



Expression of Interest

# CANAAN VALLEY RESORT STATE PARK SKI AREA AND OTHER IMPROVEMENTS

DNRB11059

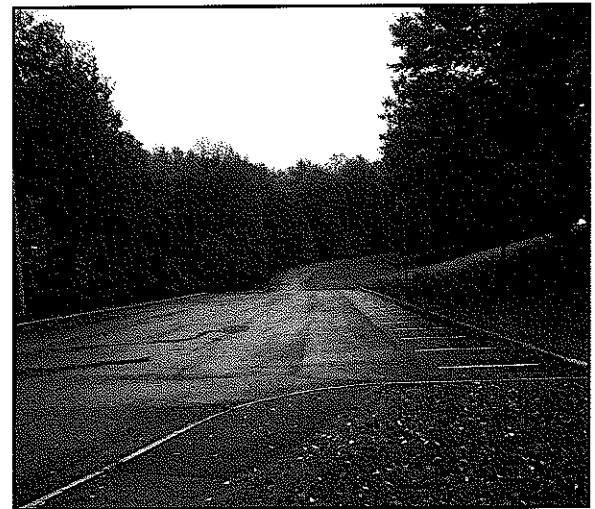
Prepared for

West Virginia Division of Natural Resources

Prepared by

KCI Technologies, Inc.

March 22, 2011



RECEIVED  
2011 MAR 21 AM 9:36  
WV PURCHASING  
DIVISION



ENGINEERS • PLANNERS • SCIENTISTS • Construction Managers

48 DONLEY STREET, SUITE 502 • MORGANTOWN, WV 26501 • 304-296-3611 • (FAX) 304-296-8046

March 22, 2011

Mr. Frank Whittaker  
Purchasing Division  
Building 15  
2019 Washington Street, East  
Charleston, WV 25305

Re: Canaan Valley Resort State Park Ski Area and Other Improvements  
DNRB11059

Mr. Whittaker,

KCI Technologies, Inc. (KCI) is pleased to submit this proposal to provide the West Virginia Division of Natural Resources (WVDNR) with professional architectural and engineering services for the design, construction, or specification of improvements to the ski area and other facilities at Canaan Valley Resort State Park. KCI is currently working at Canaan Valley, providing engineering and surveying services. We have a thorough understanding of the site and the expectations of WVDNR.

Our full-service capabilities enable us to provide the WVDNR streamlined and efficient deliverables. The KCI team maintains a strong technical staff with extensive experience in providing planning and engineering design services and construction management/inspection services. With more than 850 registered engineers, scientists, and planners, KCI's staff possesses the diverse expertise necessary to provide comprehensive technical services in support of the improvements to Canaan Valley Resort State Park. The strength of our staff lies in its commitment to generating creative and practical solutions to the issues within a project. Work required will be performed with the highest degree of coordination, efficiency, and quality.

KCI will provide the required services with the assistance of Stevens Engineering (Stevens), who will provide renovation or replacement of surface lift components, and Sno.matic Controls and Engineering, Inc. (Sno.matic), who will provide renovation and extension of snow making systems. Both firms possess the applicable certifications and experience to perform the work required under this contract.

The project will be managed from KCI's Morgantown, West Virginia office, ensuring a rapid response to any of WVDNR's requests. We appreciate your consideration of the KCI team, and we look forward to working with WVDNR on this important project.

Sincerely,

Charles Phillips, RPLS  
Senior Vice President

Direct Line: (410) 316-7855  
Email: [charles.phillips@kci.com](mailto:charles.phillips@kci.com)



State of West Virginia  
 Department of Administration  
 Purchasing Division  
 2019 Washington Street East  
 Post Office Box 50130  
 Charleston, WV 25305-0130

# Request for Quotation

RFQ NUMBER  
 DNRB11059

PAGE  
 1

ADDRESS CORRESPONDENCE TO ATTENTION OF:  
 FRANK WHITTAKER  
 304-558-2316

\*B15142357 304-296-3611  
 KCI TECHNOLOGIES INC  
 48 DONLEY ST STE 502  
 MORGANTOWN WV 26501-5907

DIVISION OF NATURAL RESOURCES  
 PARKS & RECREATION SECTION  
 324 4TH AVENUE  
 SOUTH CHARLESTON, WV  
 25303-1228 304-558-3397

DATE PRINTED	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
02/16/2011				

BID OPENING DATE: 03/22/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
0001	1	LS		906-00-00-001		
ARCHITECT/ENGINEERING SERVICES, PROFESSIONAL  EXPRESSION OF INTEREST (EOI)  THE WEST VIRGINIA PURCHASING DIVISION, FOR THE AGENCY, THE WEST VIRGINIA DIVISION OF NATURAL RESOURCES, IS SOLICITING EXPRESSIONS OF INTEREST FOR ARCHITECTURAL AND ENGINEERING SERVICES FOR SKI AREA IMPROVEMENTS AT CANAAN VALLEY RESORT STATE PARK, TUCKER COUNTY, WV PER THE ATTACHED.  ALL TECHNICAL QUESTIONS MUST BE SUBMITTED IN WRITING TO FRANK WHITTAKER IN THE WV PURCHASING DIVISION VIA EMAIL AT FRANK.M.WHITTAKER@WV.GOV OR VIA FAX AT 304-558-4115. DEADLINE FOR ALL TECHNICAL QUESTIONS IS 03/02/2011 AT 4:00 PM. ALL TECHNICAL QUESTIONS WILL BE ADDRESSED BY ADDENDUM AFTER THE DEADLINE.  EXHIBIT 10  REQUISITION NO.: .....  ADDENDUM ACKNOWLEDGEMENT  I HEREBY ACKNOWLEDGE RECEIPT OF THE FOLLOWING CHECKED ADDENDUM(S) AND HAVE MADE THE NECESSARY REVISIONS TO MY PROPOSAL, PLANS AND/OR SPECIFICATION, ETC.						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

WHEN RESPONDING TO RFQ, INSERT NAME AND ADDRESS IN SPACE ABOVE LABELED 'VENDOR'



State of West Virginia  
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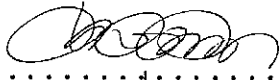
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 KCI TECHNOLOGIES INC  
 48 DONLEY ST STE 502  
 MORGANTOWN WV 26501-5907

SHIP TO

DIVISION OF NATURAL RESOURCES  
 PARKS & RECREATION SECTION  
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ADDENDUM NO. S:						
NO. 1 .....						
NO. 2 .....						
NO. 3 .....						
NO. 4 .....						
NO. 5 .....						
<p>I UNDERSTAND THAT FAILURE TO CONFIRM THE RECEIPT OF THE ADDENDUM(S) MAY BE CAUSE FOR REJECTION OF BIDS.</p> <p>VENDOR MUST CLEARLY UNDERSTAND THAT ANY VERBAL REPRESENTATION MADE OR ASSUMED TO BE MADE DURING ANY ORAL DISCUSSION HELD BETWEEN VENDOR'S REPRESENTATIVES AND ANY STATE PERSONNEL IS NOT BINDING. ONLY THE INFORMATION ISSUED IN WRITING AND ADDED TO THE SPECIFICATIONS BY AN OFFICIAL ADDENDUM IS BINDING.</p> <p style="text-align: center;">             .....            SIGNATURE            KCI Technologies, Inc.            .....            COMPANY            March 18, 2011            .....            DATE         </p>						
NOTE: THIS ADDENDUM ACKNOWLEDGEMENT SHOULD BE SUBMITTED WITH THE BID.						

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### Request for Quotation

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FRANK WHITTAKER 304-558-2316

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\*B15142357 304-296-3611  
 KCI TECHNOLOGIES INC  
 48 DONLEY ST STE 502  
 MORGANTOWN WV 26501-5907

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DIVISION OF NATURAL RESOURCES  
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 324 4TH AVENUE  
 SOUTH CHARLESTON, WV  
 25303-1228 304-558-3397

DATE PRINTED	TERMS OF SALE	SHP VIA	F.O.B.	FREIGHT TERMS
02/16/2011				

BID OPENING DATE: 03/22/2011 BID OPENING TIME 01:30PM

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
REV. 09/21/2009						
NOTICE						
A SIGNED BID MUST BE SUBMITTED TO:						
DEPARTMENT OF ADMINISTRATION						
PURCHASING DIVISION						
BUILDING 15						
2019 WASHINGTON STREET, EAST						
CHARLESTON, WV 25305-0130						
THE BID SHOULD CONTAIN THIS INFORMATION ON THE FACE OF						
THE ENVELOPE OR THE BID MAY NOT BE CONSIDERED:						
SEALED BID						
BUYER: 44						
RFQ. NO.: DNRB11059						
BID OPENING DATE: 03/22/2011						
BID OPENING TIME: 1:30 PM						
PLEASE PROVIDE A FAX NUMBER IN CASE IT IS NECESSARY						
TO CONTACT YOU REGARDING YOUR BID:						
----- (304) 296-8046 -----						
CONTACT PERSON (PLEASE PRINT CLEARLY): John Rudmann, PE, RLA, LEED AP						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS

SIGNATURE	TELEPHONE	DATE
TITLE	FEIN	ADDRESS CHANGES TO BE NOTED ABOVE

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ADDRESS CORRESPONDENCE TO ATTENTION OF:
FRANK WHITTAKER 304-558-2316

V E N D O R	*B15142357      304-296-3611
	KCI TECHNOLOGIES INC 48 DONLEY ST STE 502
	MORGANTOWN WV 26501-5907

S H I P T O	DIVISION OF NATURAL RESOURCES PARKS & RECREATION SECTION
	324 4TH AVENUE SOUTH CHARLESTON, WV
	25303-1228      304-558-3397

DATE PRINTED 02/16/2011	TERMS OF SALE	SHIP VIA	F.O.B.	FREIGHT TERMS
BID OPENING DATE: 03/22/2011		BID OPENING TIME 01:30PM		

LINE	QUANTITY	UOP	CAT. NO.	ITEM NUMBER	UNIT PRICE	AMOUNT
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***** THIS IS THE END OF RFQ DNRB11059 ***** TOTAL: _____						

SEE REVERSE SIDE FOR TERMS AND CONDITIONS			
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STATE OF WEST VIRGINIA  
Purchasing Division

**PURCHASING AFFIDAVIT**

**West Virginia Code §5A-3-10a states:** No contract or renewal of any contract may be awarded by the state or any of its political subdivisions to any vendor or prospective vendor when the vendor or prospective vendor or a related party to the vendor or prospective vendor is a debtor and the debt owed is an amount greater than one thousand dollars in the aggregate.

**DEFINITIONS:**

"Debt" means any assessment, premium, penalty, fine, tax or other amount of money owed to the state or any of its political subdivisions because of a judgment, fine, permit violation, license assessment, defaulted workers' compensation premium, penalty or other assessment presently delinquent or due and required to be paid to the state or any of its political subdivisions, including any interest or additional penalties accrued thereon.

"Debtor" means any individual, corporation, partnership, association, limited liability company or any other form or business association owing a debt to the state or any of its political subdivisions. "Political subdivision" means any county commission; municipality; county board of education; any instrumentality established by a county or municipality; any separate corporation or instrumentality established by one or more counties or municipalities, as permitted by law; or any public body charged by law with the performance of a government function or whose jurisdiction is coextensive with one or more counties or municipalities. "Related party" means a party, whether an individual, corporation, partnership, association, limited liability company or any other form or business association or other entity whatsoever, related to any vendor by blood, marriage, ownership or contract through which the party has a relationship of ownership or other interest with the vendor so that the party will actually or by effect receive or control a portion of the benefit, profit or other consideration from performance of a vendor contract with the party receiving an amount that meets or exceed five percent of the total contract amount.

**EXCEPTION:** The prohibition of this section does not apply where a vendor has contested any tax administered pursuant to chapter eleven of this code, workers' compensation premium, permit fee or environmental fee or assessment and the matter has not become final or where the vendor has entered into a payment plan or agreement and the vendor is not in default of any of the provisions of such plan or agreement.

Under penalty of law for false swearing (*West Virginia Code §61-5-3*), it is hereby certified that the vendor affirms and acknowledges the information in this affidavit and is in compliance with the requirements as stated.

**WITNESS THE FOLLOWING SIGNATURE**

Vendor's Name: KCI Technologies, Inc.

Authorized Signature:  Date: March, 18 2011

State of Maryland

County of Carroll, to-wit:

Taken, subscribed, and sworn to before me this 18<sup>th</sup> day of March, 2011.

My Commission expires 7/19, 2011.

AFFIX SEAL HERE

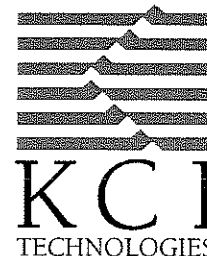
NOTARY PUBLIC 

West Virginia Division of Natural Resources  
*Canaan Valley Resort State Park Ski Area and Other Improvements*

## KCI Technologies, Inc.

As one of the nation's leading multi-discipline, full-service engineering firms, KCI Technologies, Inc. (KCI) is consistently ranked among the top 100 consulting engineering firms in the country by Engineering News Record.

With a professional staff of engineers, planners, scientists, surveyors, and construction managers, we offer a broad range of engineering services, including civil, structural, transportation, environmental, hazardous waste, mechanical, electrical, telecommunications, and soils. We also provide cultural and environmental resource management services, land planning and landscape architecture, geology, hydrology, ecology, surveying, and construction management and inspection.



The professional staff is supported by CADD (Computer-Aided Drafting and Design) designers, BIM (Building Information Modeling) designers, GIS (Geographic Information Systems) experts, and database analysts, programmers, and technicians; as well as state-of-the-art computer, field, and lab equipment. KCI's computer network supports the firm's core production systems, including BIM, CADD, GIS, three-dimensional visualization/animation tools, document processing and desktop publishing, and project management. The firm's integrated approach to automating design, drafting, documentation, and presentation minimizes costs, facilitates coordination among engineering disciplines, and expedites the production of high-quality products.

At KCI, we believe that our broad technical expertise, combined with our unique commitment as employee owners, has enabled us to emerge as industry leaders whose customers can count on excellent service time and again.

### **Point-of-Contact**

John Rudmann, PE, RLA, LEED AP  
48 Donley Street, Suite 502  
Morgantown, WV 26501  
Phone: (304) 296-3611  
Fax: (304) 296-8046  
[john.rudmann@kci.com](mailto:john.rudmann@kci.com)

KCI has been working throughout the state of West Virginia for nearly 20 years and is familiar with the conditions and infrastructure of West Virginia. Our local office has a wide range of experience working with various state agencies, as well as private developers and contractors. We have engineers who understand and advocate for the needs of the state of West Virginia as well as rural communities and public service districts. Our backgrounds range from WVDOH to USDA Rural Development. KCI has the knowledge to aid our clients in all aspects of this project including but not limited to preliminary study, preliminary design, funding assistance, final design, bidding services, construction administration, construction inspection, or any other service needed to complete these types of projects.

### **Experience with Parks and Recreational Facilities**

From athletic fields and golf courses to regional parks and hiking trails, KCI creates quality recreation areas that blend aesthetics and functionality with an existing environment to preserve, enhance, and protect open space.

We provide planning, design, construction, and resource management services to enhance public assets and improve quality of life. Our projects often incorporate natural and cultural resources, as well as alternative recreational amenities such as boat access, boardwalks, and skateboard ramps. Our experience includes thousands of acres of recreational facilities.

Currently, KCI is providing engineering and landscape architecture services for the Cacapon Resort State Park Improvement project, including the Robert Trent Jones style golf course, water and waste water collection and distribution, and the resort addition.

WVDNR also recently selected KCI to provide engineering, surveying, and landscape architecture services at Canaan Valley Resort State Park.

In addition, the WV Division of Culture and History recently selected KCI to provide engineering at Camp Washington-Carver.



West Virginia Division of Natural Resources  
*Canaan Valley Resort State Park Ski Area and Other Improvements*

**Stevens Engineering**

Stevens Engineering (Stevens) is recognized throughout North America for responsive planning and engineering design. With nearly 30 years of service to its clients, Stevens is an accomplished source for passenger ropeway engineering, planning and design of lift and trail systems, snow tubing park design, and mountain surveying.



**STEVENS  
ENGINEERING**

Lift relocation engineering and the design of upgrades and modifications to existing lift installations are technical specialties at the core of the firms' capabilities. Stevens Engineering frequently assists lift manufacturers with the design of new installations, major lift upgrades, and lift profile surveying. Ski area clients often seek out the technical expertise and the knowledge of governing standards and regulations that Stevens has to offer in preparing comprehensive and result-oriented bid specifications for future lift purchases and for expert witness representation.

More information is attached later in this section.

**Sno.matic Controls and Engineering, Inc.**

Sno.matic Controls and Engineering, Inc. (Sno.matic) is the premier North American snowmaking design company, with installations throughout the US, Canada, South America, and Asia. Sno.matic specializes in providing evaluations, master plans, permit assistance, design, and control system integration on snowmaking systems. Sno.matic does not manufacture or represent any snowguns, pumps, compressors, or other mechanical equipment. As a result, system design and control integration is customized to the specific objectives and requirements of the site rather than to the profit incentives of equipment sales.

Sno.matic provides a full range of services, including review of existing snowmaking facilities, defining the optimal design concept for snowmaking installations or expansions, permitting, detailed design, construction, controls/automation, and operations support.

More information is attached later in this section.



# Staff Organization Chart



## PROJECT MANAGER

John Rudmann, PE, RLA, LEED AP

### CIVIL ENGINEERING

John Pitman, EIT  
Timothy Miller

### WATER SUPPLY DESIGN

Daniel Garcia, PE  
Timothy Wolfe, PE, BCEE

### LIFT DESIGN

Stevens Engineering

### SNOW MAKING DESIGN

Sno.matic Controls and  
Engineering, Inc.

**West Virginia Division of Natural Resources**  
*Canaan Valley Resort State Park Ski Area and Other Improvements*

**John Rudmann, PE, RLA, LEED AP**  
*Project Manager*

**Education**

BS / Civil Engineering  
BS / Landscape Architecture

**Registration**

RLA / WV / 341  
Also RLA in MD, OH, PA  
PE / WV / 14779  
Also PE in MD, PA  
LEED AP

**Total Years with KCI: 4**

**Total Years of Experience: 16**

Mr. Rudmann is a licensed civil engineer, a licensed landscape architect, and a LEED Accredited Professional. His responsibilities have included being a Project Manager, a Senior Civil Engineer, and a Senior Landscape Architect for many community redevelopment and transportation enhancement projects. As a designer, his design tasks have included streetscape design, site master planning, stormwater design, utility design, grading, access road design, erosion and sediment control design, pedestrian plaza design, site permitting, golf course design, and completing project specifications. He has incorporated LEED sustainable principles in to the design process and has completed all the necessary credit paper work for projects to achieve LEED Certification. Relevant project experience includes:

**Canaan Valley Resort State Park Lodge Expansion. Davis, WV.** Project Manager. KCI is a subconsultant for the Canaan Valley Resort State Park Improvement Project. KCI is providing engineering and surveying services for the lodge expansion and facility improvements. KCI is also providing landscape design to enhance the aesthetic appeal of the resort. The surveying scope involved aerial photogrammetry for approximately 4,400-acres with supplemental ground survey.

**Cacapon Resort State Park Lodge Expansion and Park Improvement. Berkeley Springs, WV.** Site/Civil Engineer. For the lodge facility, Mr. Rudmann is responsible for completing the overall design of all site/civil services, which included sidewalks and ADA compliant routes, access roads and parking lot, utility lines, drainage, stormwater retention, grading plans, landscaping, erosion and sedimentation control, and permitting. For the golf course pond renovations, Mr. Rudmann has completed the pond bank stabilization design and completed the Site Registration Application Form, WV/NPDES General Permit Construction Stormwater (Three Acres or Greater). This application has been submitted and approved. Mr. Rudmann was also responsible for updating the golf course drainage system and solving stormwater ponding problems. The outdoor plaza area is being designed to enhance the pedestrian experience and maximize views. The pavement will be a mixture of stamped/colored concrete and scored/colored concrete. There will be numerous benches, seating walls, fire pits, and will be heavily landscaped.

**Event Center and Garage. Morgantown, WV.** Civil Engineer. Project involved site/civil engineering and landscape architecture services for this design/build project. Mr. Rudmann was responsible for the overall design of all site/civil services, which included local stormwater permitting, stormwater retention, grading plans, landscaping, erosion and sedimentation control, access roads and parking lot, and utility lines. While this building is not seeking LEED certification, Mr. Rudmann designed the site to maximize sustainable sites and water efficiency credits. The stormwater quantity control was achieved through oversized storage collection pipes and quality through a series of filters.

**USDA Building Design/Build. Sabraton, WV.** Project Manager. KCI was a subconsultant to for the USDA Building located in the Sabraton Area of Morgantown. KCI provided site/civil engineering and landscape architecture design services for this design/build project. This project is pursuing LEED certification. Mr. Rudmann was responsible for the overall design of all site/civil services, which included parking lot design, access road design, landscape design, WV DEP erosion and sediment control permitting, local permitting for the Morgantown Utility Board, drainage design, stormwater quality and retention, grading plans, and erosion and sedimentation control plans. The parking lot was designed to hold 154 spaces with 24 spaces in a secured area, and maintain ADA compliance. Mr. Rudmann also completed all the necessary LEED submittal paperwork for sustainable site and water efficiency credits. The site was also previously disturbed and certified a brownfield site.

West Virginia Division of Natural Resources  
Canaan Valley Resort State Park Ski Area and Other Improvements

John Pitman, EIT  
Designer

**Education**

BS / Civil Engineering

**Registration**

EIT / WV / 7805

**Total Years with KCI: 12**

**Total Years of Experience: 13**

Mr. Pitman is a site/civil designer in KCI's Morgantown, West Virginia office. His experience includes the development of existing conditions, demolition, sediment and erosion control, and site, grading, and utility plans along with creating detail sheets for site specific elements. Mr. Pitman is also an experienced highway designer with a background in the preparation of roadway construction, right-of-way, sign, and pavement marking plans. Other responsibilities include performance of field surveys and construction stake out, traffic studies, stormwater and sanitary sewer design, and cost estimation. Relevant experience includes:

**Cacapon Resort State Park Lodge Expansion and Park Improvement. Berkeley Springs, WV.** Designer. Project involves engineering and landscape architectural services for the golf course commensurate with a Robert Trent Jones style course, addition to the resort currently in design and upgrade to the park's wastewater collection system, and improvements to the potable water distribution throughout the park. Mr. Pitman is responsible for creating digital base mapping from compiled aerial photogrammetry for CADD implementation. Additionally, responsible for field investigation, existing stormwater drainage evaluation, golf course/bunker drainage improvements, golf course pond improvements, and fire hydrant/flow testing.

**Event Center and Garage. Morgantown, WV.** Designer. Project involved site/civil engineering and landscape architecture services for this design/build project. Mr. Pitman's responsibilities included plan presentation for final construction documents, overall grading, and assisting on the development of sediment and erosion control and site, landscape, and utility plans. Also created roadway profiles, cross sections, project specific details, and checked vehicular turning movements throughout the project site using the Autoturn software.

**New Northside Fire Station. Morgantown, WV.** Designer. Project involved overall site design, access roads, utility lines, sidewalks, drainage, stormwater quality and retention, grading plans, erosion and sedimentation control plans, and the site/civil permitting. This project earned LEED Silver certification. Mr. Pitman was responsible for plan presentation for final design, consisting of parking lot and bio-cell grading, and the development of sediment and erosion control, site, utility, and sign fabrication details.

**The Dayton. Morgantown, WV.** Designer. KCI was a subconsultant for the Dayton, a three-story mixed-use building located at the corners of Ridgeway Avenue, Dayton Street, and Richwood Avenue in Morgantown, providing retail space and parking on the ground level with residential housing on the upper floors. KCI was responsible for overall site/civil design, water lines, sanitary sewer, general utility coordination, site/civil permitting, and erosion and sediment control. Mr. Pitman's tasks included plan presentation for final construction documents, site grading, creating details, and drainage system design.

**The View II at the Park. Morgantown, WV.** Designer. KCI was a subconsultant for the View II. The View II is the second phase of a three phased development along the waterfront in Morgantown, WV. The View II is a four-story structure housing the Morgantown Area Chamber of Commerce on the first floor, with residential condominiums on the upper floors. Project involved overall site design, utility lines, sidewalks, drainage, storm water retention, grading plans, sediment and erosion control plans, and the site/civil permitting. Mr. Pitman was responsible for plan presentation of final design site/civil drawings, which included demolition, sediment and erosion control, proposed site plan, and detail sheets.

**West Virginia Division of Natural Resources**  
*Canaan Valley Resort State Park Ski Area and Other Improvements*

**Timothy Miller**  
Civil Engineer

**Education**

BS / Civil Engineering  
AS / Civil Engineering  
Technology

**Total Years with KCI: 11**

**Total Years of Experience: 31**

Mr. Miller is a civil engineer with responsibilities including plans, specifications, cost estimates, and management for projects involving municipal and recreational space; military and DOD facilities; commercial and industrial facilities; educational, health, and institutional installations; and roads and highways. These projects have involved site development plans, stormwater management, drainage, erosion and sediment control plans, grading, and utilities. His experience also includes preliminary plans and the processing of residential subdivisions. Relevant project experience includes:

**General Engineering and Landscape Architectural Services. Prince George's County, MD.** Project Manager. KCI has provided full service engineering, surveying, and landscape architectural services to the Maryland-National Capital Park and Planning Commission (M-NCPPC) on multiple parks for eight years under several consecutive contracts. Projects have included trail design, stormwater management design, parking lot design, historic structure stabilization and relocation, and park improvements.

- **Old Fort Hills Park:** Design of a 28-space parking lot for a community park, stormwater quality facility, grading, sediment control, landscaping, and specifications.
- **Colmar Manor Community Park:** Plans and specifications, including grading, soil erosion and sediment control plans for proposed improvements of the temporary de-watering basin, stockpiling of dredge spoil, and ingress and egress from the lower access road into the de-watering area.
- **Trap and Skeet Building Addition:** Development of a stormwater management concept plan to be submitted to Prince George's County DER for review and approval in order to construct an 800 SF addition to the existing skeet range building.

**USDA Building Design/Build. Sabraton, WV.** Project Manager. Mr. Miller provided project management and civil engineering for a proposed new 9,000 SF three-story, 12-unit Community Shelter. Development included a building, side yard setback variances, parking, handicap access, stormwater management for water quality and quantity, new driveway entrance, all utility connections in Public Open Space, coordination with District of Columbia Water and Sewer Authority (DCWASA), landscaping, Public Open Space upgrades, grading, and sediment control.

**Civil Engineering Services for the University of Maryland. College Park, MD.** Civil Engineer. KCI was selected to provide civil and structural design engineering services to the University of Maryland on an on-call basis. Task assignments have included renovation of Ludwig Field's natural sand based turf field, renovations to the campus golf course, design of a new golf course pavilion, and reconstruction of the MFRI shop facility.

**Falcon Crest Community Center. Owings Mills, MD.** Civil Engineer. The Falcon Crest Apartment Community located in Baltimore County, Maryland was built in the 1970s without the amenity of a community building for use of the tenants. KCI provided site planning to place a new 4,500 SF, single-story community building within an existing townhouse apartment complex and on an existing parking area. KCI provided topographic survey of the area; prepared water, sewer, and storm drain plans; designed an underground stormwater management facility (sand filter), a water recharge area, site and grading plans, erosion and sediment control plans, and landscape plans and details. Other services included construction inspection and concrete testing, "as-built" site and utility surveys, and assisting the client in obtaining local jurisdictional approval and permits.

**West Virginia Division of Natural Resources**  
*Canaan Valley Resort State Park Ski Area and Other Improvements*

**Daniel Garcia, PE**  
*Wastewater Engineer*

**Education**

BS / Civil Engineering

**Registration**

PE / WV / 17912

Also PE in MO, OH

**Total Years with KCI: 2**

**Total Years of Experience: 17**

Mr. Garcia is a Project Engineer in KCI's Morgantown, West Virginia office and has more than 17 years experience in the design of municipal projects, including water, sewer, stormwater, and environmental services. His experience includes solid waste landfills; public drinking water supply, treatment, storage, and distribution; wastewater collection, treatment, and disposal; and site development. Activities on these projects include proposal and cost estimating, modeling and analysis, design, advisory and review of plans, construction observation, construction quality assurance, inspection and troubleshooting operations, and regulatory relations. Relevant project experience includes:

**Cacapon Resort State Park Lodge Expansion and Park Improvement, Cacapon, WV.** Civil/Site Engineer. As a subconsultant, KCI managed and performed tasks for water and wastewater system improvements as part of state park upgrades and expansion project. Mr. Garcia is responsible for overseeing design of water supply, treatment, storage, and distribution. He is also designing upgrades to the wastewater treatment plant.

**Sanitary Force Main and Wastewater Treatment Modifications, Marion County WV and Town of Farmington Wastewater Treatment Plant, Farmington, WV.** Project Engineer. Managed tasks and design effort for leachate transmission main from landfill to wastewater treatment plant. Provided leachate design including all field work to assess alternative alignments from leachate collection point across extreme terrain to a combined highway and creek crossing to the existing lift station at the treatment plant; coordination with all design and survey staff; and design of two leachate lift stations, force main, gravity main, flow meter station and yard piping. Designed new return activated sludge pumping system and modifying the existing system. Prepared design drawings, projects specifications, bidding, and contract documents.

**New Northside Fire Station, Morgantown, WV.** Task Manager. KCI was a subconsultant for the new Northside Fire Station for the City of Morgantown. KCI was responsible for overall site design, access roads, utility lines, sidewalks, drainage, stormwater quality and retention, grading plans, erosion and sedimentation control plans, and the site/civil permitting. Mr. Garcia provided review and markup after value engineering revisions, adding revisions per construction change requests, and construction administration. Provided construction observation for site work.

**Water Supply Improvements, Bethany, MO.** Project Engineer. Reviewed hydrogeological reports, one based on numeric groundwater modeling and one based on analysis from pump testing. Provided written analysis of design, feasibility, cost estimate, and planning.

**Water Distribution and Storage Improvements, Oronogo, MO.** Project Engineer. Evaluated existing system hydraulics and analyzed model of preliminary layout. Made recommendations on storage tank size and location based on planned system growth. Reviewed project specifications and contract documents. Made design recommendations for cost savings after bidding.

**Water Distribution and Storage Improvements, Diggins, MO.** Project Engineer. Provided written analysis of design, using hydraulic model of system, and recommended design criteria for cost-effective distribution main layout and storage capacity. Coordinated development of design and verified compliance with project criteria. Reviewed project specifications and contract documents.

West Virginia Division of Natural Resources  
Canaan Valley Resort State Park Ski Area and Other Improvements

Timothy Wolfe, PE, BCEE  
Environmental Engineer

**Education**

BS / Civil Engineering

**Registration**

PE / MD / 15528

Also PE in DC, DE, PA, VA  
Board Certified Environmental  
Engineer (BCEE)

Total Years with KCI: 13

Total Years of Experience: 30

Mr. Wolfe is a Vice President and Practice Leader of KCI's Environmental Discipline where he is responsible for preparation of engineering reports, technical designs, specifications, cost estimates, cost-effectiveness analyses, detailed design and layout, and construction phase engineering for municipal and industrial water and wastewater system projects. He is responsible for design of new water and wastewater treatment facilities; upgrade and expansion of existing facilities; hydraulic analysis of water distribution and wastewater collection networks; design of water storage, treatment, and distribution systems; and renovation and extension of wastewater collection and conveyance systems including pump stations and force mains. Relevant experience includes:

**Wisp Resort PRD Water System Study and Design McHenry, MD.** Quality Assurance/Quality Control. KCI provided engineering services for a conceptual development study, design and preparation of designs, contract drawings, and specifications for the proposed Wisp Resort PRD Water System. The Wisp Water System includes a stand-alone water supply, treatment, storage and distribution system to serve 2,500 homes and retail commercial facilities. The water system was designed to tie into an existing County-owned water system, at the two lower service pressure zones. Elements of this project included water supply wells; finished water distribution pumping water treatment; a 500,000 gallon buried, pre-cast, post-tensioned, and water storage tank; water distribution system; separate non-potable water fire protection system for the high pressure zone; and a booster pump station to serve the high pressure zone.

**Western Regional Park. Cooksville, MD.** Project Engineer. KCI provided full-service architectural, engineering, and environmental services for the development and implementation of the park's Master Plan for this 190-acre rural park property in Howard County, Maryland. Mr. Wolfe's tasks included performing approximately 100 perc tests on-site to identify a suitable on-site septic area, the design of 22,000 LF of gravity and pressurized infiltration trench, pump station, force main, and gravity main, to serve 10,000 gpd of sanitary flow. A hydraulic report was performed including a mounding analysis and nitrogen balance, and MDE groundwater discharge permit was filed.

**Truxtun Park Boat Ramp and Pier Replacement. Annapolis, MD.** Quality Assurance/Quality Control. Project involved design services for the renovation of the Truxtun Park public boating facility. The design elements for the project included removal and replacement of an existing "L" shaped timber dock with a floating dock; removal and replacement of two existing concrete boat ramps; removal and replacement of two existing piers and construction of an additional pier associated with the boat ramps, including one pier which is ADA compliant; parking lot improvements; evaluation of existing stormwater culvert and modification as necessary; evaluation of shoreline and recommend stabilization where required; demolition and disposal of existing facilities; and obtaining all permits for the project including Critical Area Commission requirements.

**MD 18B Streetscape. Queen Anne's County, MD.** Environmental Engineer. MD Route 18B is a two-lane open-section roadway which passes through the town of Graysonville in Queen Anne's County. The Maryland State Highway Administration, working with local residents, was requested to rebuild the roadway to address pedestrian and drainage deficiencies through the town. The SHA proposed a \$2.5 million streetscape project to add a new sidewalk and landscaping for the town of Graysonville. The design work provided by KCI included preliminary and final plans for new curb and gutter, sidewalk, drainage system, culvert replacement, stormwater pump station, replacement of water line and vacuum sewer system, maintenance of traffic, and stormwater management and erosion and sediment controls.

West Virginia Division of Natural Resources  
Canaan Valley Resort State Park Ski Area and Other Improvements

**Canaan Valley Resort State Park Lodge Expansion**  
*Davis, WV*

**Client**

WV DNR Division of Parks  
and Recreation

**Contact**

Jonathan Perry,  
(304) 284-5015  
Paradigm Architecture

**Year Complete:** In Progress

KCI is a subconsultant for the Canaan Valley Resort State Park Improvement Project. KCI is providing engineering, landscape architecture, and surveying services for the lodge expansion and facility improvements.

The surveying scope involved aerial photogrammetry for approximately 4,400-acres with supplemental ground survey.

The site work involved with the lodge expansion will involve roadway expansion to allow for larger vehicles and increased number of users, reconfiguring the existing parking lot, providing a pedestrian network to link lodge facilities with parking and drop-off areas, and the multi-use recreational features. A revised loading dock with dock lifter will also be designed. KCI is also providing landscape design to enhance the aesthetic appeal of the resort.





# West Virginia Division of Natural Resources

## Canaan Valley Resort State Park Ski Area and Other Improvements

### Cacapon Resort State Park

Berkeley Springs, WV

**Client**  
WV DNR Division of Parks  
and Recreation

**Contact**  
Bradley Leslie,  
(304) 558-2764

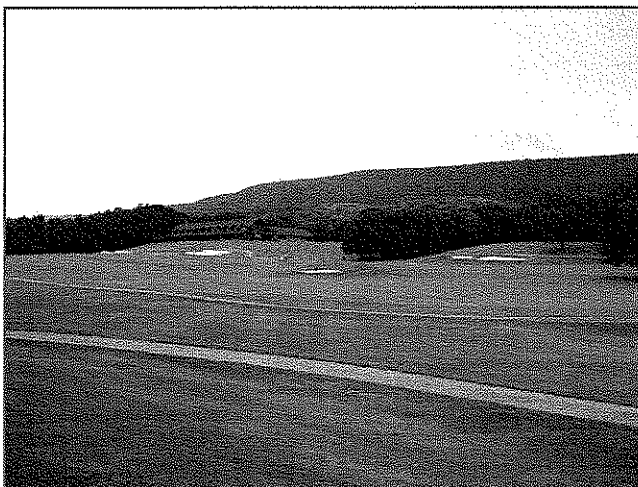
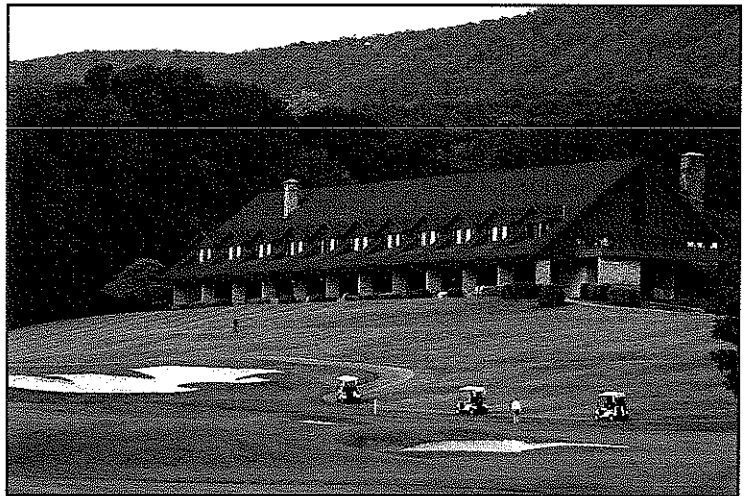
**Year Complete:** Ongoing

KCI is a subconsultant for the Cacapon Resort State Park Improvement Projects. The project involves engineering and landscape architecture services for improvement to the golf course, upgrades to the Park's water and wastewater system, and an addition to the existing resort building. KCI also provided coordination and support of surveying and geotechnical investigation.

The golf course improvements were commensurate with a Robert Trent Jones style course. In order to improve the quality of the course and correct drainage problems, storm pipes were designed within bunkers, stormwater ponding eliminated through grading and other measures, and pond bank stabilization design provided. KCI completed the Site Registration Application Form, WV/NPDES General Permit Construction Stormwater (Three Acres or Greater). This application has been submitted and approved.

KCI managed and performed tasks for water and wastewater system improvements in order to improve the potable water distribution throughout the Park and upgrade the wastewater collection system. Specifically, KCI performed water supply, treatment, and distribution studies and made recommendations for system improvements. The water supply study included field evaluation and documentation survey of water wells and using conclusions to plan water treatment plant upgrade, improvements to existing wells, and possible new wells. Water distribution system studies included domestic demand and pressure measurements and hydrant flow testing for fire flow and carrying capacity evaluation.

KCI also provided site/civil engineering and landscape architecture services to accommodate the addition to the resort building. KCI was responsible for the necessary infrastructure upgrades including utility lines, drainage, stormwater retention, and grading and erosion and sediment control plans. KCI also provided permitting assistances. New access roads, sidewalks, and parking lots were designed. The outdoor plaza area was heavily landscaped and designed to enhance the pedestrian experience and maximize views. It includes numerous benches, seating walls, and fire pits.



West Virginia Division of Natural Resources  
Canaan Valley Resort State Park Ski Area and Other Improvements

Wisp Resort PRD Water System Study and Design  
McHenry, MD

**Client**  
DC Ski, LLC

**Contact**  
Bob Yaste,  
(301) 387-4911

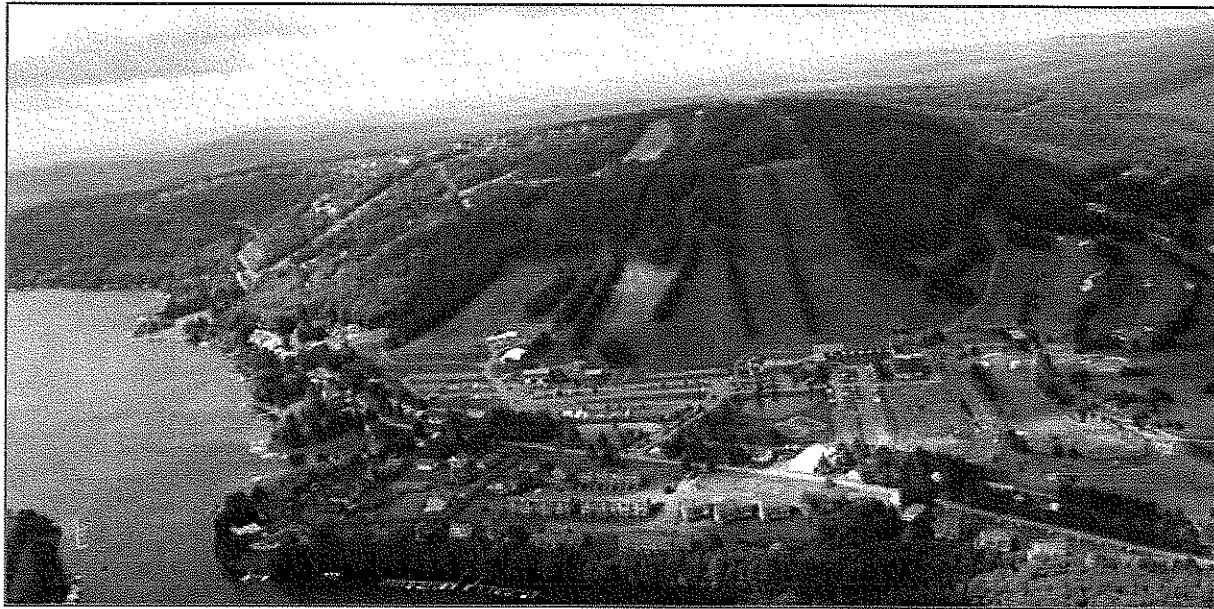
**Year Complete:** 2009

KCI provided engineering services for a conceptual development study, design and preparation of designs, contract drawings, and specifications for the proposed Wisp Resort PRD Water System. The Wisp Water System includes a stand-alone water supply, treatment, storage, and distribution system to serve 2,500 homes and retail commercial facilities. The water distribution system was established in three pressure zones.

KCI completed design of a non-potable water fire protection system to serve the high pressure zone, containing the commercial and recreational venues. The water system was designed to tie into an existing County-owned water system, at the two lower service pressure zones. Elements of this on-going project include water supply wells; finished water distribution pumping water treatment; a 500,000 gallon buried, pre-cast, and post-tensioned water storage tank; water distribution system; separate non-potable water fire protection system for the high pressure zone; and a booster pump station to serve the high pressure zone.

The water distribution piping was designed by the Owner's site consultant, following system modeling by KCI. KCI completed the system conceptual design, hydraulic modeling of the water distribution system, using WaterCAD software, design of the booster pump station, water storage tank, and pump selection for the Owner-installed fire pump system.

A water treatment and pumping facility was also designed. However, the instrumentation and controls design is currently on hold pending completion of negotiations between DC Development and Garrett County for eventual ownership and operation of the water facilities. This facility features sodium hypochlorite and fluoride chemical storage and feed systems and high head pumps, which will operator at up to 400 psi. Special valves and piping were selected for the 370 psi operating pressure.



# West Virginia Division of Natural Resources

## Canaan Valley Resort State Park Ski Area and Other Improvements

### Harpers Ferry National Park Historic Train Station

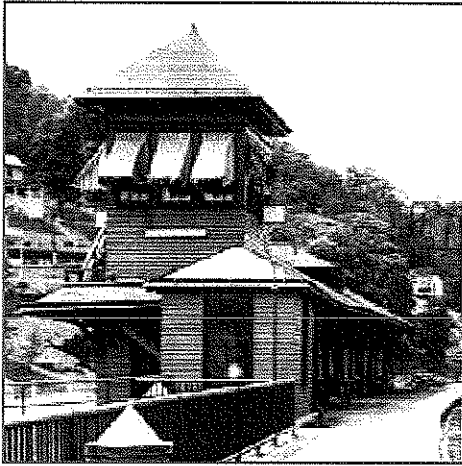
Harpers Ferry, WV

**Client**  
National Park Service

**Contact**  
Sumul Shah,  
Lumus Construction  
(781) 935-5600

**Year Complete:** 2006

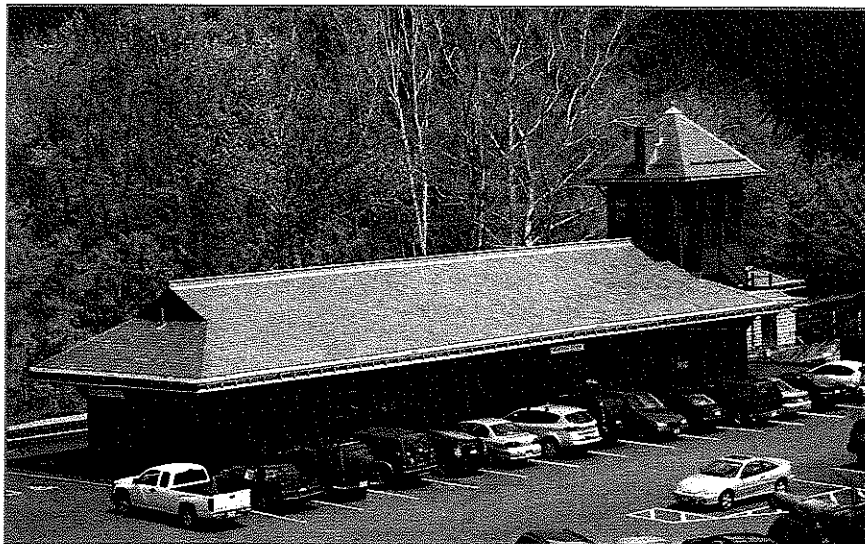
KCI provided electrical, site/civil, and structural engineering support services for this design/build historic preservation project. KCI's design team worked with the general contractor and National Park Service (NPS) to redesign the train station's parking lot and pedestrian pathway; restoring the historic nature of the site and improving safety and accessibility.



The existing parking lot lighting included several different historic fixtures that date at least to 1931, as well as contemporary, maintenance grade fixtures. None of the fixtures provided adequate lighting levels. The parking lot's historic lighting, as well as historic railings, have either disappeared or have fallen into disrepair. Since the historic railing provides a visual and physical barrier for vehicles and pedestrians from the steep slope along the armory side of the parking lot, replacing the railing is paramount from a safety standpoint.

Pedestrian access to the parking lot from Potomac Street was either via a dilapidated wood foot bridge or the vehicular access road, neither of which afford accessibility or an adequate degree of safety. Several years ago the National Park Service created a temporary gravel parking area on top of an abandoned remnant of a rail line that was part of the 1890s track realignment. The temporary parking lot was created to the east of the main parking lot in an effort to sustain the number of parking spaces during the Train Station renovation. KCI worked with NPS to remove the temporary parking lot and restore the historic rail remnant after the construction project is over.

In addition to addressing the maintenance, safety, and accessibility issues identified above, improving the general appearance of the parking lot was also a major concern from the onset of the project. Included in these general improvements were: improving the pedestrian and vehicular circulation, addressing water ponding and drainage issues, improving the appearance of the Train Station and parking lot from the street and reducing the overall impact to resources. Other issues that were identified during the design process included the impact of the parking lot construction to rail commuters and visitors to Harpers Ferry, the impact to local business, and the overall impact to the Town of Harpers Ferry. Since the town of Harpers Ferry has been encouraging tourism and the development of more business along Potomac Street, a more attractive and safer parking lot that provides better access is expected go a long way to help support their goals.



# West Virginia Division of Natural Resources

## *Canaan Valley Resort State Park Ski Area and Other Improvements*

### USDA Building Design/Build

Sabraton, WV

**Client**  
US Department of Agriculture

**Contact**  
Jonathan Perry,  
(205) 403-2742  
Paradigm Architecture

**Year Complete:** 2010

KCI was a subconsultant for the 36,000 SF USDA Building located in the Sabraton area of Morgantown. KCI provided site/civil engineering and landscape architecture design services for this design/build project.

The parking lot was designed to hold 154 spaces with 24 spaces in a secured area. To maintain ADA compliance and efficiently fit the parking lot into the existing terrain, the parking lot was design at a 5% running slope with a 2% cross slope. This cross slope allowed the asphalt to be contoured into swales to direct water into a series of bio-filtration cells within the parking lot areas and swales located closer to the building. The location of the site is well known for stormwater problems and frequent flooding. The bio-retention areas have effectively alleviated the flooding condition for this site due to a significantly slower time of concentration which allows for water to slowly infiltrate on side and the excess to discharge off site. The site was also previously disturbed and certified a brownfield site.

This project is pursuing LEED certification. The site received a Certificate of Completion in accordance with 60 CSR 3, Section 12 for Voluntary Remediation and Redevelopment Act (VRRRA) Activities after an ASTM E1903-97 Phase II environmental assessment was completed. At the conception of this project, KCI's engineers recognized several challenges that would need to be dealt with throughout the design/build process in order to meet the program requirements of the USDA, as well as providing a site/civil design that maximized LEED credentials outside of the building. The existing state road providing access to the project site lies within the flood plain. KCI provided a site/civil design that proposed raising the finished floor elevation and utilizing bio-retention areas within the project site to not only capture the onsite stormwater, but to protect the proposed buildings from the recurring flood conditions that are prevalent in the area. KCI designed the bio-retention areas within the proposed traditional parking islands thus eliminating a need for additional space within the project site for the required stormwater management devices.

In lieu of escalating project costs with large and long retaining walls, KCI's engineers were able to effectively design the proposed contour grading plans to minimize the height and length of the retaining walls.

KCI's engineers and landscape architects worked together to provide the contractor with plant seed mixes and traditional plants for the landscape plan that minimized project costs.



West Virginia Division of Natural Resources  
Canaan Valley Resort State Park Ski Area and Other Improvements

**Northside Fire Station**  
Morgantown, WV

**Client**  
City of Morgantown

**Contact**  
Terri Hough,  
(304) 284-7412

**Year Complete:** 2009

KCI was a subconsultant for the Northside Fire Station for the City of Morgantown. KCI was responsible for overall site design, access roads, utility lines, sidewalks, drainage, stormwater quality and retention, grading plans, erosion and sedimentation control plans, and the site/civil permitting. Coordination with the Morgantown Utility Board was required.

The new Morgantown Fire Station incorporated sustainable design concepts. KCI's design approach to the site/civil items reflects design items outlined in the Sustainable Sites and Water Efficiency categories of the LEED rating system. A stormwater cistern was included in the plans to achieve the Water Quality credit.

KCI also designed a 3,000 +/- gallon water harvesting tank to harvest the rain water from the roof of the proposed building. The design also provides a cost effective solution to long term water demand for the Fire Station.

KCI provided construction administration services, including responding to contractor RFIs, construction shop drawing review, and on-site contractor coordination meetings.

This project is LEED Certified.

