DIAMOND HILLS STREAM RESTORATION

TOWN OF CHRISTIANSBURG, VIRGINIA

Submitted to
Town of Christiansburg

Submitted by
Branch Highways, Inc.
in association with
Balzer and Associates, Inc.

OCTOBER 13, 2010

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1. Qualification and Experience

a. *Legal Structure of Firm*

Identify the legal structure of the firm or consortium of firms making the proposal. Identify the organizational structure for the project, the management approach and how each partner and major subcontractor in the structure fits into the overall team.

Branch Highways, Inc., a wholly owned subsidiary of The Branch Group, Inc., is the private entity and Team leader submitting this proposal to the Town of Christiansburg. Branch proposes to complete the improvements for the Diamond Hills Stream Restoration project under the purchasing regulations of the Town of Christiansburg, and, in particular, the Public-Private Education Facilities and Infrastructure Act of 2002 (PPEA), originally adopted April 4, 2006 and Draft Revisions dated September 15, 2010.

Branch Highways, Inc. will be the sole legal entity with who this PPEA contract will be written. A separate sub-agreement will be entered into between Branch Highways, Inc. (Branch) and the lead designer, Balzer and Associates, Inc. (Balzer). Branch's corporate structure is as follows:

Parent Company

The Branch Group, Inc.
P.O. Box 40004
Roanoke, VA 24022

Subsidiary Companies

Branch Highways, Inc.
P.O. Box 40004
Roanoke, VA 24022

G.J. Hopkins, Inc.
P.O. Box 12467
Roanoke, VA 24025

E.V. Williams, Inc.
925 South Military Highway
Virginia Beach, VA 23464

Branch & Associates, Inc.
P.O. Box 40051
Roanoke, VA 24022

R.E. Daffan, Inc.
P.O. Box 1100
Manassas, VA 20108

Organizational Structure

The team that Branch has assembled for this project offers extensive corporate and individual experience and will deliver the most effective results related to cost, time of performance, quality, safety and standards of design to meet or exceed the expectations of Town of Christiansburg. We are able to draw from the considerable strengths of each team member to provide the necessary level of technical skills, along with the flexibility and timely, comprehensive planning and problem solving required for success in this type of design-build project.

Our primary team members will be:
Branch Highways, Inc.: Team Leader and Construction Manager
Balzer and Associates, Inc.: Design, Permitting, CEI Monitoring.

Within the overall Project Team structure, Branch and Balzer will be responsible for all design, construction, permitting, and inspection activities. Branch will provide project management, and supervision, and will perform the work utilizing both its own resources and through strategic use of subcontractors. Balzer will be the design manager for the project and will be responsible to produce consistency in all areas of the design and deliver to Branch construction-ready documents. Balzer will also provide complete Construction Engineering Inspection (CEI) services during and after construction and post construction monitoring per permit requirements. The organizational chart to the left shows the relationships between all key firms and subconsultants.

Management Approach

As Team leader and construction manager, Branch will act as the organizational umbrella, bringing together the resources of our Team, and providing the Town of Christiansburg with a single point of responsibility. Branch's Team will utilize their collective experiences in the design-build and construction arena along with our working experiences with other local governmental agencies to maintain a seamless transition from project initiation through design, construction and completion. Our experiences, such as the Route 15 Prince William County PPTA project and the Route 58 Meadows of Dan Bypass and Hillsville Bypass VDOT PPTA projects, enable our Team to fully utilize the design-build process. Our Team members' experience will help facilitate our establishment of a team-oriented organization with an open-door policy that functions as a private entity partner to the Town of Christiansburg. This open-door policy will enable on-going project plan review by not only the Team but also the Town of Christiansburg allowing both parties the ability to address and resolve concerns or issues for any of the stakeholders, including third-party agencies or individuals.

b. Experience & Team Information

Describe the experience of the firm or consortium of firms making the proposal and the key principals involved in the proposed project including experience with projects of comparable size and complexity. Describe the length of time in business, business experience, public sector experience and other engagements of the firm or consortium of firms. Include the identity of any firms that will provide design, construction and completion guarantees and warranties and a description of such guarantees and warranties. Provide resumes of key individuals who will be involved in the project.

Branch Highways, Inc. (BHI), a wholly owned subsidiary of The Branch Group, Inc., an employee-owned Virginia corporation, is the Team leader and Lead Contractor submitting this PPEA proposal to the Town of Christiansburg, Virginia. BHI has been engaged in the construction of infrastructure works since being founded in 1963. This business experience has covered civil construction works in Virginia, North Carolina, Maryland, Tennessee, Pennsylvania, West Virginia and Mississippi. The firm contracts with both public and private owners. Recently completed major projects include the Route 58 PPTA (Phase 1), Prince William County Route 15 PPTA, Route 123/Hooes Road, Spriggs Road, VDOT Peppers Ferry Road and Chesterfield County Beulah Road Improvements. Major projects currently under construction include Phase 2 of the Route 58 PPTA (Hillsville Bypass) and Progress Park Building Pad Design-Build project for the Joint Industrial Development Authority of Wythe County, Wytheville and Rural Retreat. The Branch Group companies (including BHI) typically maintain bonded contracts in progress that total over $500 Million. BHI is one of five subsidiary companies comprising The Branch Group, Inc., currently ranked No. 239 overall nationally by *Engineering News-Record*. Throughout its history and experience with VDOT and other state agencies and owners, BHI has an unmatched level of success in completing large, complex projects to our Owner's satisfaction. BHI's management team has a wealth of experience in transportation projects. Branch's heavy equipment investment is valued at over $20 million and its program of preventive maintenance and asset management are considered significantly better than the industry average.

Balzer and Associates, Inc. (Balzer), was founded in 1967 by Donald J. Balzer, Sr. Since that time the firm has expanded to include complete civil, geotechnical, structural and traffic engineering services along with complete surveying, environmental, soils, landscape architectural and architectural services. This diversity enables Balzer and Associates to coordinate and control the interconnected disciplines required to successfully complete projects of varied scope and complexity.

With a staff of over 90, including over 30 licensed professionals, the firm offers a high level of enthusiasm, technical knowledge and personal service to its many clients. Balzer has established offices in the New River Valley, Roanoke, Shenandoah Valley and Richmond. This enables them to serve the entire state of Virginia with local professional knowledge. As a firm, the staff is committed to serving our clients as one corporate unit employing the advantage of independent offices in a complimentary function.

Balzer and Associates has extensive experience in planning and designing projects that require large earth moving operations. Some more recent jobs include Progress Park Building Pad Design-Build project for the Joint Industrial Development Authority of Wythe County, Wytheville and Rural Retreat; Orchard Market Place in Botetourt County, VA; Sportsman's Warehouse in Roanoke, VA; the Crossing @ Bon Air in Richmond, VA and Fairway at Hanging Rock in Roanoke, VA.

Balzer is committed to providing requested work within the stated timelines and budgetary constraints. These goals are attained through our dedication to performance and long standing

history of successfully working with clients to understand their needs, develop their expectations and fulfill their project requirements.

Relevant Experience

Branch has completed stream relocations/restoration for mitigation purposes for the Salem District of the Virginia Department of Transportation (VDOT) on the Meadows of Dan PPTA project (764 lf of stream relocation) and is currently working on over 3,400 lf of stream relocation and restoration on the Hillsville By-Pass PPTA project.

In addition, Balzer and Associates have designed and permitted several stream and wetland restoration projects including the Lake Gaston Stream Restoration Bank in Brunswick County, Virginia and the Pioneer Estates Umbrella Mitigation Bank in Rockbridge County, Virginia.

Completion Guarantees and Warranties

The Branch Team is submitting permit applications to various regulatory agencies as part of their work on the Progress Park project in Wythe County. The required permits are outlined later in this proposal. Upon approval of the regulatory agencies, these permits will contain guarantees and warranties for this proposed work.

Resumes of Key Personnel

The following are brief resumes of the key personnel of the Branch Team:

Michael Tomlinson

Contact Information
Branch – Vice President of Estimating/ Business Development
P.O. Box 40004, Roanoke, VA 24022
P: 540-982-1678; F: 540-982-4216
miket@branchhighways.com

Education
Business Administration, Florida International University, 1973

Associates Arts, Miami-Dade Community College, 1971

Years of Experience
With Branch: 8 Years
Construction Experience: 40 Years

Mr. Tomlinson has over 40 years of experience in the private and public site/civil construction arena. Mr. Tomlinson's experience transcends numerous and varied project types (e.g., DOT public projects including bid-build projects, design-build projects, and PPTA design-build projects; other public projects for local government and federal government; private projects; airport runway/taxiways projects; and landfill development/operations projects). Mr. Tomlinson's responsibilities as vice president at Branch include overseeing the estimating department, business development, contract negotiation customer relations and purchasing including subcontracts and construction materials.

Mr. Tomlinson is an innovative leader with strong team building and leadership skills. He initiates decisive judgment while communicating effectively both inside and outside the organization.

Michael P. Higgins

Contact Information
Branch – Vice President of Operations
Director of Design-Build Services
P.O. Box 40004, Roanoke, VA 24022
P: 540-982-1678; F: 540-982-4216
mikeph@branchhighways.com

Education
BS, Civil Engineering, West Virginia Institute of Technology, 1985

Years of Experience
With Branch: 10 Years
Construction Experience: 26 Years

Mr. Higgins will serve as the main point of contact for the project. He is Branch's authorized representative for the Route 58 Corridor PPTA project for VDOT as well as being involved with the Route 15 PPTA project for Prince William County. His past management experiences include Branch's subcontracted portion of the Route 288 VDOT PPTA project along with projects for numerous other owners such as USACE, the FAA, the County of Roanoke, other state highway agencies and many private owners. Mr. Higgins has more than 20 years of extensive experience in the heavy and highway construction industry including the past 10 years with Branch. Relevant project experience includes:

- PPTA Route 15 Corridor Improvements, Prince William County, VA
- PPTA Route 58 Corridor, Hillsville Bypass, Hillsville, VA
- PPTA Route 58 Corridor, Meadows of Dan Bypass, Meadows of Dan, VA

Steve Clayton

Contact Information
Branch - Project Manager
P.O. Box 40004, Roanoke, VA 24022
P: 540-982-1678; F: 540-982-4216
steve.clayton@branchhighways.com

Education
BS's in Management and Finance
Virginia Tech (VPI & SU), 1990

Years of Experience
With Branch: 16 Years
Construction Experience: 16 Years

Mr. Clayton is currently performing as Project Manager on the Progress Park Design-Build project. His past management experiences include projects at the Roanoke Regional Airport as well as the 2nd (Final) Phase Grading for the Western Virginia Regional Jail Facility which included converting the temporary stormwater management basins into permanent stormwater detention facilities and coordination with landscaping/planting contractor to ensure permit compliance during construction.

Relevant project experiences include:
- Progress Park Design-Build
- Western Virginia Regional Jail Facility
- Roanoke Regional Airport – GA Rehabilitation, Phase III.

Billy Mayo

Contact Information
Branch - Superintendent
P.O. Box 40004, Roanoke, VA 24022
P: 540-982-1678; F: 540-982-4216
billy.mayo@branchhighways.com

Years of Experience
With Branch: 18 Years
Construction Experience: 25 Years

Mr. Mayo has experience as superintendent for Branch including projects ranging from VDOT Peppers Ferry Road (Route 114) in Christiansburg, Progress Park Design-Build project, Route 15 PPTA Prince William County, and numerous industrial and retail developments for private owners. Mr. Mayo has more than 25 years of construction experience with 14 of those years on Branch projects.

Relevant project experience includes:

- Progress Park Design-Build Project, Wytheville, VA
- James Hardie Building Products, Plant #10, Pulaski, VA
- VDOT Peppers Ferry Road, Christiansburg, VA
- Duffield Jail – Site Work, Duffield, VA

Steve Semones

Contact Information
Balzer - Vice President
448 Peppers Ferry Road
Christiansburg, VA 24073
P: 540-381-4290; F: 540-381-4291
ssemones@balzer.cc

Education:
Bachelor of Landscape Architecture, Va. Tech (VPI & SU), 1998

Years of Experience
With Balzer: 12 Years
Construction Experience: 12 Years

Steve Semones will serve as the main point of contact for all consulting services through design and construction of this project. His design and construction experience includes site planning and engineering designs including commercial properties, industrial sites, residential developments, recreational spaces and office developments. He also is experienced in performing wetland delineations and Phase I Environmental Site Assessments. Mr. Semones' background in dealing with site design and development and his awareness of environmental issues allows him to create practical, well planned and efficient site development plans, Mr. Semones' relevant experiences include:

- Progress Park Design-Build Project, Wytheville, VA
- Sheridan Ridge Private Reserve Phase I, Smyth County, VA
- Kensington, Christiansburg, VA
- Fiddlers Green, Blacksburg, VA.

Brian D. Wagner

Contact Information
Balzer - Vice President,
Sr. Environmental Scientist
15871 City View Drive, Suite 200
Midlothian, VA 23113
P: 804-794-0571; F: 804-794-2635
bwagner@balzer.cc

Education
B.S. in Biology and Recreation & Park Management, Virginia Commonwealth University, 1987

Years of Experience
With Balzer: 6 Years
Construction Experience: 23 Years

The bulk of Mr. Wagner's 20+ year career has been devoted to environmental impact analysis, landscape restoration and regeneration of natural systems. As head of Balzer and Associates' Environmental Department, Mr. Wagner manages a staff of environmental scientists, soil scientist and hydrologists on a variety of restoration and development projects throughout Virginia.

Prior to joining Balzer and Associates, Mr. Wagner spent 10 years in state and local government conducting environmental impact reviews and compliance. Brian worked as the Senior Environmental Planner with the Chesapeake Bay Local Assistance Dept. in the Middle Peninsula region and as the Wetlands Engineer for the Three Rivers Soil and Water Conservation District. Mr. Wagner's relevant experience includes:

- Progress Park Design-Build Project, Wytheville, VA
- The Malvern Development and Restoration, Powhatan County, VA
- Unser Woods, Chesterfield County, VA
- Lake Gaston Stream Restoration Bank
- Pioneer Estates Umbrella Mitigation Bank
- Contentment Development, Traphill, VA

Jonathan Roller, CPSS, AOSE, CNMP

Contact Information
Balzer – Sr. Environmental Scientist
15871 City View Drive, Suite 200
Midlothian, VA 23113
P: 804-794-0571; F: 804-794-2635
jroller@balzer.cc

Education:
B.S. in Crop and Soil Environmental Science, Va. Tech (VPI & SU), 2003

Years of Experience
With Balzer: 5 Years
Construction Experience: 7

Mr. Roller is primarily involved in projects that focus on wetland/stream restoration and monitoring, agriculture/turf and landscape nutrient management planning, aquatic life and water quality studies and soil science as it pertains to these projects.

Jon has worked with other environmental scientists and engineers on a variety of restoration and development projects throughout Virginia and North Carolina.

- Malvern Development and Resotration, Powhatan Co., VA
- Stream & Wetland Restoration at Borum Tract, Amelia County, VA
- Stream Restoration & Nutrient Management Planning for Pioneer Esates Mitigation Bank, Rockbridge County, VA
- Stream/Wetland Restoration & Nurtient Management Planning for Lake Gaston Mitigation bank and Golf Club, Brunswick Co, VA
- Contentment Development, Traphill, NC.

Kip Mumaw

Contact Information
Balzer – Environmental Engineer
15871 City View Drive, Suite 200
Midlothian, VA 23113
P: 804-794-0571; F: 804-794-2635
kmumaw@balzer.cc

Education:
B.S. in Civil & Environmental Engineering, Virginia Tech (VPI & SU), 2007
Attending North Carolina state University for Biological & Agricultural Enginnering

Years of Experience
With Balzer: 3.5 Years
Construction Experience: 3.5 Years

As a Project Manager with Balzer and Associates, Mr. Mumaw is involoved in stormwater management design, land planning, stream restoration, environmental assessment and permitting, wetland delineation and civil engineering projects. His design and construction exerpience includes land planning an engineering designs for commercial and residential developments and environmental restoration projects in both rural and urban environments.

Mr. Mumaw's relvant experience includes:
- Lake Gaston Stream Restoration Bank
- Pioneer Estates Umbrella Mitigation Bank
- Ana Marie Estates Wetland Mitigation.

c. ***Contacts for Further Information***
Provide names, addresses and telephone numbers of persons within the firm or consortium of firms who may be contacted for further information.

The Branch Team leaders, Michael P. Higgins of Branch Highways, Inc. and Steve Semones of Balzer & Associates, Inc., may be contacted directly for any further information. Contact information for theses two individuals are as follows:

BRANCH HIGHWAYS, INC.
Michael P. Higgins, Vice President
Phone: (540) 982-1678
Fax: (540) 982-4216
Email: mikeph@branchhighways.com

BALZER & ASSOCIATES, INC.
Steven Semones, Vice President
Phone: (540) 381-4290
Fax: (540) 381-4291
Email: ssemones@balzer.cc

d. ***Financial Statement***
Provide a current or most recently audited financial statement of the firm or firms and each partner with an equity interest of twenty percent or greater.

Financial information for Branch Highways, Inc. is located at the end of Section 3 and is considered confidential.

e. ***Disqualification of Personnel***
Identify any persons known to the private entity who would be obligated to disqualify themselves from participation in any transaction arising from or in connection to the project pursuant to

The Virginia State and Local Government Conflict of Interest Act, Chapter 31 (§ 2.2-3100 et seq.) of Title 2.2.

In accordance with the Virginia State and Local Government Conflict of Interest Act, Chapter 31 of Title 2.2, we do not know of anyone that is part of the Branch Team that would be required to disqualify themselves for participation in this project.

f. Project Listing/Claims

A list of all projects in the past ten years in which the contractor served as prime contractor and the contract value of the project was within 25% more or less of the proposed contract price of this project. For each such project, state whether or not the contractor or owner submitted any claims against the other for damages or losses and whether or not there was settlement or litigation of such a claim. Describe each claim fully and the result.

See listing in Table 1f on the following 2 pages; for all the project references on those pages there were no claims by Branch Highways, Inc. or the Owners for damages or losses.

Project	Location	Owner	Contract Amount	Scope of Work	Start Date	Completion Date
VDOT Rt 122 Franklin County	Burnt Chimney, Virginia	Va. Dept. of Transportation	$1.29 Million	Road Widening to include turn lanes and signal.	May 2009	November 2009
Roanoke River Flood Reduction Project – Training Wall 330	Roanoke, Virginia	U.S. Army Corps of Engineers	$999,000	Construction of wall to contain flooding	October 2008	May 2009
Virginia Market Place	Franklin County, Virginia	Orient Bay, LLC	$1.24 Million	Earthwork for site development for buildings construction.	June 2008	April 2009
Virginia Tech/Montgomery Executive Airport – Clear Span Hangar No. 1, Site Development	Blacksburg, Virginia	Virginia Tech/ Montgomery Executive Airport	$728,000	Construction of apron expansion for future hangar building with access roadway and parking lot pavement.	May 2008	November 2008
Bedford County State Route 911	Bedford County, Virginia	Bedford County	$857,000	Construction of roadway with associated work.	April 2007	August 2008
Slate Hill – Pad Fills	Roanoke, Virginia	Smith-Packett	$525,000	Creating new building pad at top of mountain and expanding lower building pad.	June 2008	August 2008
Boxley Materials – Asphalt Plant Improvements	Blue Ridge, Virginia	Boxley Materials	$510,000	Site improvements for asphalt plant.	December 2007	June 2008
Pheasant Ridge - Independent Living Facility	Roanoke, Virginia	Pheasant Ridge IL Investors, LLC	$1 Million	Site work for construction of independent living facility.	August 2005	July 2007
Pheasant Ridge - Roadway & Parking Improvements	Roanoke, Virginia	Pheasant Ridge IL Investors, LLC	$957,000	Roadway and parking improvements for independent living facility.	July 2006	August 2006
Roanoke Airport – Terminal Demolition & Rehab. Taxiways A&G	Roanoke, Virginia	Roanoke Regional Airport Commission	$953,000	Demolition of old airport terminal building.	March 2005	March 2006
Walnut Springs Mountain Reserve	Union, West Virginia	Mountain America, LLC	$1.28 Million	Roadway development for housing community	May 2005	December 2005

Roanoke Stadium & Amphitheater	Roanoke, Virginia	City of Roanoke	$869,000	Early site work for construction of stadium and amphitheater.	August 2003	April 2004
VDOT Potts Creek	Alleghany County, Virginia	Va. Dept. of Transportation	$924,000	Bridge replacement over Potts Creek.	March 2003	April 2004
VDOT Route 639	Montgomery County, Virginia	Va. Dept. of Transportation	$540,000	Bridge replacement.	November 2002	January 2004
Orange County Airport – Runway 7/25 Safety Area Improvements	Orange County, Virginia	Orange County Airport	$785,000	Grading, drainage and avionics.	June 2002	April 2003
F & W Bonsack	Roanoke, Virginia	Fralin & Waldron	$814,000	Early site work for commercial outparcels.	December 2001	October 2002
VDOT Exit 114	Christiansburg, Virginia	Va. Dept. of Transportation	$1.1 Million	Ramp extension deceleration/ acceleration lane on I-81.	June 2001	December 2001
Montvale Industrial Center	Bedford, Virginia	Bedford Co. Industrial Development Authority	$810,000	Grading, drainage and water mains.	August 2001	December 2001

2. Project Characteristics

a. *Project Description & Conceptual Design*

Provide a description of the project, including the conceptual design. Describe the proposed project in sufficient detail so that type and intent of the project, the location, and the communities that may be affected are clearly identified.

This proposed project is being offered as potential mitigation source to the regulatory agencies to offset the environmental impacts resulting from the grading project that Branch Highways is performing at Progress Park in Wythe County for the Joint Industrial Development Authority of Wythe County. This proposal is contingent upon the pertinent regulatory agencies granting approval to mitigate the environmental impacts resulting from the grading activities at Progress Park with this proposed stream restoration within the Diamond Hills development.

The proposed project includes the restoration of approximately 2,180 linear feet of an unnamed perennial stream within the Diamond Hills development. The unnamed perennial stream is a tributary of Crab Creek. The proposed project is located on property owned by the Town of Christiansburg south of Independence Boulevard and west of Franklin Street.

The restoration activities are being proposed to alleviate the various impacts that are associated with the existing stream including, but not limited to, degraded aquatic habitat, flooding, channel incision, bank erosion and instability, sedimentation, fixed grade controls such as utility lines and inadequate vegetated buffers. Upper Crab Creek is currently listed as impaired water according to the 2008 Water Quality 305(b)/303(d) Integrated Report for not supporting aquatic life and recreation. The listed impairments consist of *Escherichia coli* (E. coli) and benthic macro-invertebrates.

All proposed restoration activities are based on Natural Channel Design principles. The profile, pattern and cross-section of the stream channel will be altered to address stability issues. A riffle pool sequence will be used based on present conditions and current design practices. Rock cross vanes and other step pool practices will be used where practicable. The new cross-section and bed elevation adjustments will reconnect the stream to its historic floodplain. The stream bed will be reinforced with a minimum 1' depth to prevent incision and control grade throughout the stream. Habitat structures will be installed where appropriate and reduced sediment loading, proper substrate, and reduced volume and velocities from storm events will increase ecological diversity within the stream. The stream side buffer will be composed of native trees and shrubs to a minimum width of 100 feet on both sides of the stream, where possible, based on utility easements and width of the Town's property.

Existing storm water outfalls will be improved to reduce erosive velocities, settle sediment and provide pre-treatment by using energy dissipation techniques and bio-retention. The existing storm water detention dam and culverts will be removed to allow for the natural channel design stream. Stormwater detention will be provided in stream through the use of pools and by reconnecting the stream to its historic floodplain. The stream shall be re-routed to intersect with Crab Creek at a less severe angle than is presently found in order to reduce the damaging effects on the Norfolk Southern railroad embankment.

b. Work To Be Performed by the Town or Any Other Public Entity

Identify and fully describe any work to be performed by the Town or any other public entity.

The Town will be responsible for reviewing and approving all proposed site and land disturbance plans for the project and coordinating and inspecting all proposed work around utility lines. The Town is also responsible for all utility relocations necessary to complete the project.

c. Federal, State or Local Permits and Approvals

Include a list of all federal, state and local permits and approvals required for the project and a schedule for obtaining such permits and approvals.

The proposed project will require a Nationwide Permit (Stream Restoration Activities) from the United States Army Corps of Engineers. The Town of Christiansburg will also require site plan and land disturbance plan approval. These permits will be obtained immediately after approval of the Individual Permit from the Corps in the Spring of 2011.

d. Adverse Impacts & Mitigation Strategies

Identify any anticipated adverse social, economic and environmental impacts of the project. Specify the strategies or actions to mitigate known impacts of the project.

The entire proposed project is located within property owned by the Town of Christiansburg. The area is currently maintained by the Town staff and is used informally by the surrounding neighborhood for passive recreation activities such as walking, golfing and wildlife watching. The existing stream is also used by neighborhood children informally for play but due to the stream's instability this activity should be curtailed immediately.

The activities above will be adversely impacted during construction but may resume at the completion of construction.

There may also be dust associated with the construction of the stream restoration, however this will be mitigated using of water trucks. There may also be short term impacts associated with construction traffic on Independence Boulevard toward Franklin Street.

There will be very short term environmental impacts to the stream and aquatic life during initial stages of construction associated with the installation of erosion and sediment control practices and the stabilization of the first 100 feet of channel immediately downstream of the Independence Boulevard crossing.

e. Positive Social, Economic, & Environmental Impacts

Identify the projected positive social, economic and environmental impacts of the project.

The proposed project will restore the stream and floodplain allowing greater use of the property for passive recreation activities such as walking and wildlife/bird watching. The proposed project will also present numerous environmental education opportunities for the Town's Parks and Recreation Department and the school system including the stream restoration itself, plant community succession, aquatic ecology and biological and chemical aquatic monitoring.

The restoration of the stream and floodplain will reduce the Town's maintenance cost of the grass cutting and the long term maintenance and infrastructure costs of the existing dam and culvert pipes. In addition, the existing stream condition is so unstable that it is very likely that the Town would have had to contract out for the stabilization of the stream in the very near future. The Town also benefits by the stabilization of the two existing sanitary sewer crossings of the creek which are currently exposed or nearly exposed.

There are numerous environmental benefits that will be derived from the stream restoration including: the restoration of degraded aquatic habitat; prevention of downstream flooding by reconnecting the stream to its historic floodplain and realigning the stream's intersection with Crab Creek; channel stabilization reducing the amount of sediment contributed to the stream and Crab Creek; and the restoration of a forested buffer composed of native trees and shrubs. In addition, the proposed work should assist the Town with meeting its obligations for the Total Maximum Daily Load requirements for Upper Crab Creek which is currently listed as an impaired water according to the 2008 Water Quality 305(b)/303(d) Integrated Report for not supporting aquatic life and recreation. The listed impairments consist of *Escherichia coli* (E. coli) and benthic macro-invertebrates.

f. *Project Schedule*

Identify the proposed schedule for the work on the project, including the estimated time for completion.

The proposed work will begin immediately for permitting and final design with construction beginning in the spring of 2011, finish grading in the fall of 2011 and planting of the wooded buffers in the late fall and early winter of 2011, weather permitting.

g. *Allocation of Risk & Liability, & Assurance for Timely Completion*

Propose allocation of risk and liability for work completed beyond the agreement's completion date, and assurances for timely completion of the project.

This project has a direct impact on the timely completion of the Lot 24 project at Progress Park in Wytheville, Virginia. That project has a completion date of September 2012. In order to complete that project, the disturbed stream and wetlands must be mitigated and to meet that schedule the Diamond Hills project must be completed in 2011.

The proposed project requires mitigation monitoring and reporting in accordance with the following regulations: Norfolk District Corps and Virginia Department of Environmental Quality Recommendations for Wetland Compensatory Mitigation - Including Site Design, Permit Conditions, Performance and Monitoring Criteria, July 2004; Department of Army, Corps of Engineers and Environmental Protection Agency's Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, 33 CFR Parts 325 and 332 and 40 CFR Part 230, April 10, 2008; and the United States Army Corps of Engineers Regulatory Guidance Letter 08-03 Minimum Monitoring Requirements for Compensatory Mitigation Projects, Involving the Restoration, Establishment and/or Enhancement of Aquatic Resources, October 10, 2008.

h. Assumptions Related to Ownership, Legal Liability, Law Enforcement & Operations

State assumptions related to ownership, legal liability, law enforcement and operation of the project and the existence of any restrictions on the Town's or any other public entity's use of the project.

The proposed restoration area will be required to be placed within an easement dedicated to the preservation and maintenance of the restoration area in perpetuity. The easement will allow recreational and educational uses of the easement such as trails and interpretive educational signs but will not permit clearing or other land disturbances post-construction.

i. Project Phasing

Provide information relative to phased or partial openings of the proposed project prior to completion of the entire work.

There will be no phased or partial openings of the proposed project due to the very tight schedule already anticipated.

j. Applicable Standards

Describe any architectural, building, engineering, or other applicable standards that the proposed project will meet.

The stream restoration project is being designed using Natural Channel Design principles and all engineering, construction and project management will be in compliance with standard professional practices.

k. Other Assumptions for Project Success

List any other assumptions relied on for the project to be successful

This project assumes that the United States Army Corps of Engineers will approve the Individual Permit for the Joint Industrial Development Authority of Wythe County – Progress Park Lot 24 and the Nationwide Permit and allow for the Diamond Hills Stream Restoration project to be used for mitigation purposes.

It is also assumed that the Town of Christiansburg will coordinate all utility line and other infrastructure crossings and issue a land disturbance permit for the proposed project in a timely manner.

l. Contingencies for Project Success

List any contingencies that must occur for the project to be successful.

This project is contingent on the approval of the U.S. Army Corps of Engineers Individual Permit for the Joint Industrial Development Authority of Wythe County – Progress Park Lot 24 submitted on September 29, 2010 and the proposed Nationwide Permit for the Diamond Hills Stream Restoration. This project is also contingent upon the regulatory agencies allowing the Diamond Hills Stream Restoration project to be used for mitigation purposes to offset the

impacts resulting from the work being performed on Lot 24 at Progress Park in Wytheville, Virginia.

4. Project Benefit and Compatibility

a. Project Benefits

Describe the anticipated benefits to the community, region or state, including anticipated benefits to the economic condition of the Town, and identify who will benefit from the project and how they will benefit.

The proposed project will restore the stream and floodplain allowing greater use of the property for passive recreation activities such as walking and wildlife/bird watching. The proposed project will also present numerous environmental education opportunities for the Town's Parks and Recreation Department and the school system including the stream restoration project itself, plant community succession, aquatic ecology and biological and chemical aquatic monitoring.

The restoration of the stream and floodplain will reduce the Town's maintenance cost of the grass cutting and the long term maintenance and infrastructure costs of the existing dam and culvert pipes. In addition, the existing stream condition is so unstable that it is very likely that the Town would have had to contract out for the stabilization of the stream in the very near future. The Town also benefits by the stabilization of the two existing sanitary sewer crossings of the creek which are currently exposed or nearly exposed.

There are numerous environmental benefits that will be derived from the stream restoration including the restoration of degraded aquatic habitat; prevention of downstream flooding by reconnecting the stream to its historic floodplain and realigning the stream's intersection with Crab Creek; channel stabilization reducing the amount of sediment contributed to the stream and Crab Creek; and the restoration of a forested buffer composed of native trees and shrubs. In addition, the proposed work should assist the Town with meeting its obligations for the Total Maximum Daily Load requirements for Upper Crab Creek which is currently listed as an impaired water according to the 2008 Water Quality 305(b)/303(d) Integrated Report for not supporting aquatic life and recreation. The listed impairments consist of *Escherichia coli* (E. coli) and benthic macro-invertebrates. The Commonwealth of Virginia also benefits from the proposed project by helping meet its water quality goals and obligations under the Clean Water Act.

b. Public Support and Opposition

Identify any anticipated public support or opposition, as well as any anticipated governmental support or opposition, for the project.

It is anticipated that there would be widespread public and community support for the project due to the limited economic and personnel resources required by the town and the social and environmental benefits provided.

Part of the community outreach and public support of the project will include the Town of Christiansburg Parks and Recreation Department and Parks and Recreation Advisory Committee. Support will also be coordinated with the Skyline Soil and Water Conservation District, New River Highlands Resource Conservation District, the Virginia Department of Conservation and

Recreation, Virginia Department of Environmental Quality and the United States Army Corps of Engineers.

c. ***Public Involvement***

Explain the strategy and plans that will be carried out to involve and inform the general public, business community and governmental agencies in areas affected by the project.

Once project approval has been obtained there will be meetings held with Town of Christiansburg Parks and Recreation Department and Parks and Recreation Advisory Committee. Support will also be coordinated with the Skyline Soil and Water Conservation District, New River Highlands Resource Conservation District, the Virginia Department of Conservation and Recreation, Virginia Department of Environmental Quality and the United States Army Corps of Engineers.

It is anticipated that many of the agencies above may also want to partner on some aspect of the project which could include expansion of the restoration to include an additional 1,400 linear feet of Crab Creek restoration, trail development and educational/interpretive signs and materials.

d. ***Attracting or Maintaining Industries and Businesses***

Explain whether and, if so, how the project is critical to attracting or maintaining competitive industries and businesses to the Town or the surrounding region.

The restoration project will assist the Town with meeting its obligations for the Total Maximum Daily Load requirements for Upper Crab Creek which is currently listed as impaired water according to the 2008 Water Quality 305(b)/303(d) Integrated Report for not supporting aquatic life and recreation. The listed impairments consist of *Escherichia coli* (E. coli) and benthic macro-invertebrates. The Commonwealth of Virginia also benefits from the proposed project by helping meet its water quality goals and obligations under the Clean Water Act. This will alleviate/reduce possible future water quality restrictions imposed on development in the Crab Creek watershed.

The proposed project will also improve the property values and quality of life for the surrounding Diamond Hills community.

e. ***Project Compatibility with Local Plans***

Explain whether and, if so, how the project is compatible with the Town's comprehensive plan, infrastructure development plans, capital improvements budget, or other governmental spending plan.

The proposed project is compatible with the Town's Comprehensive Plan's goals and objectives including promoting safe, environmentally sound and aesthetically pleasing development; protecting the natural environment from inappropriate development and enhancing the man-made environment; protecting the quality and reliability of the regional water supply system; and promoting the future development and the preservation of green space.

f. ***Participation by Minority, Woman and Small Businesses***

Provide a statement setting forth participation efforts that are intended to be undertaken in connection with this project with regard to the following types of businesses: (i) minority-owned businesses, (ii) woman-owned businesses and (iii) small businesses.

Branch Highways, Inc. is committed to the participation of minority, woman-owned and small businesses.

Branch maintains an up-to-date and comprehensive database of subcontractors, suppliers and vendors which include the ability to identify disadvantaged and small businesses; additionally we will rely on the Virginia Department of Minority Business Enterprise's website to search for additional minority, woman and small businesses. Branch will solicit participation from qualified subcontractors and suppliers including minority-owned, women-owned and small businesses as subcontracting and material supply opportunities arise.

Our designer, Balzer & Associates, Inc. is registered as a small-business concern (SWAM #676823) and at this time we intent to use RSG Landscaping & Lawn Care, Inc. for the planting on the project; this company is also registered as a small-business concern (SWAM #653640) with the Commonwealth of Virginia.