from the Contractor's retention prior to release of final payment. Overtime costs for the Owner's personnel shall be \$125 per hour.

18. CORRECTION OF WORK PERIOD

Within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so. During the one-year period for Correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor.

19. WARRANTY

The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

END OF SECTION

SECTION 01 200

BID FORM

BY: _____
(Bidder)

PROJECT IDENTIFICATION: **ROCKY BRANCH PARK IMPROVEMENTS
BLUE ZONE TRAILS**

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents for the Contract Price and within the Contract Time indicated in this Bid Form and the Agreement, and in accordance with the other terms and conditions of the Contract Documents.
2. Bidder accepts all of the terms and conditions of the Bidding and Contract Documents.
3. In submitting this Bid, Bidder makes all representations required by the Instructions to Bidders and further warrants and represents that:
 - (a) Bidder has examined copies of all the Bidding Documents, the Request for Bids, the Instructions to Bidders, Contract Documents, and of the following Addenda (receipt of all which is hereby acknowledged):

No. _____	Dated _____	No. _____	Dated _____
No. _____	Dated _____	No. _____	Dated _____
 - (b) Bidder has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or furnishing the Work.
 - (c) Bidder has given Parks and Recreation Director written notice of all conflicts, errors or discrepancies that it has discovered in the Contract Documents and the written resolution thereof by Parks and Recreation Director is acceptable to Bidder.
 - (d) This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or a corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for himself any advantage over any other Bidder or over Owner.

4. Bidder agrees to complete the Work for the prices(s) indicated in the Schedule of Prices which follows and is further described in the Contract Documents.

ITEM NO.	SECTION	DESCRIPTION	EST. QTY.	UNITS	UNIT PRICE	ITEM TOTAL
1	03 200	Mobilization	1	LS		
2	03 300	Demolition of Existing Trail Features	1	LS		
3	03 300	Bike-Optimized Singletrack Trail Construction	7,000	LF		
4	03 400	Imported Thick Stack Fieldstone Rock (Material & Delivery)	120	TON		
5	03 500	Signature Trail Feature 1	1	LS		
6	03 500	Signature Trail Feature 2	1	LS		
7	03 500	Signature Trail Feature 3	1	LS		
8	03 500	Signature Trail Feature 4	1	LS		
9A	03 500	Signature Trail Feature 5A	1	LS		
9B	03 500	Signature Trail Feature 5B	1	LS		
10	03 600	Wayfinding and Signage	1	LS		
11	03 300	Erosion and Sediment Control	1	LS		
TOTAL BASE BID (ITEMS 1-11)					\$	
(in words)					(in figures)	
12	03 700	Rock Cairn Trailhead Monument	1	EA		
TOTAL ADD ALTERNATE #1 BID (ITEM 12)					\$	
(in words)					(in figures)	

Bidder acknowledges that estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all Unit Price Bid items will be based on actual quantities provided, determined as provided in the Contract Documents.

5. The Bidder agrees that the Work shall be substantially completed for the Blue Zone within _____ calendar days. Time commences to run as provided in the Notice to Proceed, and will run continuously until the project is completed and ready for final payment in accordance with the Agreement. Time extensions may be granted for weather delays in accordance with the Agreement.
6. The General Contractor Qualifications Statement & Questionnaire (Section 01 300) document is attached to and made a condition of this Bid.
7. Communications concerning this Bid shall be addressed to:
- Contact Name: _____
- Address: _____
- _____
- Phone No.: _____
- _____
8. The terms used in this Bid have the meanings assigned to them in the Instruction to Bidders.

Submitted on _____, 20__.

Bidder is:

An Individual

By: _____ (SEAL)
(Individual's Name and Signature)

Doing business as: _____

Business address: _____

Phone No.: _____

A Partnership

By: _____ (SEAL)
(Firm Name)

(General Partner's Name and Signature)

Business address: _____

Phone No.: _____

A Corporation

By: _____(SEAL)
(Corporation Name)

State of incorporation: _____

By: _____
(Name and signature of person authorized to sign)

Title: _____

(Corporate Seal)

Attest: _____
(Secretary)

Business address: _____

Phone No.: _____

A Joint Venture

By: _____
(Name and Signature)

Business address: _____

Phone No.: _____

By: _____
(Name and Signature)

Business address: _____

Phone No.: _____

(Each joint venturer must sign. The manner of signing for each individual, partnership, and corporation that is a party to the joint venture should be in the manner indicated above).

END OF SECTION

SECTION 01 300

GENERAL CONTRACTOR QUALIFICATIONS STATEMENT & QUESTIONNAIRE

The undersigned warrants the truth and accuracy of all statements and answers herein contained. The information requested in Items 1 through 12 of the Informational Questionnaire shall be completed in its entirety by the Bidder. The requirements set forth below are the minimum qualifications and previous project experience that must be met by the General Contractor. Previous project experience listed below shall be accurate and representative of the Work performed by the General Contractor listed below. Previous project experience performed as part of a joint venture shall be performed directly by the General Contractor listed below. **Failure** to meet these conditions will result in a **non-responsive Bid**. **Failure** to complete this section of the Bid in its entirety shall render Bid **non-responsive**. Include additional sheets if necessary.

Minimum qualification requirements for Bidders:

1. General Contractor shall be licensed to do work in the State of North Carolina or have the ability to obtain licensure as a General Contractor in North Carolina prior to the start of construction.
2. General Contractor shall have completed at least three projects similar in nature to the proposed one.
3. General Contractor must demonstrate a complete understanding of the project design, goals, and objectives.

Priority will be given to Bidder's that meet the following qualification preferences:

1. General Contractor that is a member of the Professional Trail Builders Association.
2. General Contractor that has never failed to complete work awarded to him/her.
3. General Contractor with past client references that provide a satisfactory review of their past project performances.
4. General Contractor that has shown substantial experience in constructing trails in rolling natural terrain.
5. General Contractor that has shown they fully understand the characteristics of the project site.
6. General Contractors that have demonstrated creativity and high quality craftsmanship in construction of trail features on past projects.
7. General Contractors that are able to mobilize to the site within 3 months of the award and complete the project within 6 months of the award.

INFORMATIONAL QUESTIONNAIRE

Include additional sheets if necessary.

1. How many years has your organization been in business constructing trails? _____
2. Is your organization licensed as a General Contractor in the State of North Carolina? _____
If so, how many years has your organization been in business as a General Contractor? _____

Provide General Contractor's license number and classification.

License Number: _____

Classification: _____

If not, does your organization meet the requirements and have the ability to obtain licensure as a General Contractor in the State of North Carolina prior to the start of construction? _____

3. Is your organization a member of the Professional Trail Builders Association (PTBA)? _____

4. Describe and give the date and owner of the last project that you have completed similar in type, size, and nature as the one proposed.

5. Have you ever failed to complete work awarded to you? If so, where and why?

6. Name three individuals, municipalities, or corporations for which you have performed work and to which you refer; with contact name, phone number, & email address:

7. Have you personally inspected the site of the proposed work? _____

8. Please list the names and addresses of the subcontractors to be used for the portions of the work listed below. Insert "self" if proposing to perform the Work with own forces. All proposed subcontractors must meet the qualification requirements set forth in the Project Manual.

Clearing/Trail Construction: _____

Trail Features/Obstacles (Timber or Earth): _____

Rock Integration: _____

Other: _____

9. Does your organization have past experience in rock work and a high level of proficiency in the use of rock for trail and trail feature construction? _____

***If so, please attach pictures and descriptions of at least three examples of your rock work from past projects.**

10. Describe how you would execute the project, collaborate with the trail designer, Community Trail Design, and work with project committee throughout the construction process. Attach an additional sheet if necessary:

11. What date do you anticipate having crews available to begin construction? _____

12. State the true and exact, correct, and complete name under which you do business. Bidder is:

SOLE PROPRIETORSHIP

Individual's Signature: _____

Individual's Name: _____

PARTNERSHIP

Partnership Name: _____

General Partner's Signature: _____

General Partner's Name: _____

CORPORATION

Corporation Name: _____

State of Incorporation: _____

Authorized Signature: _____

Name of Person Authorized to Sign: _____

END OF SECTION

DIVISION 02
CONTRACT DOCUMENTS

NOTICE OF AWARD

Dated: _____

TO: _____
(Bidder)

CONTRACT FOR: **ROCKY BRANCH PARK IMPROVEMENTS
BLUE ZONE TRAILS**

You are notified that your Bid dated _____ for the above Contract has been considered. You are the apparent successful Bidder and have been awarded a contract for the construction of the **Rocky Branch Park Improvements – Blue Zone Trails**.

The Contract Price of your contract is _____ Dollars
and _____ Cents (\$_____).

Enclosed are three copies of the Contract Documents for your execution and subsequent return to this office for further processing.

You must comply with the following conditions within ten (10) business days of the date of this Notice of Award, which is by

_____, 2021:

1. Execute three copies of the Agreement. Do not date the Agreements; this will be accomplished upon execution of the contracts by the Owner's Designated Agent.
2. Include three copies of the Certificate of Insurance. The Certificate must name the Owner as additional insured.

The Owner's Designated Agent will return to you one fully signed counterpart of the Contract Documents attached.

If you have any questions, or if we can be of any further assistance, please do not hesitate to contact this office.

Sincerely,

City of Belmont, North Carolina

Adrian T. Miller, City Manager
(Authorized Representative of Owner)

SECTION 02 200

AGREEMENT

THIS AGREEMENT is dated as of the _____ day of _____ in the year 20____ by and between the City of Belmont, North Carolina, a municipal corporation organized and existing under the laws of the State of North Carolina and herein called the Owner, and _____ herein called the Contractor.

Owner and Contractor, in consideration of the mutual covenants hereinafter set forth, agree as follows:

1. WORK

Contractor shall complete all Work as specified or indicated in the Contract Documents. The work is described in the Contract Documents and generally includes all work required for construction of the **ROCKY BRANCH PARK IMPROVEMENTS – BLUE ZONE TRAILS**.

2. CONTRACT TIME

The Contractor shall be substantially completed with the work as specified in the Bid within _____ calendar days after the date when the Contract Time commences to run as provided in the Notice to Proceed. The Contractor shall keep records of daily rainfall throughout construction and the Contractor may request extensions for weather related delays. All time extensions for the substantially complete deadline shall be reconciled monthly in a formal request made with the monthly payment application and approved by the Owner's Designated Agent in writing. For each calendar day beyond the scheduled or extended date of Substantial Completion (as provided in the Notice to Proceed) that the Project has not achieved Substantial Completion, the Contractor shall pay the Owner's Designated Agent liquidated damages in the amount of \$100 per day.

3. CONTRACT PRICE

Owner shall pay Contractor for performance of the Work in accordance with the Contract Documents in current funds at the unit prices presented in the Bid Form (Section 01 200) of these Contract Documents in the amount of \$_____.

Estimated quantities are not guaranteed, and verifications of actual quantities and classification are to be made by the Contractor.

4. PAYMENT PROCEDURES

Progress Payments: Owner will make monthly progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment during performance of the Work. All such payments will be measured by the schedule of values established in the Bid and will be made in an amount equal to the percentage indicated below, but, in each case, less the aggregate of payments previously made and less such amounts as Owner may withhold.

- 4.1 Partial payment of the cost of Work completed, until 50 percent of the Work is completed, as evidenced by payments in the amount of at least 50 percent of the Contract Price, shall be made at the rate of 90 percent of the estimates. After 50 percent of the Work is completed, payment of the cost of Work completed shall be made at the rate of 100 percent of the estimates with no further funds being retained.
- 4.2 Final Payment. Upon final completion, and acceptance of the Work, Owner shall pay the remainder of the Contract Price as recommended by Parks and Recreation Director.

- 4.3 On the completion of the work, the Owner shall pay such amount, less payments previously made, in legal tender of the United States, and payments of such final amount shall release the Owner from all claims for work done or materials furnished under this contract.
- 4.4 The Owner will require full release of all claims, including without limitation, for materials or labor furnished for this work, and prior to the payment of the final estimate, the Contractor shall furnish the City with a written statement sworn before a Notary Public to the effect that all payments have been made for labor and materials used in this construction, and that all claims, suits, and proceedings of every name and description against the Owner, its officers and agents, have been settled.

5. POST CONSTRUCTION

Once construction is substantially complete, the Contractor shall remain obligated to the quality of the construction materials used and workmanship of their Work according to the following requirements:

- 5.1 Within one year after the date of Substantial Completion of the Work or designated portion thereof, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so. During the one-year period for Correction of Work, if the Owner fails to notify the Contractor and give the Contractor an opportunity to make the correction, the Owner waives the rights to require correction by the Contractor.
- 5.2 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality and new unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage.

6. CONTRACTOR'S REPRESENTATIONS

In order to induce Owner to enter into this Agreement Contractor makes the following representations:

- 6.1 Contractor has familiarized itself with the nature and extent of the Contract Documents, Work, site, locality, and all local conditions and Laws and Regulations that in any manner may affect cost, progress, performance or finishing of the Work.
- 6.2 Contractor has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.
- 6.3 Contractor has given Parks and Recreation Director written notice of all conflicts, errors or discrepancies that he has discovered in the Contract Documents and the written resolution thereof by Parks and Recreation Director is acceptable to Contractor.

7. CONTRACT DOCUMENTS

The Contract Documents which comprise the entire agreement between Owner and Contractor are attached to this Agreement, made a part hereof and consist of the following:

- 7.1 This Agreement (pages 1 to 4 of Section 02 200, inclusive).
- 7.2 Notice of Award and Notice to Proceed.
- 7.3 Project Manual bearing the general title "Rocky Branch Park Improvements – Blue Zone Trails", dated March 2021 and consisting of Project Description and Scope of Work, Bid Documents, Contract

Documents, Contract Provisions and Specifications, and attachments all as listed in table of contents thereof.

- 7.4 Addenda numbers _____ to _____, inclusive.
- 7.5 Contractor's Bid (pages 1 to 4 of Section 01 200, inclusive).
- 7.6 General Contractor Qualification Statement & Questionnaire (pages 1 and 3 of Section 01 300, inclusive).
- 7.7 All applicable provisions of State and Federal law and any Modification, including all Change Orders, duly delivered after execution of Agreement.

There are no Contract Documents other than those listed above in this article. The Contract Documents may only be amended, modified or supplemented as provided in Project Manual.

8. MISCELLANEOUS

- 8.1 Terms used in this Agreement are defined in the Instructions to Bidders and shall have the meanings indicated.
- 8.2 No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, moneys that may become due and moneys that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.
- 8.3 Owner and Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto, his partners, successors, assigns and legal representatives in respect to all covenants, agreements and obligations contained in the Contract Documents.
- 8.4 Contractor shall pay promptly and before final payment, any and all claims or liens incurred in and about this work, and execute a final receipt form.

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement and caused their respective corporate seals to be affixed hereto. All portions of the Contract Documents have been signed or identified by Owner and Contractor.

CONTRACTOR

(AFFIX CORPORATE SEAL HERE)

Street Address

City, State, Zip

BY: _____
President/Vice President

ATTEST: _____
Secretary/Treasurer

Federal Taxpayer ID Number _____

CITY OF BELMONT
OWNER

BY: _____
City Manager

WITNESS: _____
City Clerk

END OF SECTION

SECTION 02 300

CERTIFICATE OF INSURANCE

(Attach Certificate of Insurance here)

END OF SECTION

SECTION 02 400

NOTICE TO PROCEED

Dated _____, 20____

CONTRACT FOR: **ROCKY BRANCH PARK IMPROVEMENTS
BLUE ZONE TRAILS**

CONTRACTOR:

You are hereby notified to commence work on the subject contract on or before _____ and are to substantially complete the work within _____ calendar days. The Substantial Completion date is _____, 20_____.

(OWNER)

By _____
(Authorized Signature)

(Printed Name & Title of above signer)

DIVISION 03
CONTRACT PROVISIONS AND
SPECIFICATIONS

SECTION 03 100

CONTRACT CONSIDERATIONS

1.1 APPLICATIONS FOR PAYMENT

- A. Submit three copies of each application on an Application for Payment form as included in Section 03 110. Contractor's electronic media driven form will be considered.
- B. Content and Format: Utilize schedule of bid items for listing items in Applications for Payment.
- C. Payment Period: Monthly.
- D. Owner may require Contractor to furnish waivers of lien signed by all persons furnishing labor or materials included in any estimate submitted by or on behalf of Contractor.
- E. Include three copies of sales tax statement as included in Section 03 120 with copies of receipts.

1.2 MEASUREMENT AND PAYMENT - UNIT PRICES

- A. Authority: Measurement methods are delineated in Section 03 140.
- B. Take measurements and compute quantities. Owner's Designated Agent will verify measurements and quantities.
- C. Quantities: Actual quantities provided within defined limits shall determine payment.
- D. The total Bid price shall cover all Work required by the Contract Documents. All costs for the providing of all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work, and other overhead and profit shall be included in the unit and lump sum prices bid. All Work not specifically set forth as a pay item in the Bid shall be considered a subsidiary obligation of Contractor, and all costs in connection therewith shall be included in the prices bid.

END OF SECTION

SECTION 03 110

APPLICATION FOR PAYMENTPROJECT: **ROCKY BRANCH PARK IMPROVEMENTS
BLUE ZONE TRAILS**

CONTRACTOR:

Sheet No. _____

Estimate No. _____

Date _____, 20____

OWNER: **CITY OF BELMONT**P.O. Box 431 (115 North Main Street)
Belmont, NC 28012
704-825-5586

CONTACT:

Belmont Parks and Recreation Director**RECAP**

	<u>Contract Amount</u> Total	<u>Completed to Date</u> Total
Original Contract	\$ _____	\$ _____
Extra Orders	\$ _____	\$ _____
Deduction Orders	\$ _____	\$ _____
Totals	\$ _____	\$ _____
<hr/>		
Less Retainer 10% (after 50% complete 0% on remaining est.)		\$ _____
Net Completed to Date		\$ _____
Total Earned to Date		\$ _____
Less Amount Previously Paid		\$ _____
DUE THIS ESTIMATE		\$ _____

CONTRACTOR'S CERTIFICATE

I hereby certify that the above materials and services have been furnished and performed in accordance with the conditions of the contract for the above work, and that payment has not been received and there is due and unpaid on said contract

 _____ Dollars _____

CONTRACTOR: _____

SIGNED: _____
Date _____**OWNER'S APPROVAL**

 (Authorized Signature) Date

OWNER'S DESIGNATED AGENT'S RECOMMENDATION

 (Authorized Signature) Date

Rocky Branch Park Improvements
Blue Zone Trails03 110-1
Application for PaymentCITY OF BELMONT
3/1/21

UNIT PRICE QUANTITIES AND AMOUNTS								
CONTRACTOR:			PROJECT: ROCKY BRANCH PARK IMPROVEMENTS BLUE ZONE TRAILS					
ESTIMATE NUMBER:			DATE:					
ITEM NO.	ITEM DESCRIPTION	UNIT	CONTRACT QUANTITY	PREVIOUS INSTALLED QUANTITY	INSTALLED QUANTITY THIS PERIOD	TOTAL INSTALLED QUANTITY	UNIT PRICE	TOTAL CURRENT AMOUNT
1	Mobilization	LS					\$	\$
2	Demolition of Existing Trail Features	LS					\$	\$
3	Bike-Optimized Singletrack Trail Construction	LF					\$	\$
4	Imported Thick Stack Fieldstone Rock (Material & Delivery)	TON					\$	\$
5	Signature Trail Feature 1	LS					\$	\$
6	Signature Trail Feature 2	LS					\$	\$
7	Signature Trail Feature 3	LS					\$	\$
8	Signature Trail Feature 4	LS					\$	\$
9	Signature Trail Feature 5	LS					\$	\$
10	Wayfinding and Signage	LS					\$	\$
11	Erosion and Sediment Control	LS					\$	\$
12	Rock Cairn Trailhead Monument	EA					\$	\$
TOTAL								\$

SECTION 03 120

SALES TAX STATEMENT

Project _____

Period Covered _____

Invoice No.	Invoice Date	Vendor's Name	Amount Before Taxes	NC Tax	County Tax	Total Inv. Amount	County Paid
Subtotal (Page 1)			\$	\$	\$	\$	
Plus total cost of material withdrawn from our warehouse stock							
Grand Total			\$	\$	\$	\$	

I certify that the above listed vendors were paid sales tax upon purchases of building materials during the period covered by the construction estimate, and the property upon which such taxes were paid with or will be used in the performance of this contract. No tax on purchases of tangible personal property purchased by such contractors for use in performing the contract which does not annex to, affix to, or in some manner become a part of the building or structure being erected, altered or repaired is included in the above list.

Signed: _____

(Title)_____
Contractor (or Sub-Contractor) Name

SECTION 03 130

FINAL RECEIPT

CITY OF BELMONT, NORTH CAROLINA

ROCKY BRANCH PARK IMPROVEMENTS – BLUE ZONE TRAILS

_____ agrees to accept the sum of _____ as full and final payment of the cost of all improvements provided for in the foregoing contract whose total sum of _____ Dollars, \$_____, in cash, being the full amount accruing to the undersigned by virtue of said Contract, said cash covering and including full payment for all extra work and material furnished by the undersigned in the construction of said improvements, and all incidentals thereto. The undersigned hereby releases the said City of Belmont and its agents and representatives from all claims whatsoever growing out of the said Contract.

The undersigned further certifies that all construction has been completed in substantial compliance with the Contract Documents and that all persons doing work upon or furnishing materials or supplies for said improvements under the foregoing Contract have been paid or will be paid in full in accordance with the requirements of the Contract Documents and the requirements of the General Laws of the State of North Carolina.

The undersigned further certifies that all taxes, imposed by Chapter 212, North Carolina Statutes (Sales and Use Tax Act), as amended, have been paid and discharged.

CONTRACTOR

DATE

SECTION 03 140

MEASUREMENT AND PAYMENT

1.1 SECTION INCLUDES

- A. This section covers methods of measurement and payment of items of work under this contract.
- B. The total Bid Price for each section of the contract shall cover all work required by the Contract Documents. All costs in connection with the proper and successful completion of the work, including furnishing all materials, equipment, supplies, and appurtenances; providing all construction plant, equipment, and tools; and performing all necessary labor and supervision to fully complete the work, shall be included in the unit and lump sum prices bid. All work not specifically set forth as a pay item in the Bid Form, including but not limited to testing and inspections, shall be considered a subsidiary obligation of Contractor and all costs in connection therewith shall be included in the prices bid.

1.2 ESTIMATED QUANTITIES

- A. All estimated quantities stipulated in the Bid Form or other Contract Documents are approximate and are to be used for the purpose of comparing the bids submitted for the work. The actual amounts of work done and materials furnished under unit price items may differ from the estimated quantities.
- B. The basis of payment for work and materials will be the actual amount of work done and materials furnished.
- C. Contractor agrees that he will make no claim for damages, anticipated profits, or otherwise on account of any difference between the amounts of work actually performed and materials actually furnished and the estimated amounts therefore. Owner's Designated Agent reserves the right to reduce the scope of the Work as necessary to conform to the project budget.

1.3 MOBILIZATION & DEMOBILIZATION

- A. Mobilization consists of preparatory work and operations necessary for the movement of personnel, equipment, supplies and incidentals to the project site, and for establishment of facilities necessary for work on the project. Also included is the removal and disbandment of those personnel, equipment, supplies and incidentals established for work on the project; and for costs incurred prior to beginning work on the items on the Project site.
- B. All work covered by mobilization will be paid for at the contract lump sum price. Fifty percent of the lump sum will be paid with the first payment request application. The remainder will be paid with the last application.

1.4 DEMOLITION

- A. The work covered by this section consists of all removal and disposal of existing trail features indicated on the existing trail map in Attachment C. Features shall be demolished, hauled offsite, and disposed of in a proper landfill in accordance with local, state, and federal regulations. The City of Belmont Public Works will haul materials offsite and dispose of them if they are stockpiled near the trailhead off of Sacco St. at no cost to the Contractor.
- B. The work covered under this section shall be paid for at the contract lump sum price and will be full compensation for all elements of work needed to complete this work as specified. The lump sum price will be paid once demolition is complete.

- C. Any additional trail features not indicated on the existing trail map in Attachment C will be negotiated during construction with the Owner's Designated Agent. Payment will be made based on the negotiated lump sum price at the completion of the demolition.

1.5 BIKE-OPTIMIZED SINGLETRACK TRAIL CONSTRUCTION

- A. The work covered by this section consists of all equipment, material, and labor to clear, excavate, and compact the singletrack trail as specified in Section 03 300.
- B. The work covered by this section shall include equipment, material, and labor to construct standard trail features utilizing terraforming such as berms, rollers, and table tops.
- C. The work covered by this section also consists of the installation of the thick stack fieldstone rock as specified in Section 03 400. The material and delivery costs are covered under a separate line item.
- D. The work covered by this section shall also include equipment, material and labor to construct the blue zone hub feature as specified in Section 03 300.
- E. The work covered under this section shall be paid on a unit price basis per linear foot of singletrack trail that is satisfactorily completed as determined by the Owner's Designated Agent.

1.6 IMPORTED THICK STACK FIELDSTONE ROCK

- A. The work covered by this section consists of material and delivery of all the imported thick stack fieldstone rock as specified in Section 03 400. The installation costs are covered under a separate line item.
- B. The work covered under this section shall be paid on a unit price basis per ton for the actual number of tons of imported thick stack fieldstone rock which has been delivered to the project site as determined by the Owner's Designated Agent.

1.7 SIGNATURE TRAIL FEATURES

- A. The work covered by this section consists of all equipment, material, and labor to install signature trail features as specified in Section 03 500 and described in Attachment E.
- B. The materials for these signature features shall not include any materials already designated for use in the trail such as the thick stack fieldstone rock. Additional rock, timber, or soil needed to construct the signature trail feature shall be included with its unit cost.
- C. The work covered under this section shall be paid for at the contract lump sum price for each signature trail feature satisfactorily installed as determined by the Owner's Designated Agent.

1.8 WAYFINDING AND SIGNAGE

- A. The work covered by this section consists of all equipment, material, and labor to wayfinding and signage as specified in Section 03 600.
- B. The work covered under this section shall be paid for at the contract lump sum price once the wayfinding and signage is satisfactorily installed as determined by the Owner's Designated Agent.

1.9 ROCK CAIRN TRAILHEAD MONUMENT

- A. The work covered by this section consists of all equipment, material, and labor to construct the rock cairn trailhead monument as specified in Section 03 700.

- B. The work covered under this section shall be paid on a unit price basis per each rock cairn satisfactorily installed as determined by the Owner or Owner's designated agent.

1.9 EROSION AND SEDIMENT CONTROL

- A. This item consists of the work described in Sections 03 300 of the specifications.
- B. The work covered under this section shall be paid for at the contract lump sum price and will be full compensation for all elements of work needed to complete this work as specified. The lump sum price will be paid for with the last application.

END OF SECTION

SECTION 03 200

CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

1.1 MOBILIZATION

- A. Perform preparatory work and operations for the assembling and setting up necessary for work on the project, such as shops, plants, storage areas, sanitary facilities, moving in of personnel and equipment, incidentals to the project, and any other facilities, as required by the Specifications and special requirements of the Contract Documents, as well as by Laws and Regulations in effect at the Site.
- B. Perform demobilization to remove the items and equipment specific to the Project.

1.2 TEMPORARY UTILITIES

- A. Arrange for and pay for all temporary utilities required for the work and for temporary facilities on the Site.
- B. Water: Contractor may obtain water needed for his operations and his subcontractor's operations and construction of the work from the City of Belmont without charge.

1.3 BARRIERS

- A. Provide, erect, and maintain barricades, suitable and sufficient warning lights, and take all necessary precautions for the protection of the public.
- B. Provide barriers to prevent unauthorized entry to construction areas, and to protect existing facilities and adjacent properties from damage from construction operations.

1.4 ENVIRONMENTAL CONTROLS

- A. Provide and maintain methods, equipment, and temporary construction as necessary to provide controls over environmental conditions along the route of construction and related areas under Contractor's control as required to comply with Laws and Regulations governing noise, dust, water, pollution, and erosion control, and the requirements of these Contract Documents. In the event of conflict between the requirements of these Contract Documents and Laws and Regulations, the more restrictive shall apply.
- B. Control dust and dirt on a daily basis within the limits of the Project and haul roads leading to or away from the Project that are used by Contractor, Subcontractors, and Suppliers. If not complied with in a satisfactory manner, all Work, except clean-up operations will be stopped immediately until complied with to the satisfaction of Owner or Owner's Designated Agent. Methods of control shall include, but are not limited to:
 - 1. Sweep streets and haul roads using an automatic self-contained mechanical sweeper with integral water spray and vacuum equipment.
 - 2. Remove excessive dirt on streets by means of hand shoveling or appropriate mechanical equipment, and sweep area as in method above.
 - 3. Clean sidewalks and driveways using shovels and hand brooms or approved mechanical equipment.

1.5 PROTECTION OF INSTALLED WORK

- A. Protect installed work and provide special protection where specified in individual Specifications Sections.
- B. Provide temporary and removable protection for installed materials. Control activity in immediate work area to prevent damage.

1.6 PROGRESS CLEANING AND WASTE REMOVAL

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain Site in a clean and orderly condition.
- B. Collect and remove waste materials, debris, and rubbish from Site daily and dispose off-site.

END OF SECTION

SECTION 03 300

BIKE-OPTIMIZED SINGLETRACK TRAIL

1.1 GENERAL TRAIL CONSTRUCTION SPECIFICATIONS AND TRAIL STANDARDS

- A. All trail construction shall be in accordance with the specifications and standards listed in this section.
- B. Trail construction shall adhere to the IMBA standards specified in their book, Trail Solutions, where noted in this section.
- C. Overall trail characteristic shall resemble a USFS Trail Class 3.
- D. A detailed design plan for the Blue Zone Trails is provided in Attachment A. Refer to the design plans for more details.
- E. The Owner's Designated Agent reserves the right to utilize donated materials as a substitute for contractor purchased materials on the specified bike-optimized singletrack trail construction. A deduction in the unit price shall be applied for any materials donated.

1.2 DEMOLITION

- A. Features indicated on the existing trail map in Attachment C shall be demolished, hauled offsite, and disposed of in a proper landfill in accordance with local, state, and federal regulations.
- B. Manmade trail features that are deemed in conflict with the construction of the bike-optimized singletrack trail and approved by the Owner's Designated Agent shall be removed and disposed of offsite.
- C. No existing trail features shall be removed without prior approval from the Owner's Designated Agent regardless of its designation in Attachment C.
- D. The City of Belmont Public Works will haul materials offsite and dispose of them if they are stockpiled near the trailhead off of Sacco St. at no cost to the Contractor.

1.3 TREE CUTTING

- A. Avoid removal of trees with a diameter at breast height (dbh) greater than 6" when possible to do so.
- B. Stumps on the trail tread shall be completely removed, including the root ball, and placed at least 30 feet from the edge of the trail corridor.
- C. Trees removed from the trail corridor and outside of the trail tread shall be cut flush with the ground.
- D. Tree roots within the trail corridor shall be cleanly cut using a root cutting saw. Realignment of the trail shall be considered to avoid cutting more than 1/3 of the root length. In some specific cases, tree fertilization shall be considered to increase the likelihood of the tree's survival.

1.4 BRUSH REMOVAL

- A. The width of the trail corridor shall be approximately the width of the trail tread. The trail corridor shall be at least 8 feet high.

- B. The trail corridor shall be cleared of all limbs, brush, vines, and vegetation. All branches shall be cut just outside of the branch collar to promote sealing of the wound.
- C. A 5' fall zone outside the finished trail surface shall be cleared of all hazards, stobs, and protrusions.
- D. Vegetation cut from the trail corridor shall be moved at least 30 feet from the edge of the trail corridor and not interfere with any existing trails. The brush shall be placed so that the cut end is facing away from the trail.
- E. Brush shall not be placed in piles unless directed by the Owner's Designated Agent. It shall be spread out in a way that appears natural.

1.5 TRAIL ALIGNMENT

- A. The trail shall be constructed within 10 feet of corridor centerline flagline. The Owner's Designated Agent will provide GIS coordinates of corridor centerline.
- B. Any variances in trail alignment are required to be approved by the Owner's Designated Agent.

1.6 TRAIL CHARACTERISTICS

- A. The trail shall be constructed in accordance with the following characteristics.
 - 1. The trail tread shall be 24" to 48" wide.
 - 2. The trail shall be constructed for optimized flow in the clockwise direction.
 - 3. All turns, switchbacks, and berms shall be constructed with bi-directional compatibility.
 - 4. The average grade target is 9%.
 - 5. The maximum short pitch grade shall be 12% for 30 feet or less.
 - 6. The trail shall be constructed with grade reversals or drains approximately every 25 to 50 feet.
 - 7. The maximum transverse grade shall be 15% (inslope to outslope).
- B. Trails shall be constructed with a full bench cut on the back slope that smoothly transitions to the hillside. The backslope shall be 1:1 or angle of repose.
- C. Mechanized equipment shall not have a footprint that exceeds the width of the tread. The contractor shall use a mini-excavator or trail specific dozer such as a Sutter or Sweco to perform the full bench cut excavation of the trail. Trail excavation using a skid steer is not allowed.
- D. Excavated material shall be evenly distributed downhill of the trail tread to avoid forming a berm on the outer edge of the tread.
- E. All clean clay-based fill dirt needed for trail construction shall be harvested onsite or supplied by the Owner.
- F. Grade reversals and grade dips shall be constructed to remove water from the trail tread. All needed grade reversals and/or grade dips will be done according to IMBA standards specified in their book, Trail Solutions.
- G. All needed climbing turns shall be designed and constructed according to IMBA standards specified in their book, Trail Solutions.
- H. All needed rolling crown switchbacks shall be designed and constructed according to IMBA standards as specified in their book, Trail Solutions.

- I. Rolling crown switchbacks shall have a near level turning platform that is slightly crowned. The upper leg should be in-sloped at 5 % and shall create a drain extending well beyond the platform. The lower leg should be out-sloped at 5% for proper drainage. Grade reversals shall be located immediately before and after the switchback.
- J. Small vegetative and/or root matter in the tread shall be removed. Large feeder roots shall be covered with soil to raise the tread above the roots.
- K. Compaction shall be completed using vibratory compaction of the tread fill slopes.
- L. The construction of standards trail features such as rollers, berms, and switchbacks shall be included in the unit price of the trail construction. Natural materials shall be harvested from the site for construction of these standard trail features.
- M. An abundant amount of recycled concrete sidewalk is available for use on the trail construction. However, the recycled concrete sidewalk shall not be exposed in the trail tread without prior approval from the Owner's Designated Agent. It is encouraged to modify the concrete so it appears more natural before being utilized anywhere where it might be visible.

1.7 Blue Zone Hub Feature

- A. The recycled concrete sidewalk available onsite shall be modified into more random/natural shapes and turned rough side up to create a flagstone berm at the entry and exit to the blue zone.
- B. The joints between the recycled concrete slabs shall be filled with a recycled crushed concrete to lock the slabs in place. The maximum stone size in the recycled crushed concrete shall be 0.5 inches.
- C. The blue zone hub feature should match the look of the green zone hub feature currently under construction. Example pictures of the green zone hub feature are provided in Attachment G.

1.8 EROSION AND SEDIMENT CONTROL

- A. Contractor shall implement the use of SWPP and ECD's where necessary.
- B. Contractor shall maintain less than 3,000 sq. ft. of broken, un-compacted soil at any time.
- C. Contractor shall re-naturalize disturbances, spoils, and borrow pits with native organics.
- D. Trail constructed within 100 feet of streams shall be completed and stabilized by the end of each work day. Collect and remove waste materials, debris, and rubbish from Site daily and dispose off-site.
- E. Contractor shall re-seed or apply seed mat where necessary.
- F. Existing trail to be abandoned shall be re-naturalized. The contractor shall re-naturalize the existing trail by spreading natural debris such as limbs and leaves across it. If the existing trail is steep or aligned downhill and subject to erosion, the contractor shall stack natural debris in regular intervals to use as check dams to slow water runoff and push water off of the trail.

END OF SECTION

SECTION 03 400

THICK STACK FIELDSTONE ROCK

1.1 THICK STACK FIELDSTONE ROCK

- A. The thick stack fieldstone rock shall be landscape quality rock that is approximately 2" to 6" thick (thick enough that they don't break under the force of a bike). This rock can be as small as flagstone size (2' wide x 2' long) or be larger slab type rock (3' to 4' long). Examples of acceptable imported rock are shown in Attachment D.
- B. The thick stack fieldstone rock is intended for use in armoring, rock gardens, stacking for trail features, etc.
- C. Thick stack fieldstone rock is included as a separate line item and may be utilized throughout the trail and within standard trail features. The unit cost for thick stack fieldstone rock shall include material and delivery. The installation costs for thick stack fieldstone rock shall be included in the per linear foot cost of the bike-optimized singletrack trail.
- D. The intent of the fieldstone rock is to provide a natural and more mountainous trail experience not typically available in the piedmont of North Carolina.

END OF SECTION

SECTION 03 500

SIGNATURE TRAIL FEATURES

1.1 SIGNATURE TRAIL FEATURES

- A. All signature trail features have been identified in Attachment E. All signature trail features shall be constructed as described in this project manual. Any deviations from signature features described herein shall be approved by the Owner's Designated Agent prior to construction.
- B. The Contractor is encouraged to be creative and innovative while constructing the signature trail features described in Attachment E.
- C. Natural occurring materials within the park or imported materials may be used for construction of signature trail features.
- D. The cost of all signature features shall include all materials, equipment, and labor for the installation of the described signature features. The materials for these signature features shall not include any materials already designated for use in the trail such as the thick stack fieldstone rock. Additional rock, timber, or soil needed to construct the signature trail feature shall be included with its unit cost.

END OF SECTION

SECTION 03 600

WAYFINDING AND SIGNAGE

1.1 WAYFINDING AND SIGNAGE

- A. Wayfinding and signage shall be provided throughout the trail zones at the following locations:
 - 1. A trail zone map at the zone hub.
 - 2. A directional sign indicating the flow of bikers and the flow of walkers/hikers through the trail zone shall be located at the zone hub and at least every quarter mile throughout the trail zone.
 - 3. A trail difficulty sign shall be located at every trail feature or optional line where the trail diverges from the main trail.
 - 4. A warning sign indicating difficulty shall be posted ahead of advanced trail features.
- B. All timber for the trail posts shall be pressure treated southern yellow pine or other non-pressure treated, rot resistant species such as cedar.
- C. The minimum post height shall be 48" above the trail surface.
- D. All signs shall be made of aluminum or other durable metal.
- E. Examples of acceptable wayfinding and signage can be seen in Attachment F.

END OF SECTION

SECTION 03 700

TRAILHEAD MONUMENT

1.1 GENERAL SPECIFICATIONS AND SUBMITTAL REQUIREMENTS

- A. The trailhead monument shall be in accordance with the specifications and standards listed in this section.
- B. One trailhead monument shall be constructed at the entry to the multi-use trail.
- C. The contractor shall submit a trailhead monument plan in accordance with the specifications of this section to the Owner or Owner's designated representative for review and approval. Details such as securing the rock boulders shall be provided on the trailhead monument plan.
- D. A schematic plan of the trailhead monument has been provided in Attachment B for illustration purposes only.
- E. The owner reserves the right to utilize donated materials as a substitute for contractor purchased materials for construction of the trailhead monuments. A cost deduction shall be applied for any materials donated. The value of the cost deduction shall be negotiated between the Contractor and Owner or Owner's designated agent during construction.

1.2 ROCK CAIRN

- A. The rock cairn shall consist of flat rock boulders of varying sizes.
- B. The bottom flat rock boulder shall be of substantial size and large enough to provide a seating ledge.
- C. The flat rock boulders shall be stacked on top of one another to a height of approximately 6 to 8 feet. The rock boulders shall decrease in size as they are stacked up.
- D. The contractor shall determine a sustainable and safe way to secure the rock boulders to each other and keep them from falling over. The method of securing the rock boulders shall be reviewed and approved by the Owner or Owner's designated representative.

END OF SECTION

ATTACHMENT A
ROCKY BRANCH PARK -
BLUE ZONE TRAILS
(DESIGN DOCUMENT)



Prepared By:

Craig Brickser, MSP
Community Trail Design

Contact :

P : 850.264.7355
E : craig@communitytraildesign.com
W : communitytraildesign.com

ROCKY BRANCH PARK - PHASE 2.2: BLUE ZONE TRAILS



PROJECT OVERVIEW

Phase 2.2 of the Rocky Branch Trail Enhancement Plan will finish with the development of the Blue Trail Zone located on the southern half of the Belmont Parcel.

This intermediate-level trail corridor is intended to be both challenging and highly entertaining while providing various opportunities for riders to hone their bike handling skills, test their abilities and experience trail features usually found in the mountains or bike parks. Its success will be based on the creative implementation of natural elements such as rock, maximization of the landscape's flow and topography, and surface terraforming where necessary.

Technical features in this zone ramp up in intensity, where unavoidable obstacles up to 6" are almost always present in the trail surface, and trail features provide the opportunity for airtime and increased speeds.

SETTING & CONTEXT

The Blue Zone (Figure 1) is located at the southern flank of the Belmont-owned parcel sandwiched between Rocky Branch Creek to the north and Norfolk Southern right-of-way to the south.

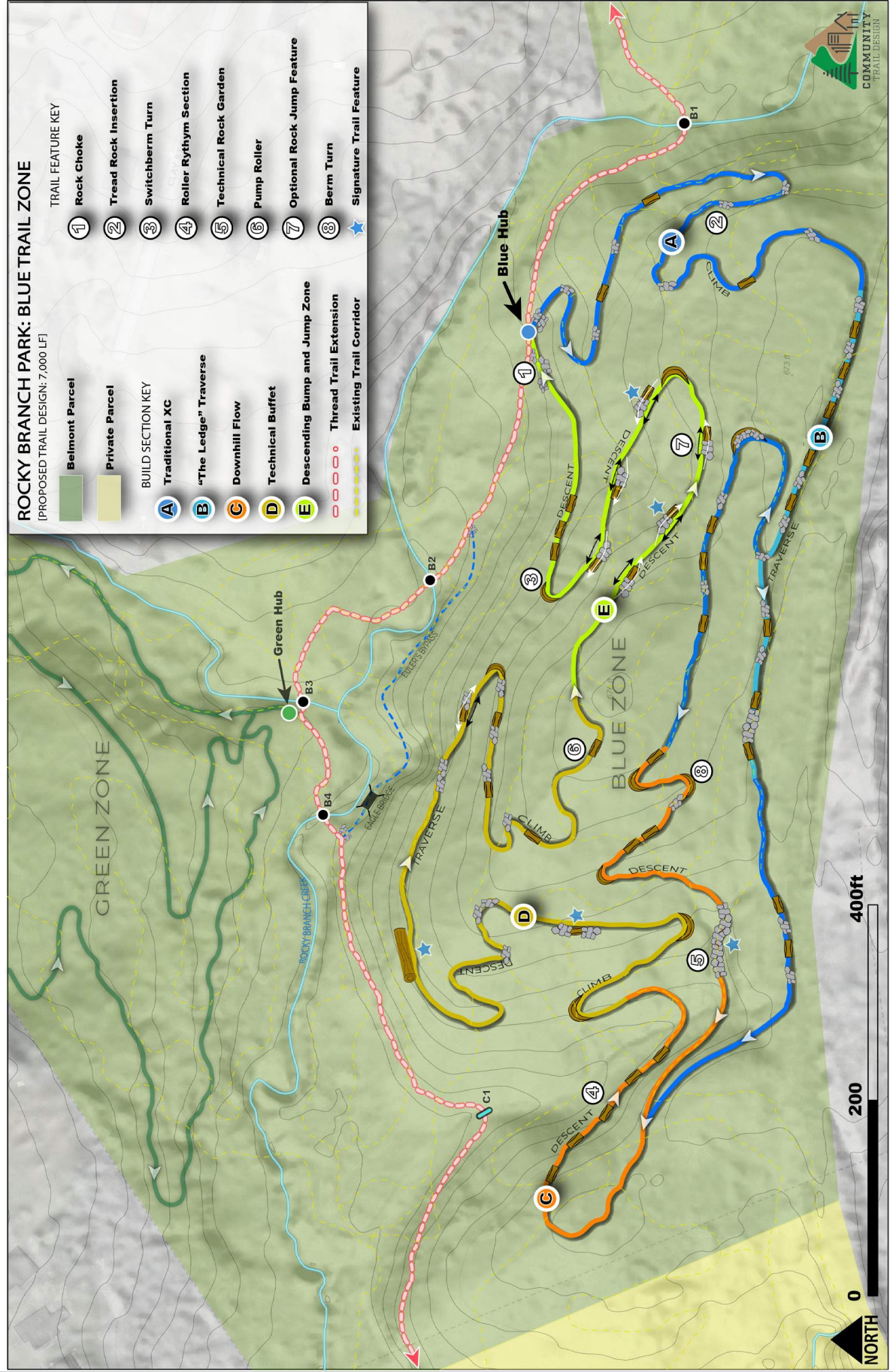
This zone is comprised of two prominent knobs with distinct high points and drainage valleys that bisect the land between them. The vegetation is some of the best of the Rocky Branch Park space, featuring an evenly-spaced mature hardwood canopy throughout. Some underbrush is present, including autumn olive and vine thickets.

CORRIDOR CONSTRUCTION

The overall theme of the Blue Zone is variety. Much of the overall trail corridor resides on mild slopes with a range of 10-50% found throughout the zone. Trail characteristics for each build segment are defined where steeper slopes provide opportunity for a bench cut that creates a sense of exposure and lower angle slopes lend themselves to a more traditional Piedmont cross-country style of trail where trail surface texture can be enhanced by plugging rocks and preserving roots.

Implementation of rock features will be essential to the success of the trail due to rock's ability to harden the surface in low areas and drainage crossings and because of its prominence in the landscape serving as visual anchors, chokes, and technical features along the trail corridor. Rock requires no maintenance, can be orientated and installed in endless patterns or designs, and will allow the trail to be more weather resilient.

Figure 1 - Phase 2.1 Green Zone Design



All drainages and wet areas should be flagstone armored which will also aid in providing a feature-rich trail experience with variable surface textures. The selected contractor should be able to demonstrate prior experience in utilizing rock to create technical riding experiences and a high level of proficiency in the use of rock for trail and trail feature construction including jumps and other progressive features.

Considering the trail's direction in reverse will be essential to the success of the Blue Zone. Running the trail in reverse will turn climbs into descents and descents into climbs, making it feel like two trails in one. Not all trail features need to be constructed as bi-directional friendly as long as a by-pass exists.

BUILD SECTIONS

The optimized direction of flow is clockwise. For clarity, the following descriptions of the build sections will refer to a clockwise orientation beginning at the Blue Hub (Figure 1).

Section A: Section A originates from the Blue Hub and begins with a gentle climb utilizing short segments of existing and new trail corridor. Because this section has mild, low angle slopes it is most compatible with a trail characteristic that resembles the old RBP trail system and a traditional cross-country experience. Minimal terraforming and the addition of large, variable rock scattered throughout this corridor will provide a challenging surface texture that rewards pedal timing and line choice.

Climbing turns help the rider ascend the slope and should resemble a hand built characteristic, preserving surface roots and minimizing excessive berming or terraforming. Grade reversals or rollers can be implemented periodically to aid with drainage.

Section B: Section B is composed of a long, linear bluff referred to as "The Ledge". The ledge varies in height from 4 to 12' and provides an excellent opportunity to create exposure and technical challenge. Cutting across this slope will allow a contractor to shape and form the trail with a series of undulations that will surf the ledge.

Incorporation of rock along the cut will allow for a tight, intimate experience with the trail that requires focus and concentration. An element of flow in the trail tread's construction will provide a coasting forward momentum through the rocks that relies less on pedal timing and more on body positioning, tire placement, and line choice allowing a rider to pump through rock gardens and chunk. This section has the opportunity to provide practice for a much more genuine backcountry mountain experience and should be a focus of resources, budget, and time.

Section C: Section C capitalizes on some steep existing trail segments with the intent of adding rock for sustainability and challenge, but the primary characteristic is one of flow and speed. Section C relies less on the implementation of imported materials and more on the use of the terrain's natural flow and ability to carry speed while traversing across a long, steep slope that can be bench cut with frequent large grade reversals for flow and airtime.

Section D: After a long flowy descent, Section C transitions into Section D beginning with a climb. This climb utilizes some existing corridor which is fairly open and flat. Space exists on this climb for a signature feature that can make up for the lack of speed, flow and topography.

Section D's climb transitions into a series of descending switchback turns that would make excellent challenging features by not berming or terraforming them, and instead adding rocks or leaving them off-camber. Climbing and descending switchbacks are a common element found in challenging mountain environments. By providing technical challenges, Rocky Branch Park can serve as a gateway for larger trail experiences and also cater to a large variety of user groups, skillsets, and preferences.

Section D ends with a long traverse across one of the most scenic slopes in the park and preserves a stretch of existing trail. This segment could benefit from the addition of rocks and texturizing to enhance the technicality, exposure, and long-term sustainability.

Finally, Section D climbs back up to one of the highest points in the zone via several climbing turns. Because of this climb's length, it will serve as a highlight descent should the trail's direction be reversed. Care should be given to ensure this climb will excel in both directions.

Section E: Section E concludes the Blue Zone loop with a long, aggressive descent back to the Blue Hub. This descent will provide the space and opportunity for some signature jump features, rock hits, alternate lines, speed, flow and airtime. Energy, time and resources should be allocated to enhance this zone and make it a signature element of Rocky Branch Park's trail experience.

Attenuating the speed of this descent as the trail terminates at the Blue Hub is crucial to the safety and sustainability of the park. Utilizing large boulder chokes and gargoyles users can be funneled and slowed to an appropriate speed on the final approach to the hub. This same implementation of rock chokes should be installed at the entrance of the trail (Section A) should it be run in the opposite direction, as both approaches will be descents into the hub.

Figure 2 - Trail Elements



CORRIDOR CONSTRUCTION REQUIREMENTS

The following guidelines are recommended for trail construction.

- Overall trail characteristic resembling a USFS Trail Class 3
- 24-48" trail tread width
- ~~● Unavoidable obstacle max height main trail: 6"~~
- ~~● Unavoidable obstacle max height optional lines: 12"~~
- All turns, switchbacks, berms bi-direction compatible
- Average grade target: 9%
- Maximum short pitch grade 12% (30' or less)
- Grade reversals or drains approximately every 25-50'
- Maximum transverse grade 15% (inslope/outslope)
- Vibratory compaction of all tread and fill slopes
- Renaturalized disturbances, spoils, and borrow pits with native organics
- Backslope 1:1 or angle of repose
- 6" 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

FIGURE 3: TRAIL AND DRAINAGE ANATOMY

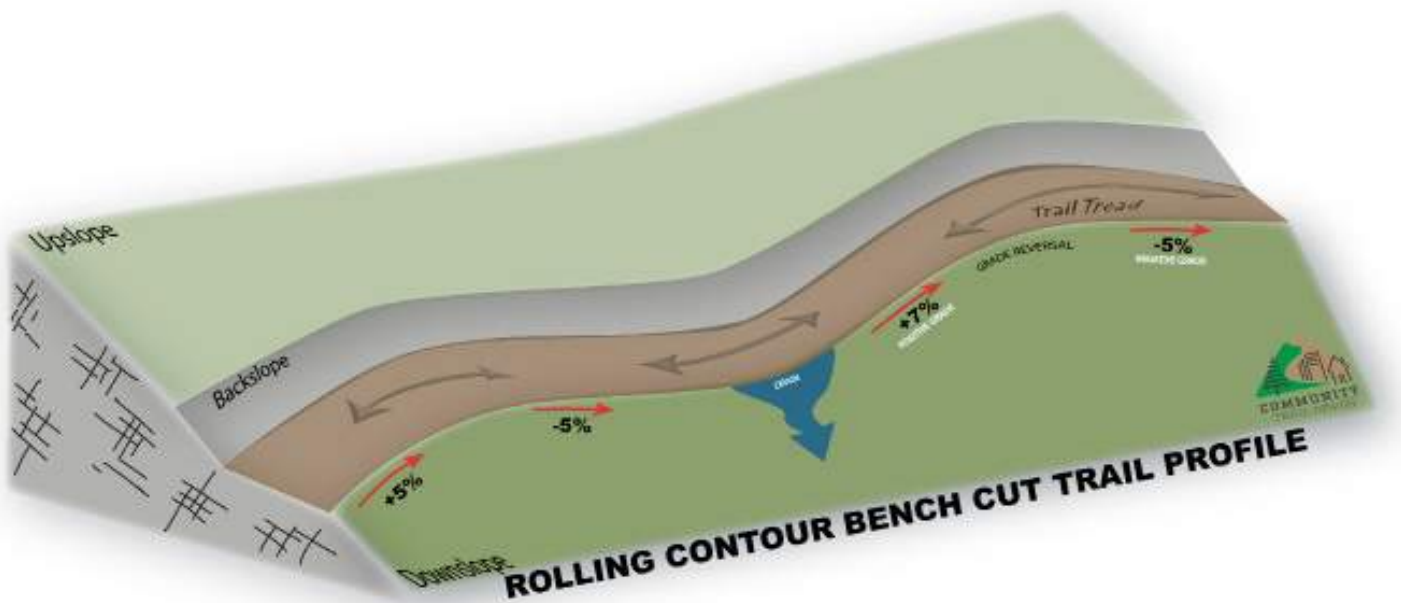


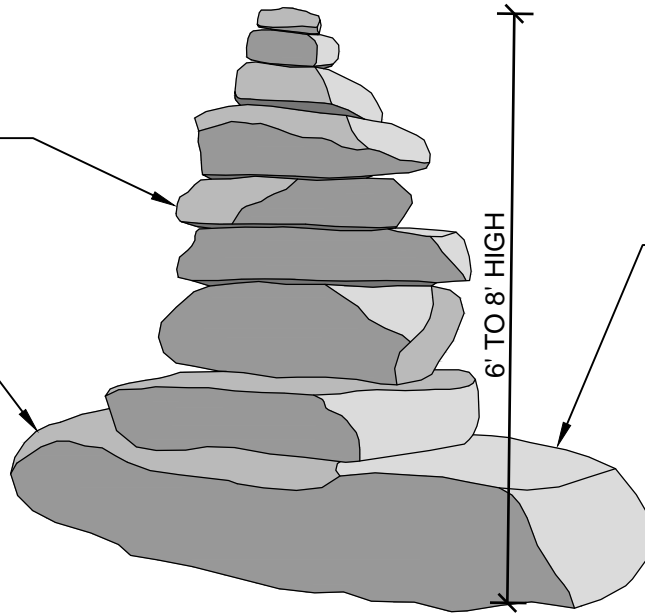
Figure 4 - More Trail Elements



ATTACHMENT B
TRAILHEAD MONUMENT SCHEMATIC

SPECIFIC ROCK CAIRN DESIGN TO
BE COORDINATED WITH THE
OWNER DURING CONSTRUCTION

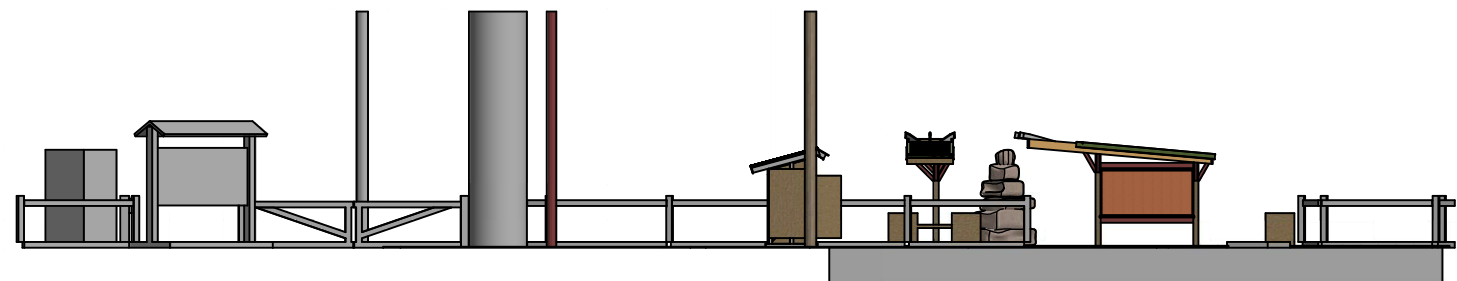
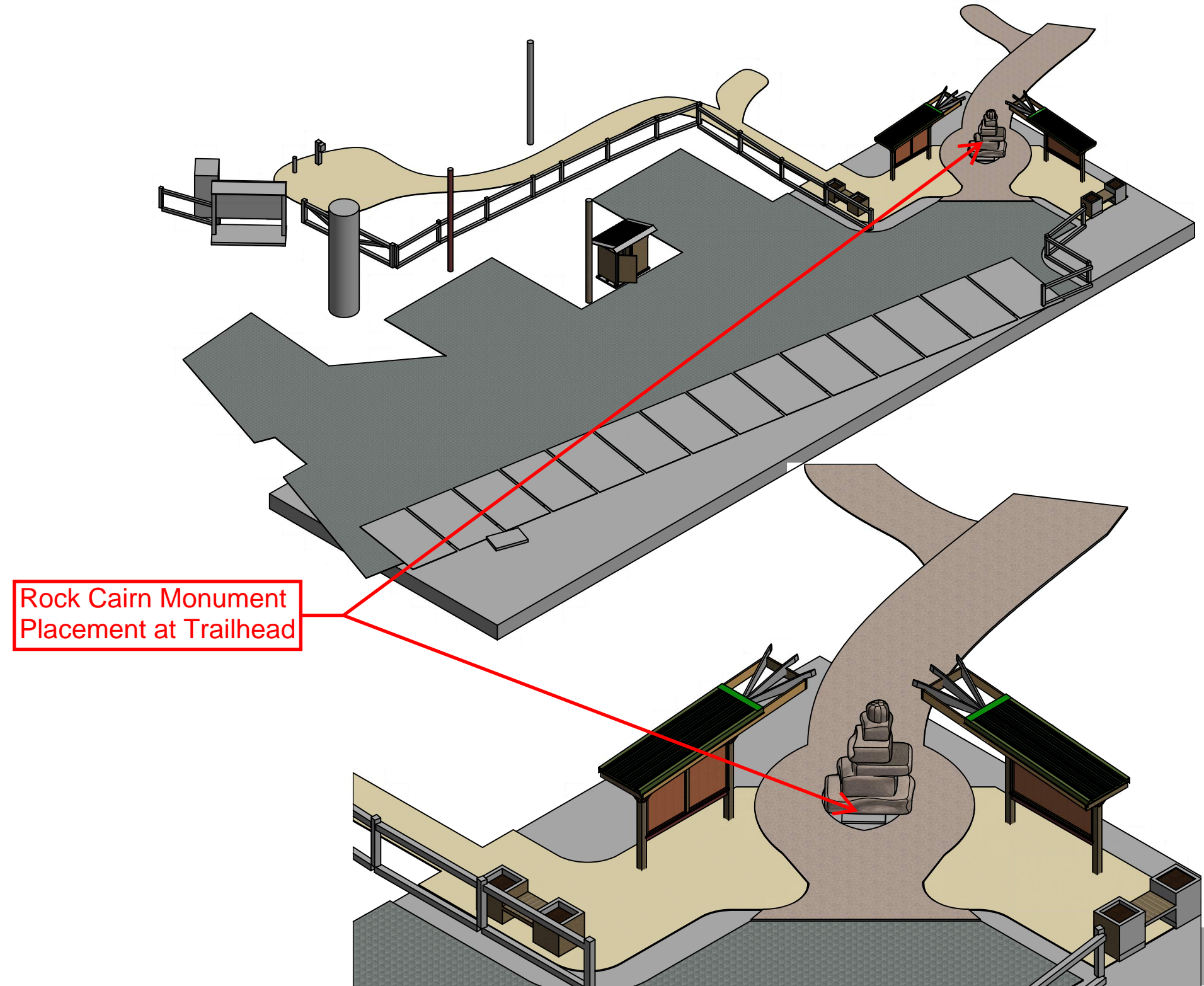
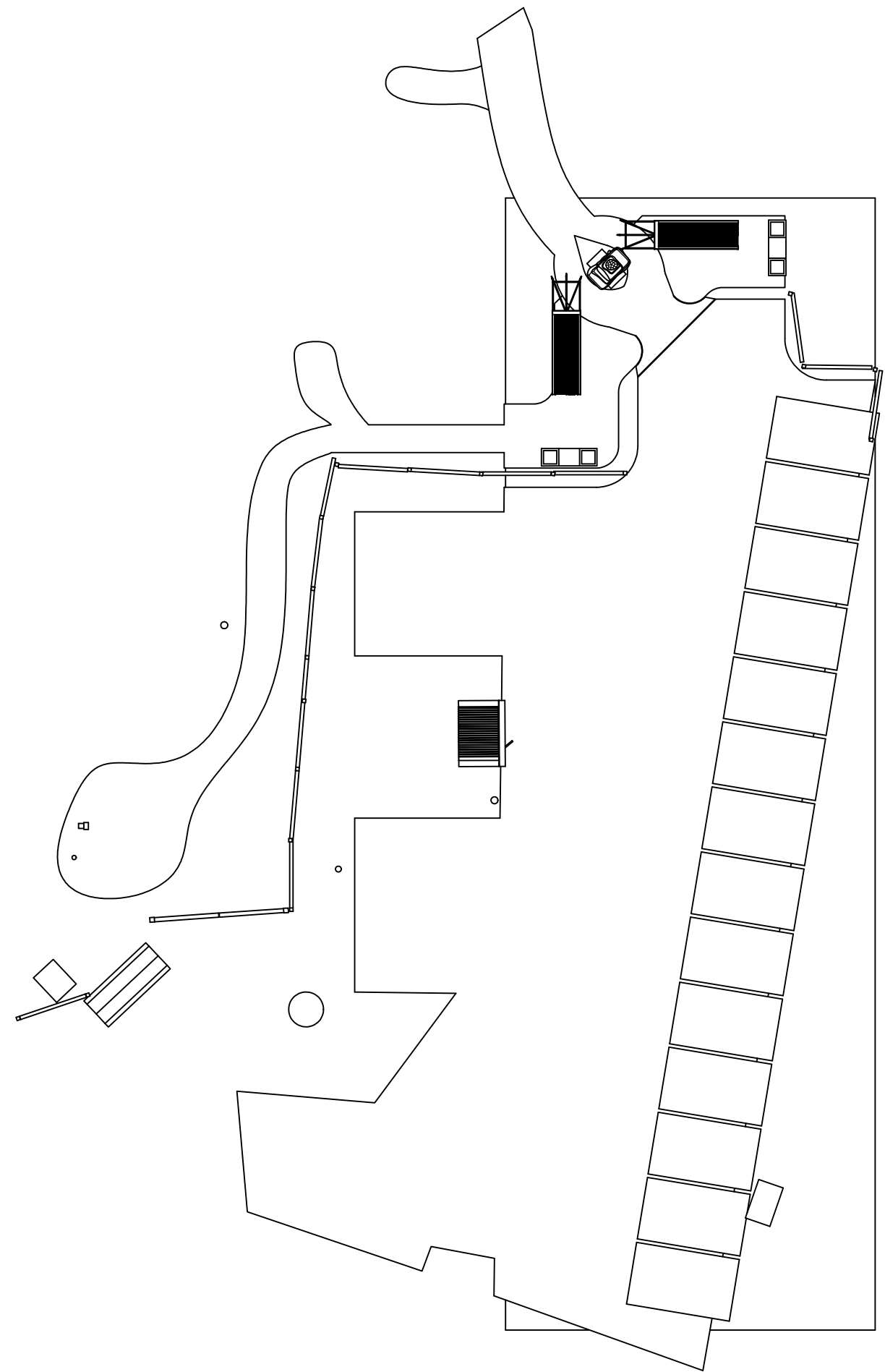
ROCK BOULDERS, SIZES VARY



BOTTOM ROCK BOULDER TO
EXTEND OUT FOR SEATING

ISOMETRIC VIEW

TRAILHEAD ROCK
CAIRN MONUMENT



VIEW FROM STREET

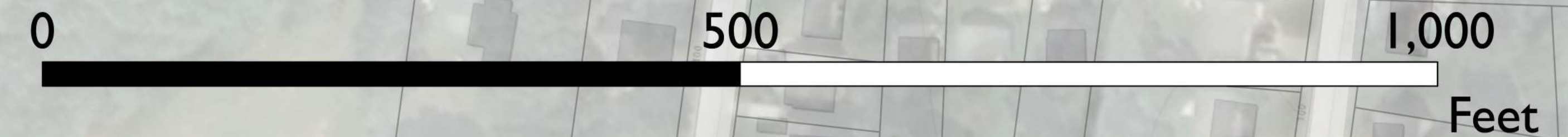
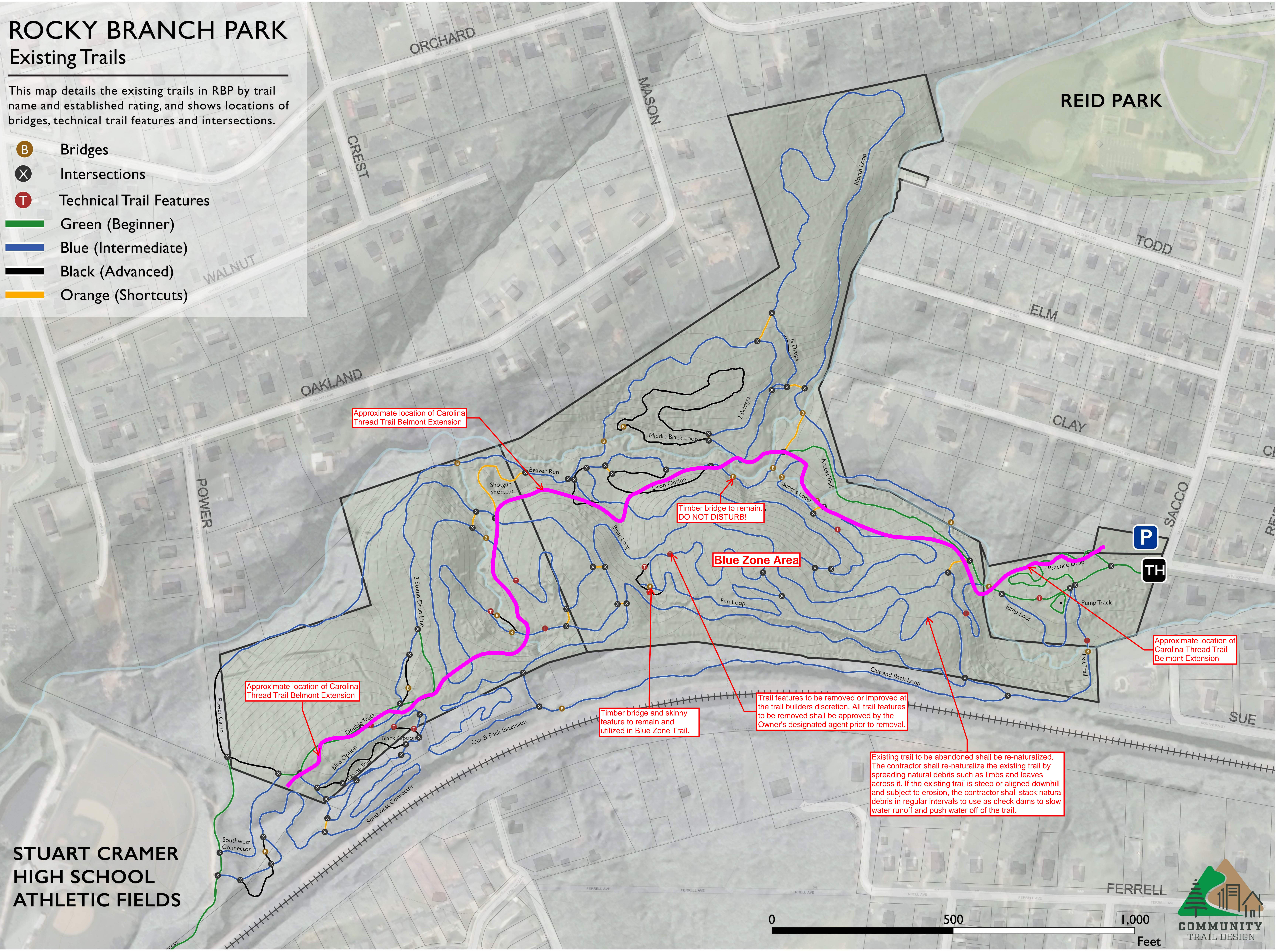
ATTACHMENT C
EXISTING FEATURES TO BE REMOVED

ROCKY BRANCH PARK

Existing Trails

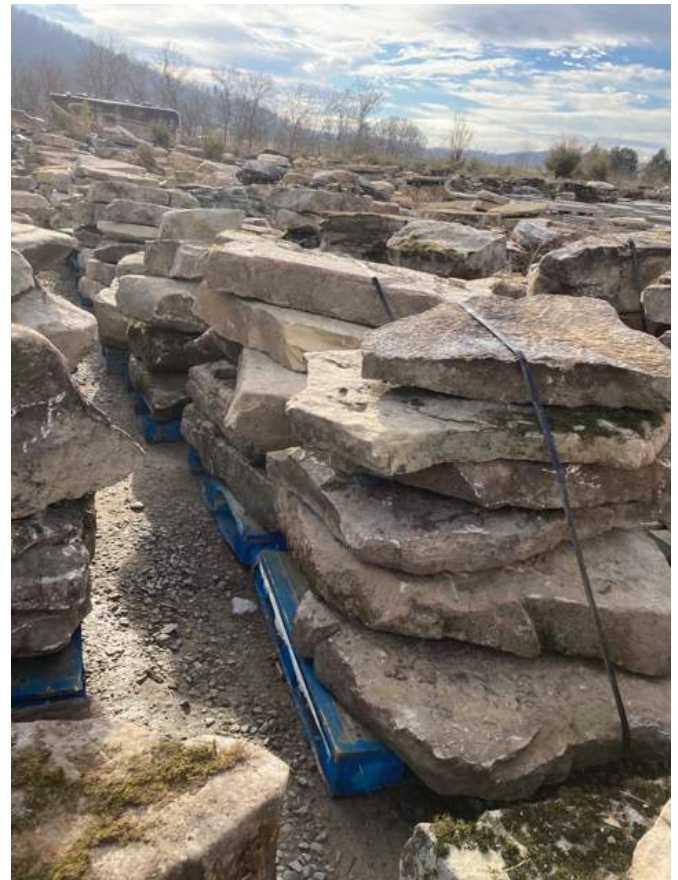
This map details the existing trails in RBP by trail name and established rating, and shows locations of bridges, technical trail features and intersections.

- B** Bridges
- X** Intersections
- T** Technical Trail Features
- Green** (Beginner)
- Blue** (Intermediate)
- Black** (Advanced)
- Orange** (Shortcuts)



ATTACHMENT D
EXAMPLES OF ACCEPTABLE
IMPORTED ROCK

Acceptable Type of Imported Rock



Example Uses of Imported Rock on Trail



Rock Armored
Switchbacks



TALLAHASSEE FL

Example Uses of Imported Rock on Trail



ATTACHMENT E
DESCRIPTIONS OF
SIGNATURE TRAIL FEATURES

Note: Signature trail feature locations are identified for bid purposes only. Actual placement of signature trail features will be determined during construction.

ROCKY BRANCH PARK: BLUE TRAIL ZONE

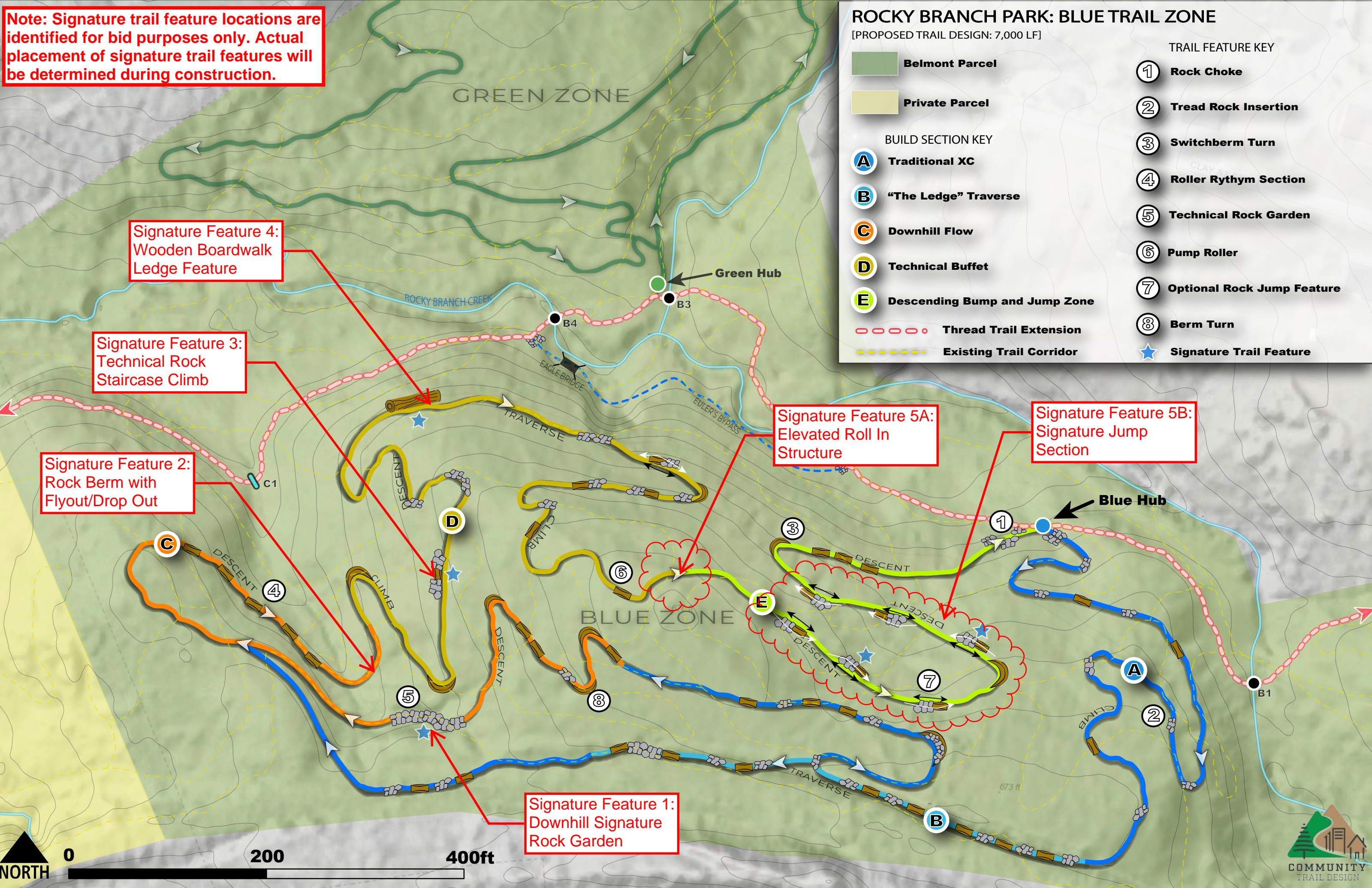
[PROPOSED TRAIL DESIGN: 7,000 LF]

- Belmont Parcel
- Private Parcel

- BUILD SECTION KEY
- A Traditional XC
 - B "The Ledge" Traverse
 - C Downhill Flow
 - D Technical Buffet
 - E Descending Bump and Jump Zone

- Thread Trail Extension
- Existing Trail Corridor

- TRAIL FEATURE KEY
- 1 Rock Choke
 - 2 Tread Rock Insertion
 - 3 Switchberm Turn
 - 4 Roller Rythm Section
 - 5 Technical Rock Garden
 - 6 Pump Roller
 - 7 Optional Rock Jump Feature
 - 8 Berm Turn
 - ★ Signature Trail Feature



Blue Zone Signature Features

See Blue Zone Trail Map for approximate location of these signature trail features. Signature trail feature locations are identified for bid purposes only. Actual placement of signature trail features will be determined during construction.

Signature Trail Feature 1: Downhill Signature Rock Garden

- Approximately 100 feet long.
- Pitched stone, chunky and aggressive.
- Multiple riding lines wide with an aggressive advance line.
- Large irregular stone/boulders should be utilized.
- Rock for this feature shall be included in the price of the signature feature. It is **not** included in the Thick Stack Fieldstone Rock quantity.

Example Pictures (for illustration purposes only):

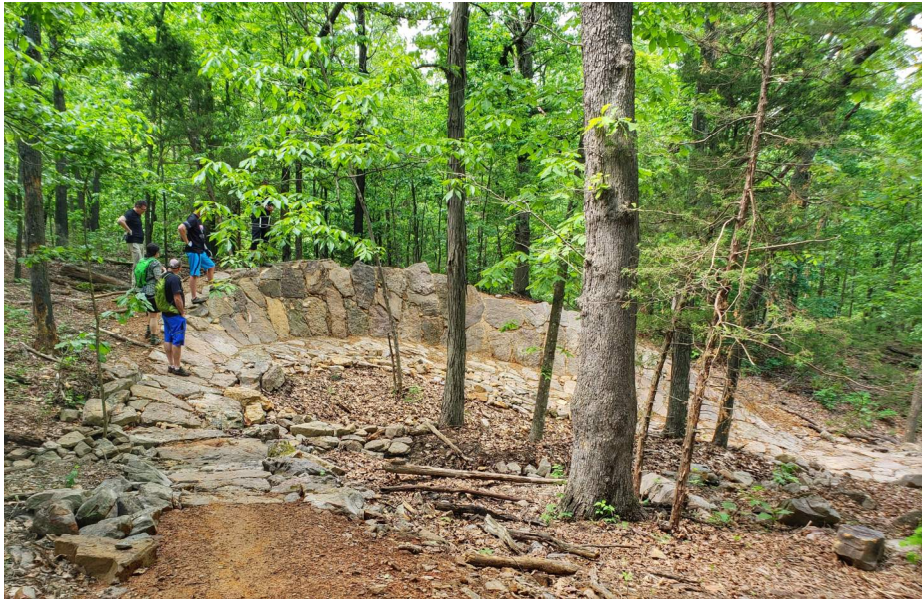




Signature Trail Feature 2: Rock Berm with Flyout/Drop Out

- Rock armored berm.
- Approximately 30 feet long and 6 feet tall.
- Low side rides like a berm.
- High side provides expert riders an opportunity to gap out to a transition and carry all of the speed generated prior to this feature.
- Rock for this feature shall be included in the price of the signature feature. It is **not** included in the Thick Stack Fieldstone Rock quantity.

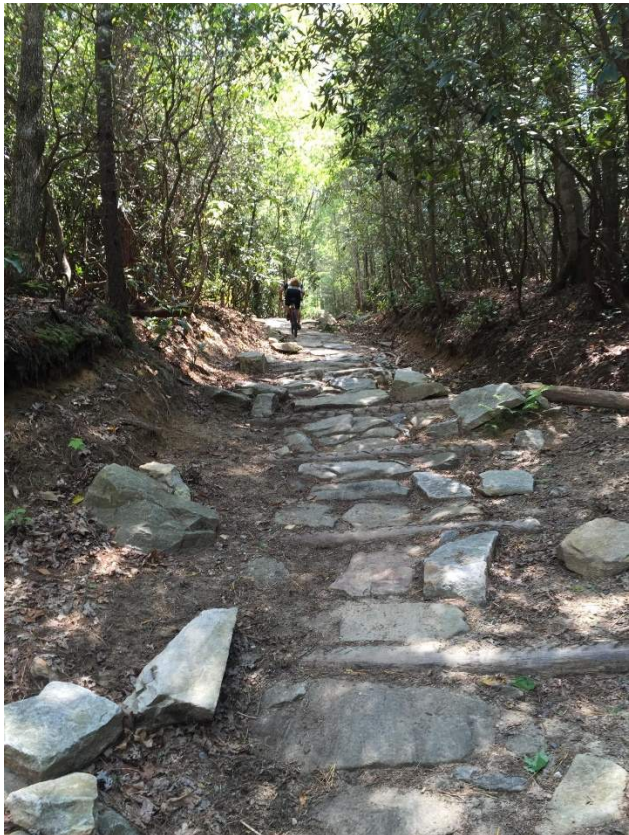
Example Pictures (for illustration purposes only):



Signature Trail Feature 3: Technical Rock Staircase Climb

- Approximately 50 feet long.
- Incorporate thicker slabs to create a technical challenge with multiple lines.
- Rock for this feature shall be included in the price of the signature feature. It is **not** included in the Thick Stack Fieldstone Rock quantity.

Example Pictures (for illustration purposes only):



Signature Trail Feature 4: Wooden Boardwalk Ledge Feature

- Custom built wooden boardwalk cantilevered out from the hill slope.
- Boardwalk should provide the feeling of exposure without unnecessary risk for the rider.
- The board walk should be made of rough sawn pressure treated yellow pine or a rot resistant wood species.

Example Pictures (for illustration purposes only):



Signature Trail Feature 5A: Elevated Roll In Structure

- Elevated roll in structure to add speed. Structure ramps shall be 4' wide and 6' tall.
- The elevated roll in structure should be made rough sawn pressure treated yellow pine or a rot resistant wood species.

Example Pictures (for illustration purposes only):



Signature Trail Feature 5B: Signature Jump Section (Multiple Features in Signature Trail Section)

- Line of three jumps, large tables as main line, each with a rock armored advanced lip set back from the table.
- Large earthen berm to maintain speed from jump line
- Signature drop/step down feature after berm. Main line should be a rock drop (that is rollable), with the advanced line providing a step down option that is a mandatory gap and armored with rock

Example Pictures (for illustration purposes only):







ATTACHMENT F
EXAMPLES OF WAYFINDING
AND SIGNAGE





Brushy Hollow
Trail
3.72 mi.



Mountain Top
Trail
2.4 mi.



To Buck Hollow
Trail
0.25 mi.

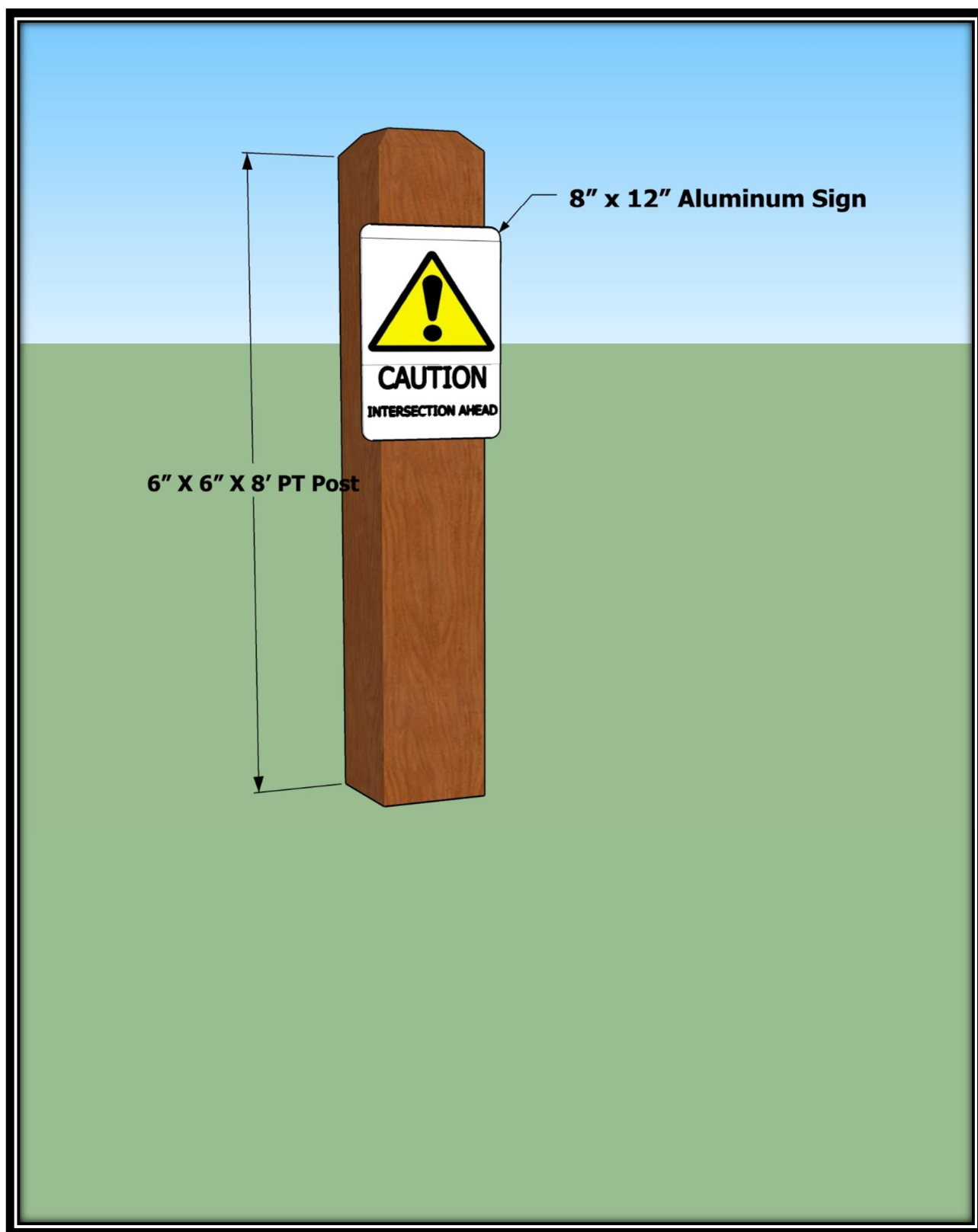


To Mountain Side
Trail
0.35 mi.



To Flat Run
Trail
3.72 mi.





6" X 6" X 8' PT Post

8" x 12" Aluminum Sign



ATTACHMENT G
EXAMPLE PICTURES OF
BLUE ZONE HUB

Green Zone Hub Feature Pictures (Under Construction)



Green Zone Hub Feature Pictures (Under Construction)

