



## Qualification Documents for PTBA Membership

7561 Industrial Ct.

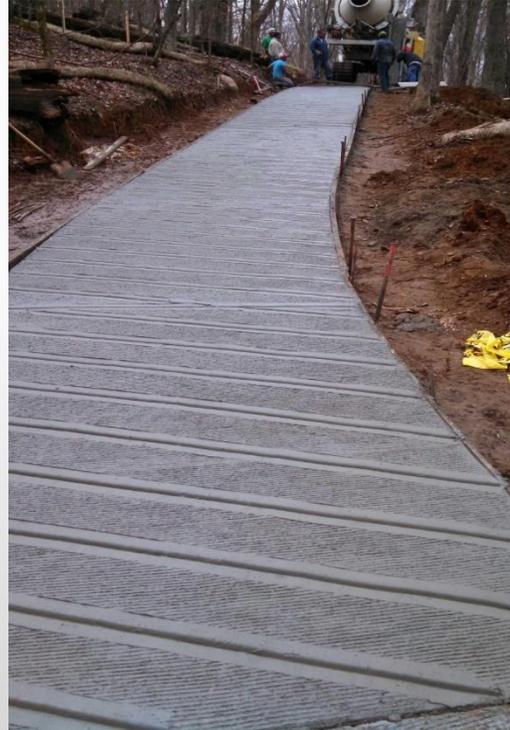
Alpharetta, GA 30004

Office: (770) 475-8199

Fax: (770) 475-8167

Prepared by: Aaron Steele

[Steele.Aaron@yahoo.com](mailto:Steele.Aaron@yahoo.com)





# Introduction

- Steele & Associates Inc. (SAI) is a fourth generation, family owned company that has been active in the construction industry for over sixty years. We have been building natural surface trails and concrete greenways in the Atlanta area professionally for nearly a decade, and were trail using enthusiasts for many years prior to that. Our home office is located in southern Forsyth county, and we also have a field office/yard facility in southern Gwinnett - both of which are conveniently located adjacent to Hall county.
- Having been in the utility construction business since the 1950s, SAI owns and operates a wide array of construction equipment, including several pieces which have proven to be useful on trail construction projects. The equipment combined with our knowledge and passion for building sustainable trail systems, that has enabled us to develop and utilize equipment and construction practices that are effective in the most environmentally sensitive of areas, as well as built trails that provide the safest and most desirable routes for the users.
- In 1996, project manager Aaron Steele was looking for an Eagle scout project, and having had years of experience with hiking, backpacking and mountain biking he was interested in possibly building a nature trail. The search led to Mimosa elementary school in Roswell GA, which had a small area of unused forested area behind the school, with very little outdoor recreation options for the children. The end result was the construction of a 1000' nature trail and outdoor classroom including a large gazebo. The trail was well received by the school and the students, and that experience fueled the desire to incorporate trails into both his professional life later on. In the process of completing utility projects for the forest service, and various government agencies, SAI had the opportunity to build and repair small sections of trails that were disturbed by construction, but it wasn't until 2007 that we had our first real opportunity to build a large trail system from scratch.



# Introduction Continued

- In the summer of 2007, we were awarded the first of two consecutive multi-year trail construction demand services contracts by Gwinnett county. Over the course of the next eight years, we have built many miles of mountain bike single track, equestrian, and pedestrian hiking trail. The range of our services included everything from complete trail design and layout to turn key construction of multi-loop trail systems, and both contracts included a significant amount of trail repair and reconstruction work. We were tasked with individual work orders ranging from simple drainage repairs, to re-routes of large section of trail that was either poorly designed or badly damaged.
- Beginning in 2010, we constructed our first greenway segment with the installation of Ivy Creek Greenway phase 1 to connect George Pierce park to the existing Suwanee greenway. This trail was a just over a mile of 6" thick, 10' wide concrete trail that included boardwalks, scenic overlooks, and small connection trails to tie other amenities in the park together. Ever since, we have renovated greenway segments on Ivy Creek phase 4, installed a new segment for the city of Johns Creek, and most recently, completed a 1 ½ mile conversion and reroute of the woodland and beach trails at Little Mulberry park to change them from badly eroded compacted earth trails, to 4" thick, 6' wide concrete.
- As a trail construction contractor, we have worked to continue to grow and expand our horizons, and we hope that inclusion into the PTBA will allow us to grow. We hope to help others by constructing trails with the best methods and technology available while spreading our knowledge of sustainable trail construction and maintenance.



# Firm Understanding, Ability and Approach

- When planning a trail construction project, one of the most important considerations (aside from the land itself) is the end user. Even though a trail may look great on a topographic map, hikers, equestrian riders, and mountain bikers may all disagree on the most important features that makes a great trail. After a trail design has been laid out, we utilize Trimble and Google software to map the trail route(s) precisely and utilize that information to create precise GPS coordinates that are then loaded onto a hand held GPS unit. At that point, we send a layout crew (usually led by one of our project managers or superintendents) into the field to mark the trail with high visibility flagging tape. With their trail building expertise, the layout crew can make field adjustments to take advantage of better drainage, or more interesting features such as a scenic vista, or an interesting rock outcrop that might not be as obvious during the design phase. Once the trail has been flagged, we generally find it that it is helpful to walk the trail with an owner's representative to review the layout and approve any potential reroutes prior to the commencement of construction.
- Once the layout design has been agreed upon, we typically mobilize a three or four-man crew for work involving the construction of natural surface trails. The mini excavator leads the way to remove obstructions and create a rough trail bed and its thumb is utilized as necessary to remove small trees and obstructions and carefully move them out of the way. This technique has proven to be far less destructive than cutting trees with a chainsaw, because falling trees often damage their surroundings. The Dingo uses a bucket attachment to remove and/or distribute excess dirt, as well as a hydraulic grapple to move large tree sections or boulders as necessary. Members of the crew follow behind with hand tools to remove any remaining roots and rocks and prepare the trail surface for compaction.

# Firm Understanding, Ability and Approach Continued



- A "York Rake" attachment (connected to an ATV) can also be used during this process to quickly remove any unwanted rocks or roots from the trail bed. The back slope is created initially by the mini excavator, and finished using hand tools. Finally, the Dingo's hydraulic compaction plate is used on the trail bed so that all destabilized soil is compacted and covered before the end of each work day. Upon completion of the trail, we conduct a final inspection with the Owner's representative and take care of any punch list items as necessary before demobilization.
- The equipment to be used has been carefully selected to (a) minimize our impact on the environment and (b) maximize our ability to efficiently create and shape the trail. Our primary tools are Takeuchi TB-53 and Kubota KX-91 mini excavators. Both have rubber tracks which are less damaging to the soil and root systems of the trees, and both are small machines with widths of 5 ½ foot or less. In addition, both have a "thumb" attachment which allows the operator to carefully grab debris and small trees and remove them without having to excavate and disturb the surrounding soil. We also employ the use of a small, 3' wide walk behind skid steer machine manufactured by Toro (called the "Dingo"). The Dingo also has rubber tracks and has a quick coupling system that allows it to utilize a variety of attachments. One of the most important attachments is a compaction plate which uses the hydraulic power of the Dingo to compact and vibrate the soil once it has been prepared, producing an extremely flat and hard finished surface. We typically use Polaris ATVs and UTVs to carry both tools and members of the crew to and from the work site. These machines all have rubber tires and they are both light enough and compact enough to limit disturbance of the environment to a minimum. Finally, we have two dump vehicles; A Benford mini dump that is approximately 5' wide helps move large quantities of material, while our Komatsu CD-60R tracked dump can move large quantities of material in hard to reach places. When not being used as a dump vehicle, it can be outfitted with our custom built 4 CY concrete mixer that we use to deliver and pour concrete back into difficult terrain; usually for greenways. Beyond that, the rest of the work that typically required can be done using a variety of simple hand tools to clean up and finish the trail.

# Firm Key Personnel Experience

- Aaron Steele has been a project manager with Steele & Associates Inc. for over fourteen years. Starting in 2008, Steele undertook its largest trail job to date with Harbins park in Dacula Georgia. Ever since, Steele has built and repaired dozens of miles of equestrian, hiking and mountain bike trails. He has also overseen the construction of multiple concrete greenway trails, and more recently boardwalks and elevated sidewalks for the city of Johns Creek as well as the Mulberry trail system construction for Gwinnett county. He has attended training courses provided by the Professional Trail Builders Association as well as studied construction means and methods from IMBA and other colleagues in the trail construction field. He has partnered directly with SORBA chapters, primarily in Gwinnett county to ensure that the best practices were followed for the construction of mountain bike single track. This included both hand built and machine built trails. He has completed the OSHA 30 hr. certification, and competent person trenching and grading certification. He is a Level 1A certified from the Georgia soil and water conservation commission. Aaron would be the project manager for duration of the contract, and act as the liaison between the owner and SAI. He is typically on site with the crew about 50% of the time.
- Bobby Russell has been with Steele for nearly thirty years, and is our primary trail construction superintendent. Bobby has been managing our trail work for the last seven years, and many of the projects on the above list are a result of his work. He has considerable experience with both natural surface trail design and construction, and concrete trails of all sizes. He is an expert operator, and has been trained to recognize both the flow of the trail, as well as the hydrology of the area to prevent water from being an erosive factor. Most recently, he directly supervised all construction of the Mulberry concrete and natural surface trails from start to finish. Bobby has completed his OSHA 30-hour certification, GUCA confined space trained, and is a licensed construction superintendent. He is also level 1A certified from the Georgia soil and water conservation commission. As the superintendent, Bobby is responsible for the day to day operations in the field, and will be on site 100% of the time.
- Pedro Perez is our primary trail foreman. He has been with Steele for over 11 years, and has been working on the trail crew for eight years. He has worked on almost every trail project we have participated in professionally, and he has a wealth of experience. Typically, he is responsible for operating the Dingo during natural surface trail construction as well as being responsible for completing the finishing and cleaning of the trail behind the excavator. He has completed his OSHA 10-hour certification, GDOT flagging course, GUCA confined space certified and has been safety trained on all equipment owned by SAI. Pedro will be on site 100% of the time as the project foreman.

# Reference & Current Projects

## **References Contact Information:**

- Bette Conaway: Gwinnett County GA Senior Park Planner (678) 822-8840
- Marcie Moore: Gwinnett County GA Greenspace Coordinator (770) 362-5008
- Barry Smallwood: Bibb County GA Contract Administration (486) 621-6333
- Alton Matthews: Johns Creek GA Field Services Administration (678) 512-3266
- Lenard Scroggins: Johns Creek GA Public Works Project Manager (678) 512-3265
- Andrew Hammer: Rockdale County GA Parks Project Manager (770) 278-7091
- Ronnie Young: Sandy Springs GA Parks and Rec Director (770) 687-5439
- Dave Butler: Dekalb County GA Greenspace Environment Manager (404) 371-2540

## **Current Workload:**

- We recently completed work on the Zonolite park trail renovation, and we are under contract to begin work on the Brushy Creek greenway phase 1 in Suwanee GA in January. We also anticipate starting work on the South Fork Greenway extension for Dekalb county GA in March.

# Firm Experience; Harbins Park Equestrian Trails 1- 4. Gwinnett County, GA

The equestrian trails at Harbins park in northern Gwinnett County Georgia were approximately 7 miles of 5' wide natural surface trails. The trails made a series of four stacking loops with each having its own unique terrain features such as pine forest, or savannah like grass fields. All of the trails were rough cut with machines, (5' wide Takeuchi TB053, and Toro Dingo with various attachments) and then hand finished. A 2% out slope was maintained throughout, and the back slope was hand cut and finished. The entire trail was compacted using a hydraulic plate compactor on a Toro Dingo.



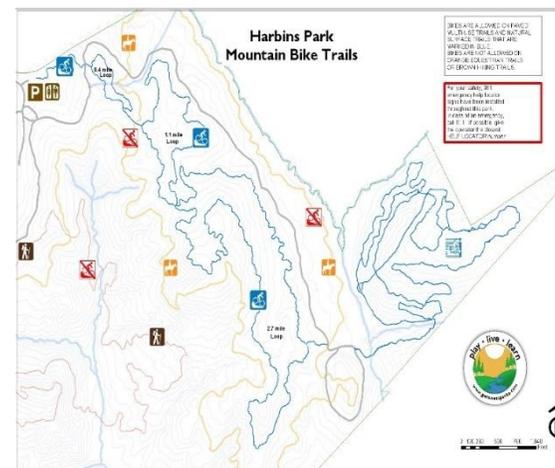
# Harbins Park Hiking Trail. Gwinnett County, GA

The primary hiking trail at Harbins park was a 4.5 mile, 5' wide natural surface loop that traversed some of the most scenic views of the entire park. Trail construction was the same as the equestrian trails with a machine rough cut, and hand finish.



# Harbins Park Mountain Bike Trails 1-4. Gwinnett County, GA

Mountain bike trails 1-4 were four stacked loops starting at the main parking lot, and stretching back to the farthest corner of the property. The total length of the four trails was 7 miles. All mountain bike trails at this park were single track, 18" wide trail. We made the trail bed 3' wide during initial construction so that trees would not be too close to the trail, and also to allow our dingo to pass. Once the corridor was cleared with the small Caterpillar excavator (CAT025) which is 3' wide, we did all of the finishing and cleaning by hand. The difficulty levels of the trails ranged from moderate, to highly technical. We partnered with the Gwinnett chapter of SORBA to ensure that all of our mountain bike trails were the best we could possibly offer with the terrain given.



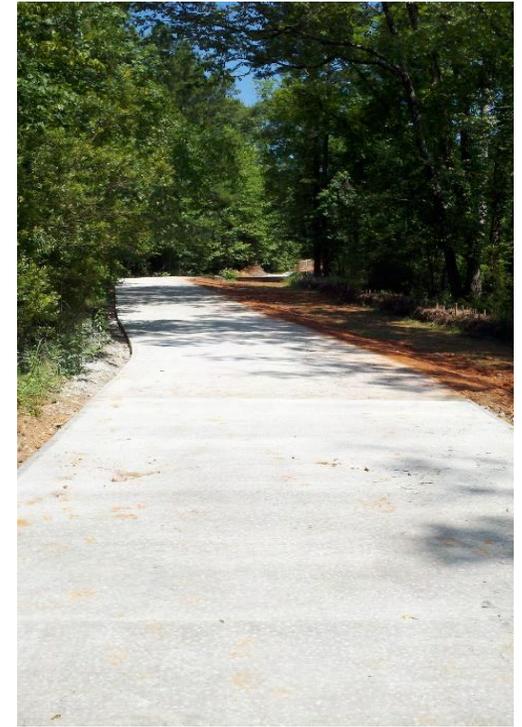
# Ivy Creek Greenway Phase 4 Renovation. Gwinnett County, GA

The Ivy Creek Greenway is a mixture of natural surface trails and impervious paving such as concrete and asphalt. Phase four is a three-mile trail segment near the Mall of Georgia in Buford. The trail had been heavily damaged by rain and flooding and was nearly wiped out altogether. We were contracted by Gwinnett county to clean out all of the storm debris and damaged trees, and then resurface the trail to make it usable again. Once all of the debris was removed, we installed filter fabric under what was to be the trail bed, and then topped that with six inches of granite 57 stone gravel. We then installed six inches of crushed stone base and compacted the entire surface to have a smooth and durable surface for people to run and bike on.



# Ivy Creek Greenway Phase 1. Suwanee, GA

We were contracted to install approximately 2.5 miles of 10' wide concrete greenway trail through a sensitive wetland area. A combination of standard concrete and pervious concrete while protecting root systems of many specimen trees was a challenge, but the end result was a new connection for visitors at George Pierce park in Suwanee to be able to access the Suwanee Creek greenway trail system.



# Trail Construction and Repair of Natural Surface Trail Annual Contract #1. Gwinnett County, GA

Construction and repair of natural surface trails annual contract. Gwinnet County GA. This was an annual contract to provide all necessary and desired services for both new trail construction and repairs of existing facilities. The work in this contract ranged from design builds of new trails, to erosion repairs in existing parks. This contract lasted three years.



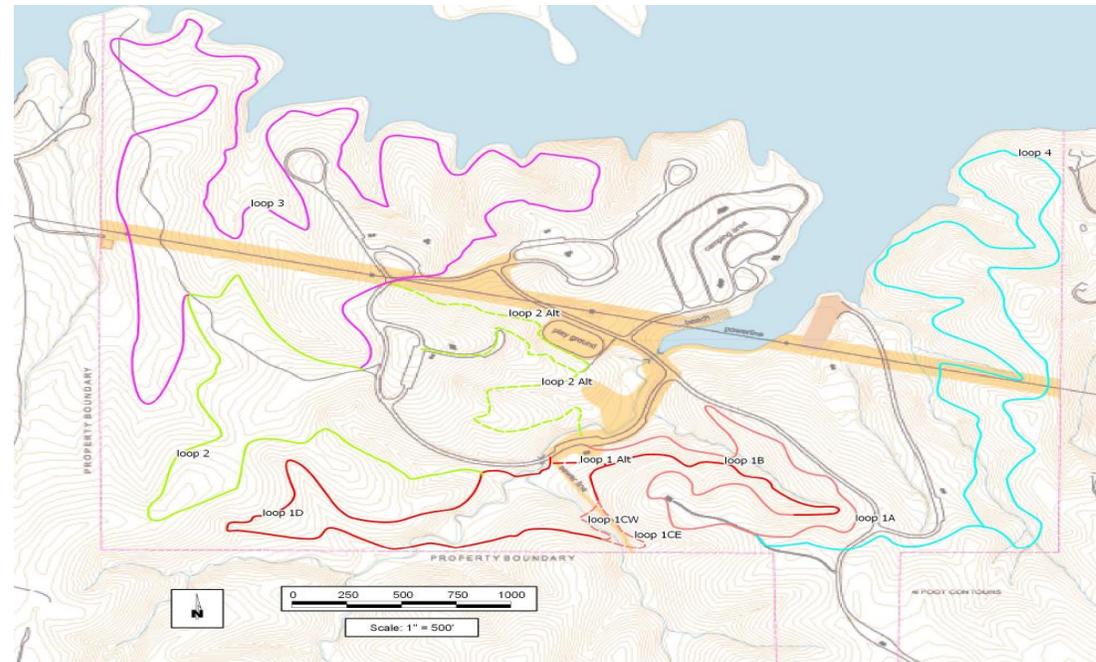
# Harbins Mountain Bike Trail #5. Gwinnett County, GA

MB5 was a trail that was built once the park was open and was the first complete design build in that park. We were tasked by the county to complete as much new mountain bike trail as possible using an unused portion of the park. We were able to design, layout and build over five miles of new trail from scratch. The trail was an 18" wide natural surface trail that was rough cut by machine, and then hand finished.



# Arrowhead MB Trails at Lake Tobesofkee. Macon, GA

The Arrowhead trail system was a partially completed trail that had been built over the years by the local SORBA chapter with volunteer labor. There was approximately 1.5 miles existing, and we were contracted to complete and refurbish the existing trails, while designing and building another 4 miles of new single track mountain bike trail. The biggest challenge was that the park had been hit point blank with a tornado just a few years before leaving a tremendous amount of dead fall and dangerous trees across the property. Using hand held GPS units, we walked the site looking for the best terrain, and then after plotting our preferred landmarks into the computer, we utilized topographic maps of the area to plot a design for the new trail system. The trail was cut with a CAT 025 mini excavator with a thumb attachment, and a Toro Dingo with various attachments. The trail was finished by hand using tools such as rakes and machetes.



# Kimball Bridge Greenway Trail. Johns Creek, GA

The Kimball Bridge trail was a 10' wide, 4" thick 1/3-mile-long concrete greenway built to connect the sidewalks in the City of Johns Creek to the Webb Bridge Park in Alpharetta.



# Trail Construction and Repair of Trails #2. Gwinnett County, GA

This project was a multi-year continuation of the previous annual contract to provide construction and repair services for the parks and recreation department on a variety of projects. The work consisted of new trail construction, drainage repair, and trail reroutes among other things. This project lasted two years.



# Ivy Creek Hiking Trail. Gwinnett County, GA

The Ivy Creek nature trail is a 1-mile-long natural surface trail that will branch off of the still under construction third phase of the Ivy Creek Greenway. This trail is a 5' wide trail that was a complete design build and incorporated a 24' long wood bridge. The project was located on land managed by the Corps. of Engineers, and so coordination and protection of the waterways was of the utmost importance.



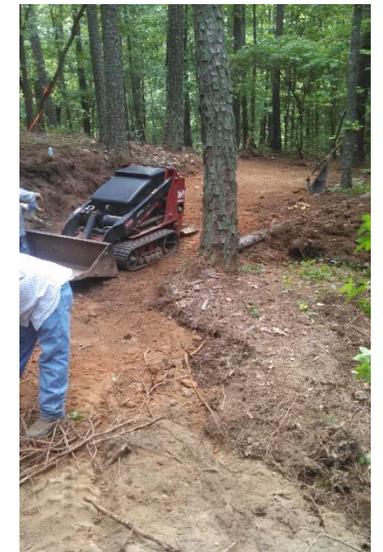
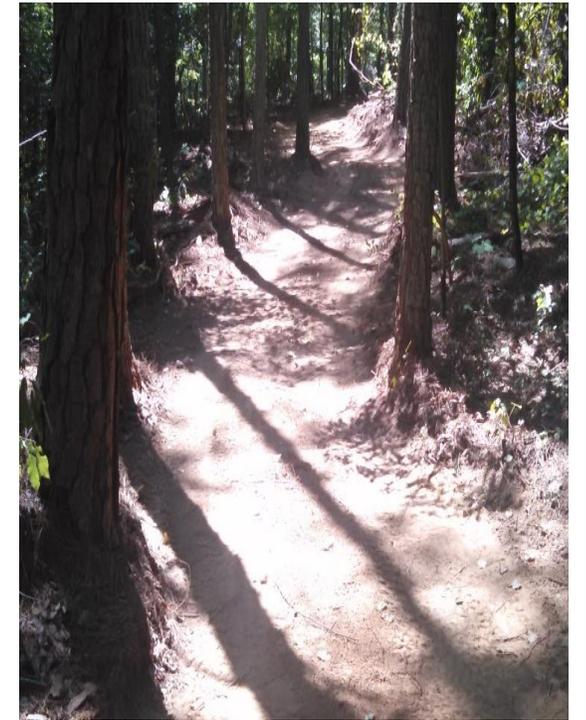
# Abbotts Bridge Elevated Trail. Johns Creek, GA

This project involved construction of a 365 LF elevated bridge/sidewalk to span a very narrow section of SR 120/Abbotts Bridge Rd. where there was previously a very narrow shoulder adjacent to a large drop off, and was very dangerous for pedestrians. The bridge was constructed using driven piles into the sloped shoulder next to the road.



# Black Rock Hiking Trail. Rockdale County, GA

The Black Rock trail is a 1.2 mile, 4' wide compacted earth trail with two wood bridges that spans through dense pine thickets, and crosses large granite outcrops with delicate ecosystems that were critical to preserve.



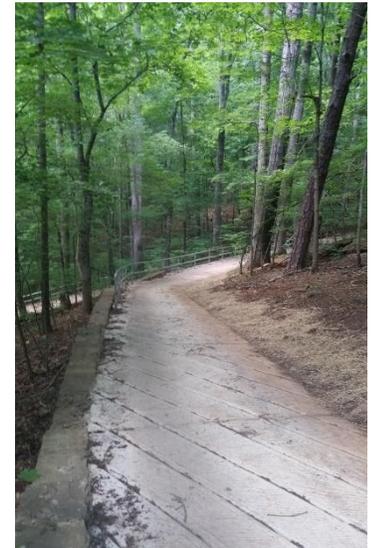
# Lost Corners Trail Design/Build. Sandy Springs, GA

The Lost Corners property is a 100+ year old family homestead that has been deeded to the city of Sandy Springs with the agreement that it would be preserved as passive green space in the midst of development and the urbanization of the rest of city. We were contracted to design and build a multi loop trail system with a total length of 0.8 miles with two wood bridges over a stream that divides the property.



# Little Mulberry Greenway and Natural Surface Hiking Trail. Gwinnett County, GA

Little Mulberry is a ten-year-old park in the Gwinnett county park system. The project includes a concrete trail is a six-foot-wide trail, at a total length of two miles. Also, the natural surface trail is 4-foot-wide with a total length of 1.2 miles built primarily with a Kubota Kx-91 mini excavator. A majority of the concrete trail was built over an existing aggregate trail that had been poorly designed, and was in dire need of re-routes and grading to facilitate positive drainage. Also included in the project was a large amount of masonry work for new benches and plaza areas, handrail installation, and five wooden bridges and five heavy duty concrete bridges to span the various creek crossings.



# Zonolite Park Trail Renovation. DeKalb County, GA

Zonolite park is a small space located in a revitalized area of Atlanta in the Druid Hills area. The site was formerly a heavy industrial plant that has since been converted into an eclectic mix of upscale offices and trendy businesses. The trail itself lies completely in a flood plain. The project consisted of converting 1,000 linear feet of muddy unusable trail, into a raised turnpike trail using pressure treated timbers, filter fabric, geo-grid as the frame. We then installed 4" of 57 stone granite gravel, and 2" of slate chips to create a durable and comfortable walking surface that would be both resistant to the wet conditions, and easy to maintain long term.

