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August 12, 2021 (revised September 23, 2021)

Ms. Amy Brooks, Executive Director  
Knoxville-Knox County Planning  
City-County Building  
400 Main Street, Suite 403  
Knoxville, TN 37902



File No.: 10-B-21-UR

Date submitted: 9/27/2021

These plans have not been reviewed by  
Planning Staff and may not be finalized.

**Re: BWI ETN LLC, dba Blue Water Industries  
BWI Forks of the River, LLC - Quarry  
Request for Amendment to Existing Plan of Operations**

Dear Director:

Blue Water Industries (BWI) is submitting this application to amend the currently approved Plan of Operations (PO) for the Forks of the River Quarry (Forks). BWI desires to add Parcels 111-003, 111-011, 111-014, 097-037, and 097-039 to the Forks of the River Quarry approved PO. BWI also desires to change the operational designation of Parcel 111-007.02 from the October 2000 approval consisting mostly of overburden storage area to the proposed designation in this submittal to include expanded quarry pit area but still having some overburden storage as necessary.

Parcels 111-003 and 097-037 were purchased by BWI and subsequently re-zoned by the Knoxville-Knox County Planning Commission (Planning) and the Knox County Commission (Commission) in the year 2020.

Previous owner/operators of the company purchased Parcel 111-011 in 2003, Parcel 111-014 in 2001, and Parcel 097-039 in 2001. These parcels were never added to the Plan of Operations because the parcels were isolated from other company owned and permitted properties until Parcels 111-003 and 097-037 were purchased in the year 2020. These historic parcels were re-zoned by the Knoxville-Knox County Planning Commission (Planning) and the Knox County Commission (Commission) in the year 2020.

These parcels are located north/northwest of existing Pits 1 and 2 at the quarry. Parcel 111-003 has an address of 3121 Vaughn Lane. Parcel 111-003 is made up of three portions with two of the portions having frontage along Asbury Road and Vaughn Lane and the third portion fronting only Vaughn Lane. Parcel 111-011 has an address of 3207 Vaughn Lane. Parcel 111-014 has an address of 3114 Vaughn Lane. Parcel 097-037 has an address of 3112 Vaughn Lane. Parcel 097-039 has an address of 2925 Asbury Road. Parcel 111-007.02 that is being re-designated in use has an address of 5510 S. National Drive.

If you have any questions concerning this correspondence, please contact me at 865-255-4349 or [whillis@bluewaterindustries.com](mailto:whillis@bluewaterindustries.com).

Sincerely,

*Walt Hillis*

Walt Hillis  
Environmental Manager

Enclosures

cc: Mike Reynolds ([mike.reynolds@knoxplanning.org](mailto:mike.reynolds@knoxplanning.org)), AICP, Senior Planner



**BLUE WATER**  
I N D U S T R I E S

# **MINING PLAN OF OPERATIONS**

## **(Amendment II)**

**BWI Forks of The River Quarry**

**2303 E. Governor John Sevier Highway  
Knoxville, Tennessee 37914**

**Date:**

**Original: August 12, 2021**

**Revision: September 23, 2021 per MPC Staff Comments**



Mining Plan of Operations (Amendment II) Application  
Forks of The River Quarry August 12, 2021, Revised September 23, 2021

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Mining Plan of Operations (Amendment II) Application  
Forks of The River Quarry August 12, 2021, Revised September 23, 2021

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**Purpose for Application is to Amend the Currently Approved Plan of Operations**

To add Parcels 097-037 and 111-003 that were purchased by Blue Water Industries (BWI) and subsequently re-zoned by the Knoxville-Knox County Planning Commission (Planning) and the Knox County Commission (Commission) in the year 2020 to the Forks of The River Quarry approved Plan of Operations.

To add historic Parcels 097-039, 111-011, and 111-014 that were re-zoned by the Knoxville-Knox County Planning Commission (Planning) and the Knox County Commission (Commission) in the year 2020 to the Forks of The River Quarry approved Plan of Operations.

To modify the designation of Parcel 111-007.02 from overburden storage in the year 2000 approved Plan of Operations to expanded quarry pit area but still having some overburden storage as necessary in the amended Plan of Operations.

**Company Information**

BWI has a principal address of 200 West Forsyth Street, Suite 200, Jacksonville, Florida 32202 with its BWI ETN LLC dba Blue Water Industries Administrative Office located at 9509 Diggs Gap Road, Heiskell, Knox County, Tennessee 37754. BWI owns and operates stone quarries, sand mines, and sales yards in Tennessee, Virginia, Alabama, South Carolina, and Florida. In Knox County, BWI owns and operates the Forks of The River Quarry, I-75 Quarry (East & West), Midway Quarry, Coster Aggregates Sales Yard, and ETN Administrative Office. The BWI facilities in Knox County were historically owned by Aggregates USA LLC (AUSA), Rinker Materials Corporation (RMC), and American Limestone Company (ALC). As a whole BWI employees over 330 personnel with approximately 45 of them assigned to facilities in Knox County of which approximately 15 are specifically assigned to the Forks of the River Quarry.

**Quarry Industry**

The quarry industry is a unique and necessary industry dating back to the beginnings of civilization. Materials from quarrying are used in everything from construction of homes, churches, schools, railroads, roads, and bridges to our national/state security infrastructure, government buildings, monuments and cemeteries. The industry has advanced through history to the modern processes taking advantage of new technology to reduce energy use, labor saving automation, increased safety, and greater environmental responsibility to produce a vital product for our society. Modern Americans use as much as 20 tons of mineral products and fuels per person per year. Of these 20 tons, as much as 12 tons per year are crushed stone and sand. Crushed stone goes into a variety of products everyone uses daily although

they may not realize it. Concrete in sidewalks, roadways, bridges, walls, floors, and foundations contains 80% crushed stone. Asphalt pavement contains as much as 94% crushed stone and sand aggregates. Crushed stone also goes into: gravel roads and lanes, the base for roadways, foundations, bedding stone for pipelines, rip rap for erosion control, stone for bank stabilization, filter media in water treatment plants, fillers in paper and plastics, concrete block, glass and fiberglass making, agricultural lime, chemical manufacture, cement making, and many other uses.

The crushed stone industry is very sensitive to location both from a geologic condition and customer focus. Crushed stone is one of the lowest priced basic commodities. Its price and market area are sensitive to transportation distances. It is important to locate quarries as close to the market area as possible to keep costs to the consumer as low as possible. Truck transportation is the only logical method to transport crushed stone in the Knox County market. Location of a quarry close to major highways and interstates is essential to maximize ease of product distribution and keep traffic patterns from affecting sensitive areas such as residential and high-density commercial business areas.

Rock quarrying is a long-term proposition. Gone are the days when a quarry was opened for a short-term project such as a specific stretch of interstate or highway and then abandoned. Emphasis is now on locating sites where a quarry can be developed which will serve the community for an extended time period (50 plus years). This allows for stability of traffic patterns and surrounding development and also allows the quarry operator the time to establish an operation that will be operated in the most efficient manner possible. Upon completion of mining there are many options for reuse/reclamation of quarries. Previously quarried properties have become parks or greenways with hiking/biking/walking trails, nature centers for education and conservation, subdivision sites, golf courses, business complexes, freshwater reservoirs for public water supply, and storm water detention areas for municipalities. Reclamation of this site would be amenable to the creation of a park/greenway (e.g. Mead's Quarry at Ijams Nature Center and the old Vulcan City Quarry at Fort Dickerson Park), business complex, industrial facility with the requirement for a clean fresh water source, or freshwater storage reservoir for an East Knox County potable water source.

### **Knox County**

Knox County is continuing to experience steady growth. One Sector experiencing this growth is the East County Area from Exit 398 on Interstate 40 at Strawberry Plains Pike up to and beyond Exit 402 at Midway. The area along Governor John Sevier Highway (TN 168) from Asheville Highway (U.S. 25W/70) to Alcoa Highway (U.S. 129/TN 115) continues to grow as well. The facility most central and easily accessed via the current road system, which leads to being the most economical source of crushed stone in Knox County to provide materials for development in this area is the Forks of the River Quarry. Other sources of stone that could possibly supply this area for development are located in areas with less developed transportation infrastructure, closer to residential and/or downtown business development, or originate outside of the county. Crushed stone is sensitive to location, as price for the product increases with increasing distance from the source. This results in situations where it isn't uncommon for the transportation costs to exceed the value of the stone. Not having a high-quality source of

stone close to the market results in an economic disadvantage for citizens, developers, and Knox County as a whole. Crushed stone operations are also restricted to where quality stone exists. While there are abundant rock outcroppings in Knox County, quantities of quality stone in sufficient volume for quarrying in areas with well-developed transportation infrastructure that are beneficial to residential and business developments are uncommon.

It was the presence of quality stone, in a growing part of the county with a well-developed and further developing infrastructure, that caused ALC, RMC, and AUSA, the predecessors to Blue Water Industries to acquire, zone, and permit the properties that currently make up the BWI Forks of the River Quarry (Forks) operation. It is also in an area that has known mining in some form since the late 1800's. Dimension Stone quarrying of the Holston marbles, a lime kiln, and aggregate operations have been a part of this community for approximately a hundred and fifty years. In 1871 a marble quarry was opened in the Forks of The River and a settlement called Marbledale developed. Subsequently other quarries such as Gray Eagle, Asbury, Appalachian, and Gray Knox quarries opened nearby. By 1882 eleven (11) quarries were operating in the area. BWI believes this is a good location to invest in Knox County by continuing to develop the existing Forks of The River Quarry to serve the long term needs of Knox County, as well as parts of Sevier and Blount counties.

### **Forks of The River Quarry**

#### **(History)**

ALC opened the Forks of The River Quarry in 1971 on property situated on the French Broad River between East Governor John Sevier Highway (JSH), Asbury Road, and South National Drive. ALC and subsequent owner RMC operated Pits 1 and 2 in the same general area up to 2003-2004. In 2003 RMC applied to Planning and County Commissions to add acreage to property north of JSH that had previously been approved for mining in 1977 to allow for the opening of Pit 3. RMC subsequently began development of Pit 3 and it has been operated under RMC, AUSA, and now BWI operation since. Under BWI ownership the Forks of The River Quarry initiated the development of a new Mine Plan of Life (Plan). This Plan included the exploratory drilling of currently owned properties northwest of Pits 1 and 2 and neighboring properties along Vaughn Lane that were being offered to BWI for sale. This drilling yielded positive information about quantity and quality of stone reserves on both BWI and the neighboring properties. As a result, BWI purchased neighboring properties at 3112 Vaughn Lane (097-037) and 3121 Vaughn Lane (111-003) in the year 2020. In November 2020 Planning Commission and subsequently in December 2020 County Commission approved the re-zoning of the original BWI properties and the 2020 newly acquired properties to Industrial from Agricultural.

#### **(Location)**

The quarry's physical address is 2303 E. Governor John Sevier Highway, Knoxville, Tennessee 37914 and the approximate geographic center of the quarry site properties is latitude 35°57'-18" North and longitude 83°-48'-50" West. The currently permitted and approved properties at Forks were originally acquired by ALC, RMC, and AUSA stretching from South National Drive between Asbury Road and the French Broad River across East John Sevier Highway up Thorn Grove Pike to Fawver Lane.

Present land zoning is mixed within the quarry operation and within one mile of the boundary of the quarry. Quarry property located south of JSH is a mixture of Industrial (I) and General Business Zone (CA). Quarry property north of JSH is mixed Business and Manufacturing Zone (CB), Industrial (I), and Agricultural (A). Surrounding properties to the north of the quarry are zoned A, I, and CA, to the east PR (Veteran's Cemetery) and A, to the south PR, I, A, and RA and to the west I, A, OB, CA, and RA. The area around the quarry is heavily industrialized and the quarry is depicted in the Forks of the River Industrial Park December 12, 2019 Profile Map and Aerial Photograph. Similar and related business industries within the area are the East Tennessee Industries Inc. quarry properties along Asbury Road and Thorn Grove Pike, Burkhart Enterprises Aggregate Terminal on Asbury Road, Duracap Asphalt on Asbury Road, Pavement Restorations, Inc. Asphalt Plant on South National Drive, and Harrison Construction Company (CRH Americas Materials) Asphalt Plant on Cinder Lane.

#### **(Access)**

No new ingress/egress points are proposed with this application. Access to the quarry is via a paved, private, one-way entrance driveway located at 2303 E. Governor John Sevier Highway approximately 175' from the Doctor J.H. Gammon Bridge over the French Broad River. Traffic exiting the quarry leaves via the other end of the paved, private, one-way exit driveway at a point approximately 800' northwest of the entrance driveway. Material delivery dump trucks are used to transport crushed stone products to customers. East Governor John Sevier Highway is a state numbered highway - Tennessee Highway 168, which has been improved in the area of the entrance by widening with a center turn lane. Truck traffic travels on Governor John Sevier Highway to major arterial roads such as Asheville Highway, Thorn Grove Pike, Strawberry Plains Pike, Andrew Johnson Highway, Alcoa Highway, Chapman Highway and I-40 towards final delivery sites. Truck traffic transporting stone products on East Governor John Sevier Highway will be no greater than it is currently. This is because stone weighed and sold via the scaling operation has and will continue to exit the operation from the existing driveway exit onto the highway. A state highway department approved access point occurs on the northern side of East Governor John Sevier Highway. At this point, a small service road provides access to the current North Pit (Pit 3) for company vehicles such as pickup trucks and service vehicles, contractor vehicles, and to allow heavy quarry equipment to be transported in and out using low-boy type tractor trailer units. There is an access road from Water Plant Road to the western portion of the property in the Pit 2 area. This is a historic road that has existed since the property was acquired in a trade with Knox County some years ago. The road is used very sparsely by vehicle traffic or possibly some type of equipment delivery vehicle when access is only needed to this area of the property or if something is blocking the main access through the plant area from Governor John Sevier Highway. When not in use this road is kept secured with a lock on the access gate. The further development of operations and use of existing facilities will not put any substantial additional traffic on main roads or residential streets, in conformance with Article 4, Supplementary Regulations, Section 2, 4.10.18.



## **Geomorphology and Geology**

The proposed quarry site is characterized by low, rolling hills and shallow valleys and karst areas. The area is dry on the surface, containing no surface streams. Storm water runoff sinks into the ground after flowing short distances and joins the area groundwater flow. This happens by flowing into small and large sinkholes in the area, and by percolation through the thin to moderate thickness residual soil blanket that has developed through the years.

Geologically, the property is underlain by limestone and dolomite of Ordovician Age. The northern part of the site is underlain by dark, greenish-gray, shaley limestones of the Lenoir Formation. Much of the central portions of the site are underlain by limestones of the Mosheim member of the Lenoir. It is this formation that contains many of the sinkholes. The southern part of the property, from the vicinity of the K.U.B. power line to the French Broad River, is underlain by dolomites and thin limestones of the Mascot formation of the Knox Group. All of the rocks dip to the southeast at approximately 15° to 20°. Core drilling has shown that weathering has developed a 2-foot to 20-foot thick overburden of clay soil and occasional chert fragments. This material must be removed before quarrying can begin. Core drilling has further confirmed the presence of limestone and dolomite which meets all state requirements for construction aggregates with the exception of skid resistance. This stone will be therefore acceptable for all uses except for skid resistant surfacing on high-traffic count roads.

## **Environment, Health, & Safety,**

Safety and Health, drilling and blasting, air quality, water quality, solid waste management, noise, and aesthetics are addressed in the following sub-sections. BWI is acutely aware of the public's interest concerning these issues and it can and does successfully address and control these aspects of the operation.

### **(Air Quality)**

The emission of pollutants to the air in Knox County is regulated by the Knox County Department Air Quality Management (KCDAQM). Permits to construct and operate crushed stone processing equipment are obtained from the Department. Currently BWI maintains Air Quality Operating Permit No. 18-0092 from the Department to operate processing equipment at the quarry. Sources of dust at a quarry tend to be crushers, screens, certain stockpiles, and roadways. Emissions from these sources can generally be controlled by the application of water using spray nozzles at selected sites, and partial to complete enclosure of selected equipment. Dust from roadways can best be suppressed by use of a water truck to keep roadways wet and clear of buildup. These activities are conducted in compliance with Knox County Ordinances Article 4, Section 1, 4.10.08.

### **(Water Quality)**

Operation of a quarry in the State of Tennessee requires the possession of an NPDES Permit issued by the Tennessee Department of Environment and Conservation (TDEC). The Forks of the River Quarry operates under NPDES Permit TN0004987. Sources of possible water pollutants at a quarry are generally from stormwater runoff, plant and equipment wash down water, pit pump-out, and plant process (stone wash water and dust suppression) water.

Pollutants most likely to be found are suspended solids, oil and grease, and low or high pH levels. These and any other pollutants of interest potentially present in water at mining sites in Tennessee are regulated by the TDEC, Division of Water Resources - Surface Mining Section. The most common method of water pollution control is the construction of sedimentation basins with controlled discharge points, water collection points and recycling through the process, best management practices, and diversion structures to prevent water from becoming affected by contact with quarry operations. All of these techniques are used at the quarry. BWI maintains three (3) process water and one (1) storm water outfall via NPDES Permit No. TN0004987. These activities are conducted in compliance with Knox County Ordinances Article 4, Section 2, 4.50.02 B. (6.).

**(Natural and Man-Made Waste Materials)**

Natural wastes generated at a quarry site tend to come from two areas; dirt/low quality rock and vegetative debris associated with the removal of overburden or site preparation for other facilities. The initial overburden resulting from site development was used mainly in the construction of the fill for the plant and operating site and berms along the property edges. After that when possible overburden is sold as a fill product on construction projects with any excess overburden being placed in berms and storage areas on site. With the continued expansion of Pit3 at the quarry the overburden material will be used to extend the site perimeter berms. With the future expansion of Pits 1 and 2 overburden material will be used to build berms to fill gaps in on newly acquired properties to coincide with existing historic berms and to reclaim Pit 2 and/or Pit 1. The management of these materials is regulated by TDEC-Division of Water Resources - Surface Mining Section via the NPDES Permit No. TN0004987.

Solid waste from daily operations include office materials, wood, empty containers, tires, used filters, used oil, batteries, spent solvent, scrap metal, used rubber belting, used tires, and decommissioned equipment. BWI follows a philosophy of reduce and recycle to minimize the generation of solid waste. Typical items recycled consist of cardboard, plastics, batteries, used oil, used filters, used antifreeze, spent solvent, metal, aluminum, and tires. Items reused include used rubber belting for shorter belts and other uses, scrap metal, parts from decommissioned equipment, and recycled/refreshed solvents. Potentially hazardous wastes are recycled when possible or properly managed as special or universal wastes. Hazardous waste generation at quarry sites is minimal and the site should qualify as a Conditionally Exempt Small Quantity Generator if necessary. Non-hazardous waste not sent for recycling or reuse will be placed in a dumpster provided by a commercial waste handler for proper disposal in a permitted landfill. The management of these wastes is regulated by the TDEC - Division of Solid Waste Management. These activities are conducted in compliance with Knox County Ordinances Article 4, Section 1, 4.10.06.

**(Landscape Screening 4.10.11, Section B.1. Type "A" and Facility Berms)**

BWI has graded and seeded the berm along Asbury Road/ Thorn Grove Pike and planted evergreens at the base. Work will continue on the seeding to produce wider coverage and the replacement of trees as necessary if dieback occurs.

BWI has worked with the Marbledale Community Association and the Knox County Engineering Department on new community organization signs, a Marbledale Community sign, and landscaping at the intersection of Asbury Road and East Governor John Sevier Highway. The dedication services with the Association and Knox County Officials occurred on September 21, 2021.

BWI is currently working on completing development of the internal access/haul roads in Pit 3 along the highway closest to the bridge and the property donated for the Veteran's Memorial Park along the French Broad River. This will involve the lowering of the facility berm in this area, seeding, and other plantings to enhance screening.

For the parcels recently acquired along Vaughn Lane and Asbury Road that are being proposed for addition to the Plan of Operations with this application. A minimum of a 15' wide Type "A" Landscape Screen will be maintained. The existing screening will be maintained and supplemented as necessary to meet the landscape screening requirement along with the installation of an interior berm for visual, noise, and security purposes as appropriate. Any newly installed Site/Overburden Berms will comply with the requirements of the Tennessee Scenic Highway System Act of 1971. As a general practice, when possible existing vegetation will be utilized on all properties at the quarry to maintain the required screening and replaced as necessary if dieback occurs.

#### **(Health & Safety)**

The quarry operates under the guidelines of the United States Department of Labor-Mine Safety and Health Administration (MSHA). Federal MSHA inspectors inspect the quarry a minimum of two (2) times per fiscal year. MSHA requires all employees that participate in mining activities at the site to be trained miners with required new miner, on-going, and annual training requirements. MSHA regulates and inspects aspects of the operation such as noise/dust exposures, pit development, overburden removal/placement, plant and mobile equipment operation, petroleum management, employee training, general cleanliness, drilling and blasting, and other related items.

#### **(Drilling and Blasting)**

Drilling and blasting is the only efficient way to obtain rock from this type of deposit for making crushed stone aggregates. BWI contracts with licensed drillers, blasters, and seismic monitoring professionals to perform and monitor these activities at the quarry. Drilling is conducted by compressed air or hydraulic percussion drills on a precisely laid out pattern. This pattern of holes is designed to maximize breakage of the rock and minimize the number of explosives used. The major type of explosives used in modern quarrying are ANFO, ANFO emulsions, or water gels. These explosives are brought to the site by a contractor, loaded into the holes following precise guidelines as to the number of explosives that can be used, and detonated by a licensed blaster. The blasting contractor and/or a separate seismic monitoring company monitor each blast and record readings from seismographs stationed near the quarry. BWI operates two other quarries in Knox County and complies with county, state, and federal performance standards related to these activities. The Tennessee State Fire Marshall's Office regulates such activities and periodically inspects the records for compliance that are required to be kept for three (3) years from the date the blast occurs. These activities are conducted in compliance with Tenn. Code Ann. Section 68-105-101, et seq., and with Knox County Ordinances Article 4, Section 1, 4.10.01, 4.10.03, and 4.10.07. To the

extent there is any inconsistency in the state statutory standards and the Knox County standards, the state standards preempt the local standards. See Tenn. Code Ann. Section 68-105-110.

#### **(Noise)**

Noise at a quarry site comes from blasting and operation of mobile and stationary equipment. BWI complies with the Knox County noise level standards on and beyond the property boundaries as required by Article 4, Section 1, 4.10.01. The location of the primary crusher and quarry in a low area screens most neighbors. The use of operational noise reduction measures and the use of berms and vegetation for sight and sound barriers provide further protection.

Blasting provides the loudest source of noise however; the location and instantaneous nature of the blast will have no long-term effect. Blasting occurs normally once to twice a week during the busiest times and generally around the noon hour to mid-afternoon if possible. The short duration of the blast is within Knox County performance standard guidelines per Article 4, Section 1, 4.10.07 and BWI takes every step possible to minimize noise from this activity. As necessary seismographs with microphones will be used at selected sites to determine noise levels associated with blasting.

#### **(Aesthetics)**

Quarry Pit3 and the primary processing plant located inside it are shielded from the view of the majority of neighbors. To the east you have the tree line along the natural rock bluff on the French Broad River, to the north you have the natural tree lines in the 100' setback required by Article 4, Section 2, 4.50.02 (B) and future site berm, to the west you will have the continuation of the site berm along Thorn Grove Pike and to the south you have the berms along John Sevier Highway. Seeding of various grasses will be performed between the roads and the toe of the berms. Other re-vegetation work will be performed as required/allowed by TDOT and KUB in relation to their road and utility line right of ways. The only real visual break is at the tunnel under the highway that allows the movement of aggregate materials to the secondary processing plant and sales yard. Colored matting on the fence at this location has been implemented to decrease the visibility of the operations. Quarry Pits 1 and 2 are well screened and basically can't be seen except from the south in some areas on the French Broad River. There are deciduous trees with a small mixture of evergreens along the river bank in various locations that assist in screening.

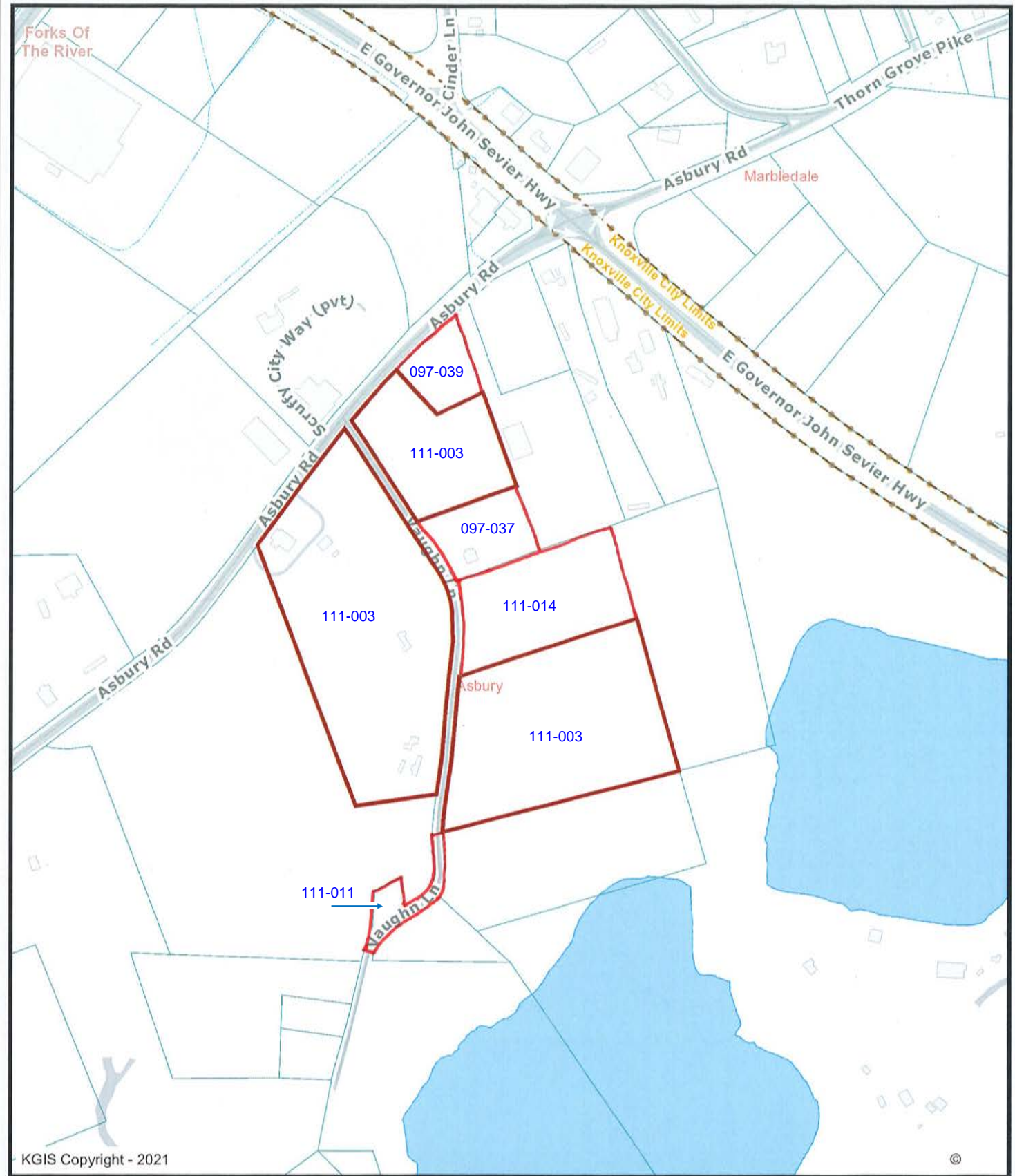
#### **Summary**

Blue Water Industries and its predecessors have operated quarries in Knox County, East and Middle Tennessee, Alabama, Florida, South Carolina, and Virginia for many years with the Forks of the River Quarry being in operation for approximately fifty (50) years. There is a long-term market need for quality crushed stone provided by the quarry to meet the needs of the growing East Knox County sector as well as the Sevier County and Blount County markets. The deposit of quality limestone of the Lenoir Formation and dolomitic limestone of the Knox Group located at the quarry can meet these needs well into the future.



## **APPENDIX A**





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## BWI-Parcels

Map 111-003, 011, 014 & Map 097-037, 039

**Knoxville - Knox County - KUB Geographic Information System**



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Blue Water Industries (BWI) Forks of the River Quarry: Parcels proposed for adding to Plan of Operations 8-12-2021

**MAP 111, South Side of John Sevier Highway (Pits 1 & 2)-Vaughn Lane & Asbury Road**

Physical Site Address	Parcel #	# Acres	Zoning	Existing Land Use	Growth Plan	Sector Plan	Planning Sector	Census Tract	2000 Traffic Zone	Jurisdiction & District	Acquisition Data	Ownership
3121 Vaughn Ln Knoxville, TN 37914	111-003	19.45 Calculated	I	AgF or Vac	Planned Growth	LI	East Co.	54.01	67	County, #8	7-15-2020 BWI	BWI Forks of The River, LLC 200 West Forsyth Street, Suite 1200 Jacksonville, FL 32202
3207 Vaughn Ln Knoxville, TN 37914	111-011	0.5 Calculated	I	AgF or Vac	Planned Growth	LI	East Co.	54.01	67	County, #8	9-15-2003 RMC	BWI ETN LLC 9509 Diggs Gap Road Heiskell, TN 37754
3114 Vaughn Ln Knoxville, TN 37914	111-014	3 Deeded	I	M-L	Planned Growth	LI	East Co.	54.01	67	County, #8	3-30-2001 ALC	BWI ETN LLC 9509 Diggs Gap Road Heiskell, TN 37754

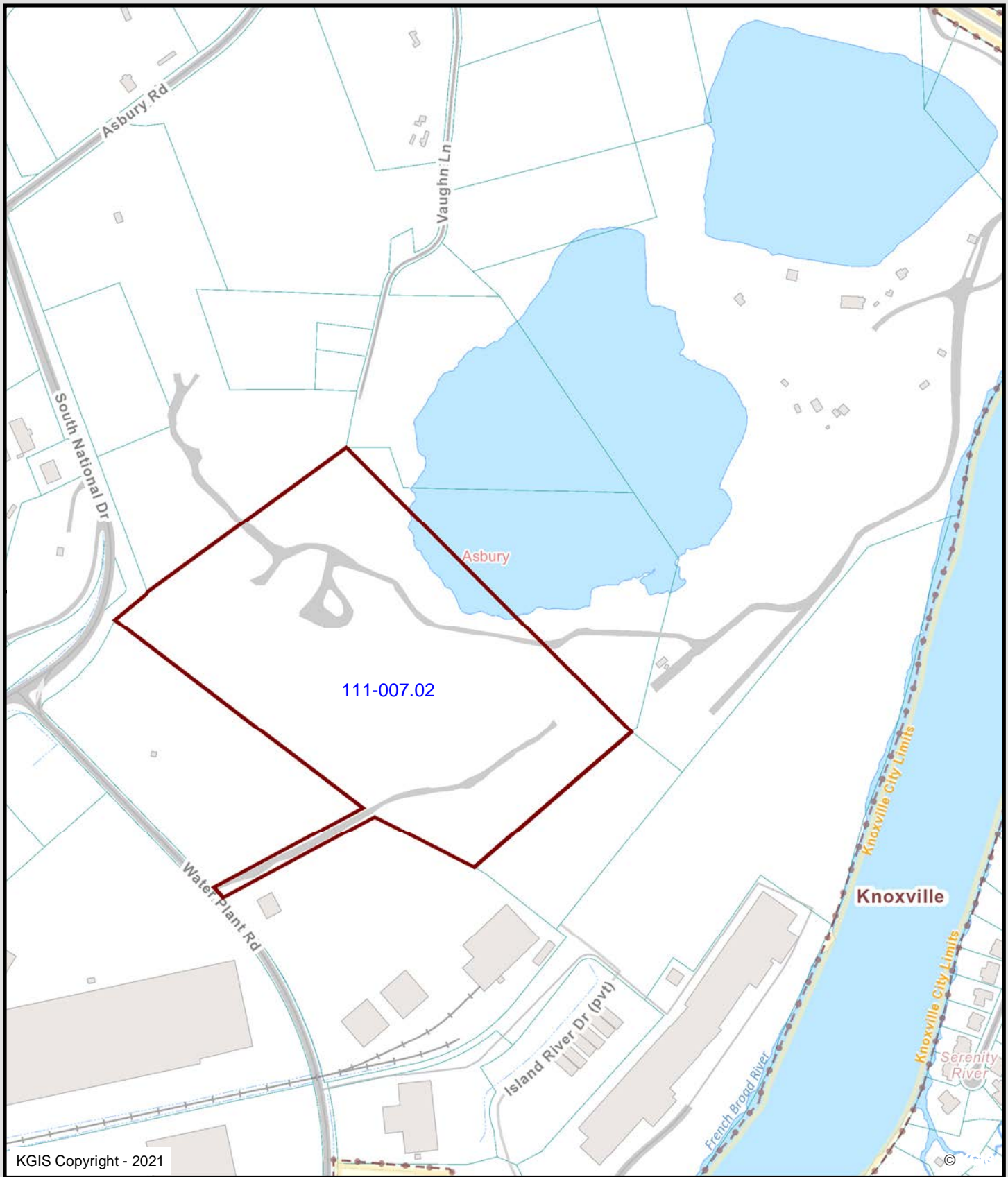
**MAP 97, South Side of John Sevier Highway (Pits 1 & 2)-Vaughn Lane**

Physical Site Address	Parcel #	# Acres	Zoning	Existing Land Use	Growth Plan	Sector Plan	Planning Sector	Census Tract	Traffic Zone	Jurisdiction & District	Acquisition Data	Ownership
3112 Vaughn Ln Knoxville, TN 37914	097-037	1.5 Calculated	I	SFR	Planned Growth	LI	East Co.	54.01	67	County, #8	2-13-2020 BWI	BWI Forks of The River, LLC 200 West Forsyth Street, Suite 1200 Jacksonville, FL 32202

**MAP 97, South Side of John Sevier Highway (Pits 1 & 2)-Vaughn Lane**

Physical Site Address	Parcel #	# Acres	Zoning	Existing Land Use	Growth Plan	Sector Plan	Planning Sector	Census Tract	Traffic Zone	Jurisdiction & District	Acquisition Data	Ownership
2925 Asbury Rd Knoxville, TN 37914	097-039	1.1 Calculated	I	AgF or Vac	East Co.	LI	Planned Growth	54.01	67	County, #8	6-8-2011 ALC	BWI ETN LLC 9509 Diggs Gap Road Heiskell, TN 37754

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## BWI-Parcel

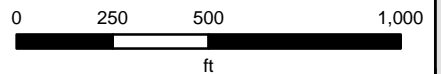
Map 111-007.02

Plan of Operations Change

**Knoxville - Knox County - KUB Geographic Information System**



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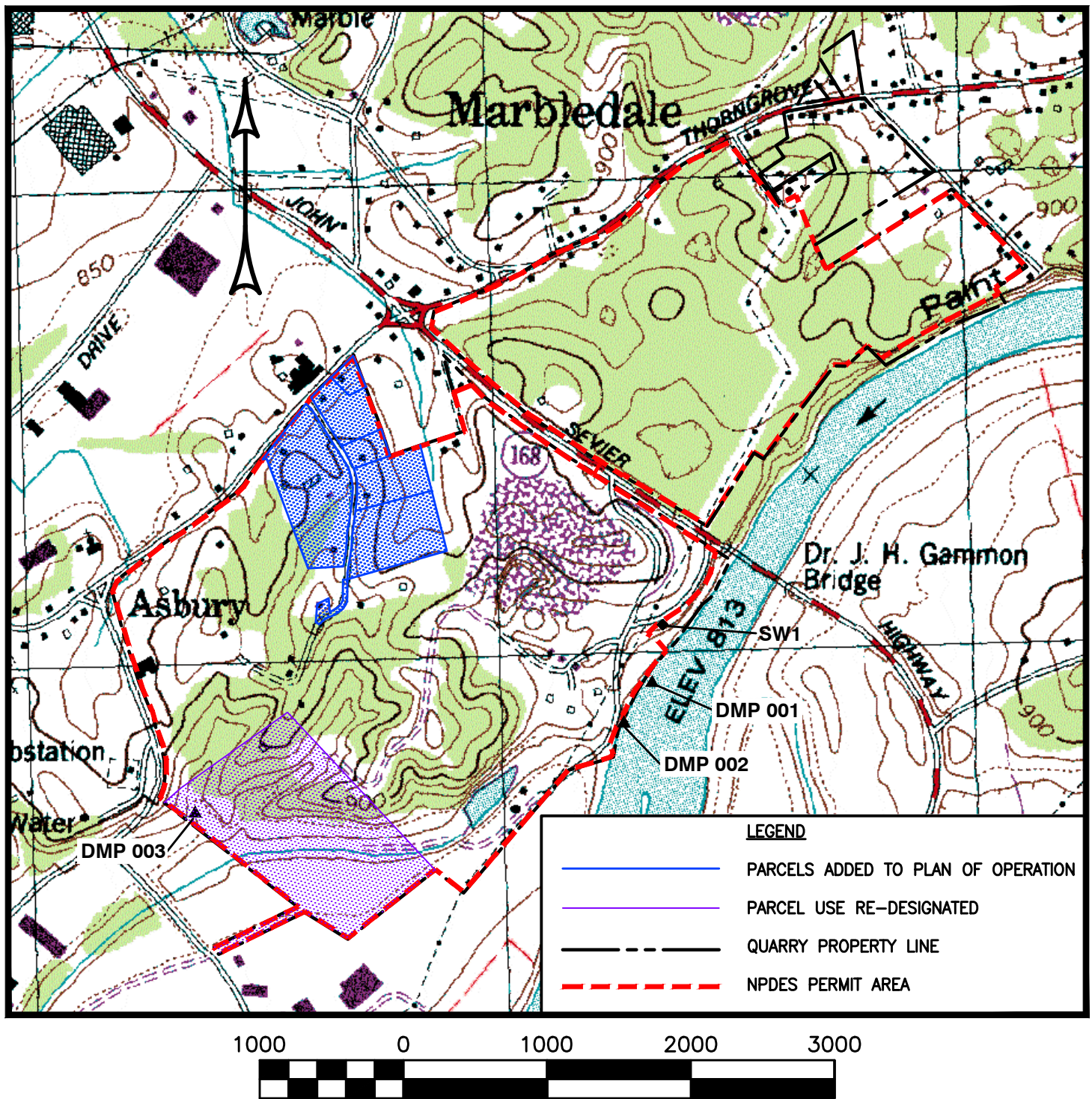
Blue Water Industries (BWI) Forks of the River Quarry: Parcel proposed Plan of Operations designation change 8-12-2021

MAP 111, South Side of John Sevier Highway (Pits 1 & 2)-Vaughn Lane & Asbury Road

Physical Site Address	Parcel #	# Acres	Zoning	Existing Land Use	Growth Plan	Sector Plan	Planning Sector	Census Tract	2000 Traffic Zone	Jurisdiction & District	Acquisition Data	Ownership
5510 South National Dr Knoxville, TN 37914	111-007.02	33.84 Calculated	I	M-L	Planned Growth	HIM	East Co.	54.01	67	County, #8	12/22/1989 ALC	BWI ETN LLC 9509 Diggs Gap Road Heiskell, TN 37754



## **APPENDIX B**



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Taken from: U.S.G.S.  
7.5 Minute Series (Topographic)  
Leesburg Quadrangle  
LAT. 35°-57'-6.6"N and LONG. 83°-48'-56.1"W

**GRIGGS & MALONEY**  
INCORPORATED  
Engineering & Environmental Consulting

P.O. BOX 2968, MURFREESBORO, TN 37133-2968  
(615) 895-8221 \* FAX (615) 895-0632

FILE NAME: L: \Engineering\963\963-55\Drawings\963-55 Location Map - Map 1 Revised 9-23-2021.dwg

## Location Map - Map 1

BWI Forks of the River Quarry  
Lat. 35-57-6.6N and Long. 83-48-56.1W  
Knox County, Tennessee  
Permit Area: +/- 337 Acres  
Date: August 2021

Revised 9-23-2021 per MPS Staff Comments



## **APPENDIX C**



FILE NAME: L:\Engineering\963-UR-55\Drawings\963-55 Plan of Operations Map South.dwg

NOTE: ADJOINING PROPERTY LINES  
TAKEN FROM TENNESSEE PROPERTY  
VIEWER SITE.

SITE TOPOGRAPHY PROVIDED BY:

**atlantic**  
2223 Drake Avenue SW, Suite 200  
Huntsville, AL 35805  
P: 256.971.9991 F: 256.971.1154

**GRIGGS & MALONEY**  
INCORPORATED

Engineering & Environmental Consulting

P.O. BOX 2968, MURFREESBORO, TN 37133-2968  
(615) 895-8221 \* FAX (615) 895-0632

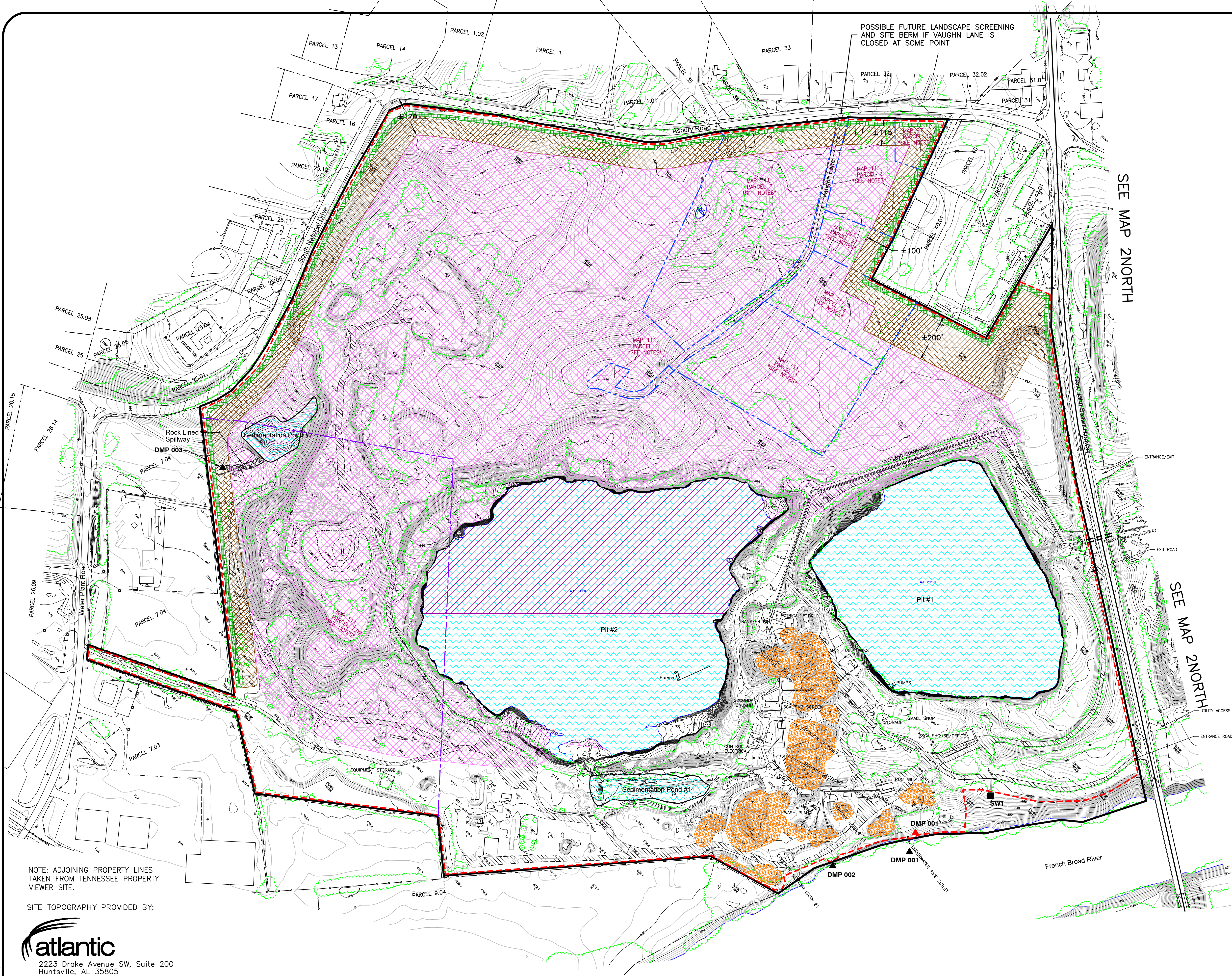
SUBMITTALS AND REVISIONS			
DATE	BY	NO.	DESCRIPTION
9/23/21	RWM		REVISIONS PER MPC STAFF COMMENTS

**BLUE WATER**  
INDUSTRIES

BWI FORKS OF THE RIVER QUARRY  
LAT. 35-57-6.6N AND LONG. 83-48-56.1W  
KNOX COUNTY, TENNESSEE

PLAN OF OPERATIONS MAP  
SOUTH

PROJECT NO. 963-55	
AUGUST DATE: 2021	DRAWN BY: DSM
	CHECKED BY: RWM
SCALE: AS NOTED	APPROVED BY: RWM



**LEGEND**

NPDES Permit Area

Site Property Line

Access Roads

BWI Stockpiles

Water Impoundments

Overburden Placement

Landscape Screening (Minimum 15' in Width)

Site Berms

Existing Mining Area


Future Mining Area

**\*NOTES\***

PARCELS ADDED PERMIT AREA WITH THIS APPLICATION MAP 111, PARCELS 3, 11 AND 14 AND MAP 097, PARCELS 37 AND 39

INDICATES PROPERTY LINES OF ABOVE NOTED PARCELS ADDED

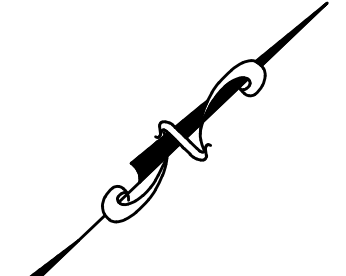
PARCEL RE-DESIGNATED USE WITH THIS APPLICATION MAP 111, PARCEL 007.02

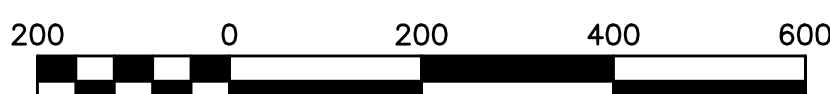
**Planning**  
KNOXVILLE & KNOX COUNTY

File No.: 10-B-21-UR

Date submitted: 9/27/2021

These plans have not been reviewed by  
Planning Staff and may not be finalized.

  
MERIDIAN BASIS:  
TN STATE PLANE  
NAD 83

  
200 0 200 400 600  
SCALE IN FEET

SYMBOL LEGEND	
	SIGN
	TREE
	TREE LINES
	GUARDRAILS
	POWER POLE
	SPOT HEIGHT
	WATER LINES
	FENCES
	RIGHT-OF-WAY/ADJOINER PROPERTY LINE

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