

# CALLAN DRIVE RECREATIONAL PARK

## ENVIRONMENTAL ASSESSMENT

Prepared for:

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## **CHAPTER 1**

### **Purpose, Need and Background**

The purpose of this environmental assessment is to evaluate the potential impacts of the Callan Drive Recreational Park project on the environment of the project area. The Town of Marion is proposing to construct a recreational park on an abandoned quarry site. One of the Town's mission is to enrich the lives of its residents and surrounding areas by providing safe, welcoming parks and recreation facilities and affordable, diverse recreation activities for people of all ages to play, learn, compete, build community and be good stewards of our environment. The Town believes that the Callan Drive Recreational Park will provide such opportunities to its residents.

The proposed project will involve development of a park on a 60-acre site, located along Callan Drive within the Town. Improvements to the property will involve the construction of an amphitheater, dog park, walking trail, and recreational fields, along with parking and restrooms. Water and sewer lines will be installed from Callen Drive onto the project site.

The Town of Marion is the county seat of Smyth County, VA. The Town is approximately 4.12 square miles in area and has a population of 5,634 persons.

## CHAPTER 2

### Alternatives

The Town has identified this project as a potential way to provide additional recreational opportunities to the residents of the Town and surrounding communities.

#### *Alternative 1 – Construction of the Callan Drive Recreational Park*

This alternative involves the development of a recreational park along Callan Drive within the Town of Marion. The site is currently owned by Marion Economic Development Authority. The site provides adequate acreage to accommodate the Town's plans.

#### *Alternative 2 – “No Action”*

This alternative would consist of no action, which would not address the Town's desire to provide more outdoor recreational opportunities. Town residents do not currently have access to such an area for recreation. The Town has deemed this project worthy of the costs and efforts associated with construction.

Alternative 1 has been chosen as the recommended alternative and is referenced throughout this report as the “proposed project”. The Town believes that this project is an excellent opportunity to provide additional outdoor recreation, and therefore, improving the quality of life for the citizens of the Town of Marion and neighboring communities.

## CHAPTER 3

### Affected Environment

The project site is located along Callan Drive (See General Vicinity Map enclosed in Exhibit A). The area of potential effect is the construction site and immediate adjacent properties. All construction activity will take place on the 60-acre site. The former rock quarry site is located at latitude 36°50'46.48"N and longitude 81°30'39.93"W and at an approximate elevation of 2250 feet above mean sea level (MSL). Elevations change throughout the property due to the rock quarry sites and rolling hills. The site is partially forested.

Minimal tree cutting and small brush clearing will be required for construction of the proposed walking trail, dog park, recreational fields, parking areas, and restrooms. In addition, grading will be necessary in these areas.

Early scoping letters were submitted to regulatory agencies requesting information regarding the presence of environmental resources within the project area. In addition, databases were searched to provide preliminary information concerning the project area. Copies of these letters, responses, and other information obtained are enclosed in Exhibit B. All comments have been incorporated into this EA.

## CHAPTER 4

### Environmental Impacts

The following information addresses the environment of the project and surrounding areas in relation to land use, topography, sensitive features and other features used to evaluate the potential impacts of the proposed project.

#### 4.1 Land Ownership / Land Use

The proposed project area is located within the Town of Marion. The land is undeveloped but was used as a rock quarry until 1982. The property is currently owned by the Marion Economic Development Authority.

The Virginia Department of Conservation and Recreation (DCR) was contacted for its comment on land use and classified lands within the project area. A copy of this agency's response, dated 10/24/19, is contained in Exhibit B. There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity. In addition, GIS mapping provided by wilderness.net and Google maps was used to determine if the project intersects or is adjacent to any formally classified lands (maps generated are enclosed in Exhibit A). According to these sources, there are no formally classified lands within the project area.

In order to minimize adverse impacts to the land uses of the project area, activities will follow all applicable local, state, and federal regulations. Solid wastes generated at the site will be reduced at the source, reused, or recycled. All hazardous wastes will be minimized. Otherwise, all solid waste, hazardous waste, and hazardous material will be managed in accordance with all applicable federal, state, and local environmental regulations. The use of herbicides and pesticides during construction or for landscape maintenance will be in accordance with the principles of integrated pest management. The use of these chemicals near waterways will be avoided and the use of petroleum products, other chemicals, or other hazardous materials will be carefully monitored.

#### 4.2 Environmental Justice / Intergovernmental Review

The proposed project will serve households of various incomes, including low-to-moderate income and minority households. According to U.S. Census data, the median household income for the Town of Marion was \$31,933 in 2017. Approximately 24% of the Town's residents are in poverty. The population of the Town has declined since 2010 and approximately 13% of the Town's residents is of minority race or origin.

All residents of the area will benefit from provision of a recreational park. The park will provide opportunities for many outdoor activities, improving the quality of life for the

citizens of the Town and Smyth County. The project will not only improve the environment of the project area but will also likely increase the property value of homes. No households, businesses or services will be displaced as a result of the proposed project.

Pursuant to Executive Order 12372, Intergovernmental Review of Federal Programs, this project is subject to Intergovernmental Review. Per these requirements, the Mount Rogers Planning District Commission (MRPDC) and the Virginia Department of Environmental Quality (DEQ) were contacted to provide comment. Copies of these agencies' responses are enclosed in Exhibit B. The MRPDC "supports" the proposed project and the DEQ "has no objections to the project provided that the applicant abides by all applicable state, Federal, and local laws and regulations.

#### **4.3 Historic Preservation**

Pursuant to Section 106 of the National Historic Preservation Act, federal agencies are required to consider the effects their undertakings will have on historic property. The Virginia Department of Historic Resources (DHR), acting as Virginia's State Historic Preservation Office (SHPO), the Delaware Nation and the Eastern Band of Cherokee Indians were invited to participate in the Section 106 process. According to an archives search, there are no archaeological or architectural resources located on the subject property, however, there are a few within close proximity to the site.

DHR's response (email dated 10/29/19) states that "it is our opinion that the historic resources within the Area of Potential Impacts will not be adversely impacted by the proposed project.

The Delaware Nation and the Eastern Band of Cherokee Indians were contacted by letter, however, no responses have been received to date.

The following measures will be implemented by the project owner: In the event that a previously unidentified archaeological resource is discovered during ground disturbing activities, all construction work involving subsurface disturbance will be halted in the area of the resource and in the surrounding area where further subsurface remains can be reasonably expected to occur. The Virginia State Historic Preservation Office (SHPO) will be contacted immediately. The Virginia SHPO, or an archaeologist approved by them, will inspect the work site and determine the area and the nature of the affected archeological property. Construction work may then continue in the project area outside the finding area. The Virginia SHPO will determine the National Register eligibility of the resource. If the resource is determined to meet the National Register Criteria (36 CFR Part 60.6), the owner will ensure compliance with Section 800.11 of the Advisory

Council on Historic Preservation's regulations. Work in the affected area shall not proceed until either (a) the development and implementation of appropriate data recovery or other recommended mitigation procedures, or (b) the determination is made that the located remains are not eligible for inclusion on the National Register.

#### **4.4 Biological Resources / Threatened and Endangered Species**

All project construction will take place on the 60-acre site. While minimal tree cutting, brush clearing, and grading will be necessary for the construction of the project activities, no long-term impacts to biological resources or threatened and endangered species are anticipated.

##### Karst Features

According to the Virginia Department of Conservation and Recreation (DCR), the project site is situated on karst-forming carbonate rock and can be characterized by sinkholes, caves, disappearing streams and large springs. The Virginia DCR karst staff screened this project against the Virginia Speleological Survey (VSS) database and the Virginia Department of Mines, Minerals and Energy (DMME) sinkhole coverage for documented sensitive karst features and caves. Three caves and multiple sinkholes are reported on the Virginia DMME sinkhole coverage for the area. DCR recommends field verification of the cave entrance locations and avoidance of these karst features. The DCR Karst Program is willing to visit these caves to document the biological resources that are present including rare bats and invertebrates. Documenting the biological resources will allow for a better understanding of how the karst resources need to be managed on the site. To minimize impacts to karst resources during development, DCR also recommends the stabilization of the soil around the site be prioritized during all the phases of the project and all standard erosion control measure that are appropriate for the site be used.

DCR also strongly recommends that if this site is developed as a park that bat friendly gates be installed on the cave entrances. This will help ensure that the cave resources are protected and that the safety of the visiting public is addressed. The benefit of having caves within the park footprint adds an entire additional karst resources value to the park providing an opportunity for interpretation to educate the public about karst resources. If the site is developed as a park, DCR recommends coordination with Wil Orndorff, the Karst Protection Coordinator (540-230-5960), [Wil.Orndorff@dcr.virginia.gov](mailto:Wil.Orndorff@dcr.virginia.gov) to discuss bat friendly cave gates including finding a qualified contractor who knows how to build these extremely specialized structures. Mr. Orndorff can also provide strategies that can be implemented to reduce potential impacts to the documented caves within the project area through site design and avoidance.



If additional karst features such as sinkholes, caves, disappearing streams, and large springs are encountered during the project, coordination with Wil Orndorff will take place to document and minimize adverse impacts to karst features. If the project involves filling or “improvement” of sinkholes or cave openings, DCR would like detailed location information and copies of the design specifications.

During the design phase, the Town will coordinate with Wil Orndorff to field verify the cave locations and to identify strategies and mitigation measures to minimize impacts to the karst features.

### Threatened and Endangered Species

In their response letter dated 10/24/19, DCR recommends coordination with the Virginia Department of Game and Inland Fisheries (DGIF) due to the potential for the tri-colored bat. While this bat species is one of the most common bats found in Virginia, the tri-colored bat is listed as “state endangered”. According to the DGIF Virginia Fish and Wildlife Information Service (VaFWIS), this species is doing well in the state and is widely distributed, abundant, and shows no declining population trends. One known occurrence of the tri-colored bat has been documented in Smyth County, however, it was not documented in any of the three caves on the project site. Coordination with DCR’s Karst Specialist will take place to identify mitigation measures to minimize impacts to the karst features on site, which will in turn protect the tri-colored bat.

Pursuant to Section 7 of the Endangered Species Act, the U.S. Fish and Wildlife Service (USFWS) online review process was completed. The conclusions for all proposed/listed species and/or proposed/designated critical habitat were “no effect” or “not likely to affect” determinations. Species fact sheets were used to identify the habitats of listed species. In addition, DCR’s comments and the Virginia Fish and Wildlife Information Service (VaFWIS) database were used to determine the documentation of these species within the project area. Upon completion of the online review, a self-certification letter was issued and the project review package was submitted to USFWS for their review. A copy of the project review package is enclosed in Exhibit B. In addition, the project site is not within a federally designated critical habitat.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

#### **4.5 Wetlands**

No wetlands have been identified during roadside surveys. The project area was compared to the U.S. Fish and Wildlife Service National Wetland Inventory (NWI) Mapping System. A copy of the NWI map generated is enclosed in Exhibit A. One small wetland was identified near the southern edge of the property. This small freshwater pond will not likely be impacted by the proposed project as no construction activity is proposed near this pond. No structures will be constructed within wetlands.

The U.S. Army Corps of Engineers (USACE) and the Virginia Department of Environmental Quality (DEQ) were contacted for their review and comment on wetlands within the project area. No response has been received to date from the USACE. A copy of DEQ's response (letter dated 10/24/19) is enclosed in Exhibit B.

According to DEQ, no long-term adverse impacts to water quality are anticipated from this project. Potential short-term adverse impacts resulting from surface runoff due to construction must be minimized. This can be achieved using Best Management Practices. In general, DEQ recommends that the amount of stream and wetland impacts be avoided to the maximum extent practicable. For unavoidable impacts, DEQ encourages the following practices to minimize the impacts to wetlands and waterways: use of directional drilling from upland locations; operation of machinery and construction vehicles outside of streambeds and wetlands; use of synthetic mats when instream work is unavoidable; stockpiling of material excavated from the trench for replacement if directional drilling is not feasible; and preservation of the top 12 inches of trench material removed from wetlands for use as wetland seed and root stock in the excavated area.

#### **4.6 Floodplains**

The project area was compared to Federal Emergency Management Agency Flood Insurance Rate Maps (See FIRM map enclosed in Exhibit A). The project area has been designated as Zone X (areas determined to be within or outside of the 0.2% annual chance floodplain). No structures will be constructed within a floodplain.

Depending on local requirements, a Stormwater Management (SWM) plan may be required. SWM requirements should be requested from the appropriate County/Town office. [References: Virginia Stormwater Management Act, Virginia Code 62.1.44.15:15 *et seq.*; Virginia Stormwater Management Project Permit Regulation, 9 VAC 25-880-1 *et seq.*] Additional guidance may be obtained from DEQ's Office of Stormwater Management.

The Virginia Marine Resource Commission (VMRC) responded by letter dated 10/28/19, that “the proposed project is outside the jurisdictional areas of the VMRC and will not require a permit from this agency.”

#### **4.7 Important Farmland**

The Natural Resources Conservation Service (NRCS) was contacted by letter for their comment on prime farmland and classified lands within the project area. A copy of NRCS’s response (AD-1006 dated 9/26/19) is contained in Exhibit B. According to NRCS’s review, the “project located in urban or reclaimed mined land, therefore no prime or unique farmland will be affected”. The proposed project will not convert any agricultural land.

#### **4.8 Other Resources**

##### **4.8.1 Water Quality**

The Virginia Department of Environmental Quality (DEQ), U.S. Army Corps of Engineers (USACE) and Virginia Marine Resources Commission (VMRC) were contacted to allow review of the proposed project. Copies of these agencies’ responses are contained in Exhibit B.

According to DEQ, the project site is in the watershed of the Middle Fork Holston River in the Tennessee and Big Sandy River Basin (Holston River Subbasin), Section 5, Class IV (mountainous zone waters). The Middle Fork Holston River is currently assessed as Not Supporting of the Recreation use due to high levels of *E.coli* bacteria.

Although no long-term adverse impacts to water quality are anticipated from this project, potential short-term adverse impacts resulting from surface runoff due to construction must be minimized. This can be achieved by Best Management Practices. In general, DEQ recommends that the amount of stream and wetland impacts be avoided to the maximum extent practicable. For unavoidable impacts, DEQ encourages the following practices to minimize the impacts to wetlands and waterways: use of directional drilling from upland locations; operation of machinery and construction vehicles outside of stream-beds and wetlands; use of synthetic mats when in-stream work is unavoidable; stockpiling of material excavated from the trench for replacement if directional drilling is not feasible; and preservation of the top 12 inches of trench material removed from wetlands for use as wetland seed and root stock in the excavated area.

The project site is not located within key water resource areas, including sole source aquifers and wellhead protection areas. This was verified using the EPA Sole Source

Aquifer website (<https://epa.maps.arcgis.com/apps/webappviewer/index.html?id=9ebb047ba3ec41ada1877155fe31356b>). The map generated is enclosed in Exhibit A.

Additionally, the project will not affect coral reef ecosystems.

#### 4.8.2 Air Quality

The Virginia Department of Environmental Quality (DEQ) was contacted for comment on the proposed project. A copy of their response is enclosed in Exhibit B. According to DEQ, the project is not likely to adversely affect air quality. However, during construction, fugitive dust must be kept at a minimum. This requires, but is not limited to, measures such as the application of water to suppress dust and washing down construction vehicles and paved roadways immediately adjacent to the construction site. Any process equipment that prepares coal via breaking, crushing, screening, wet or dry cleaning, thermal drying, etc. should be evaluated for permit applicability. The following sections of Virginia Administrative Code (VAC) may be applicable: *9 VAC 5-50-6 et. seq.*, governs abatement of visible emissions and fugitive dust emissions, and *9 VAC 5-40-5600 et. seq.* addresses open burning.

The proposed project will conform to Clean Air standards and is not anticipated to adversely affect air quality. The use of fossil-fuel burning equipment will produce normal engine exhaust, a by-product of gasoline and diesel fuel combustion. Such emissions are state and federally regulated. Normal engine emissions occur every day and are dissipated into the atmosphere at acceptable quality levels. The emissions produced as part of construction activities are not unusual events and will not have any adverse impact upon air quality. Completed project activities will not generate any air emissions.

Fugitive dust caused by the movement of construction materials and construction equipment will be controlled by adherence to the Virginia Department of Environmental Quality regulations and *9 VAC 5-50-60 et. seq.*, which governs the abatement of visible emissions and fugitive dust emissions. Land clearing wastes (vegetative debris) generated during construction should be properly managed in accordance with applicable regulations and local ordinances. Shredding/chipping or vegetative debris and reuses on-site is recommended over open burning. Any open burning of vegetation debris must be performed in accordance with *9 VAC 5-40-5600 et. seq.* and will be coordinated with the local fire official to ensure any local ordinances are met.

The DEQ has established three lead planning organizations (LPO) within Virginia. Section 174 of the Clean Air Act requires that areas of the Commonwealth that do not comply with national ambient air quality standards for LPOs. The project area is not

located within an LPO (list enclosed in Exhibit A); therefore, it is within an attainment area.

#### 4.8.3 Transportation

The Virginia Department of Transportation (VDOT) was contacted for comment on the proposed project. A copy of their response, dated 10/30/19, is enclosed in Exhibit B. According to VDOT, “it appears that the connection to Callan Drive and Staley Street have adequate site distance and intersection spacing. The proposed connection to Prater Lane/Louise Avenue on the southwest side of the park appears to be at an existing skewed intersection. The addition of this connection without further improvements may make it difficult for drivers to safely complete some of the turning movements.” VDOT recommends that the Town consider an alternative location for this connection to provide better separation of the turning movements.

Mr. John Bechtold ([john.bechtold@vdot.virginia.gov](mailto:john.bechtold@vdot.virginia.gov)) of the Abingdon Residency Office, 276-525-6463, should be engaged early in the planning, design, and construction process in order to identify and address potential impacts. Also, when the time is appropriate, plans will be submitted to the appropriate VDOT staff.

In addition, the following should be addressed in the planning and design:

- All above ground items in the right of way shall be installed outside the clear zone of the roadway or protected by appropriate guardrail treatment. The guardrail installation guidelines can be found at: [http://www.virginiadot.org/business/resources/LocDes/GRIT Manual.pdf](http://www.virginiadot.org/business/resources/LocDes/GRIT%20Manual.pdf) Refer to Pages 1-1 to 1-3 for the clear zone guidelines.
- All construction within the right-of-way must be in compliance with the Virginia Work Area Protection Manual – [http://www.virginiadot.org/Business/resources/Wrk zone/2011 WAPM Rev 1.pdf](http://www.virginiadot.org/Business/resources/Wrk%20zone/2011%20WAPM%20Rev%201.pdf)
- Land Use Permits and associated costs are outlined in the Land Use Manual – <http://www.virginiadot.org/business/bu-landUsePermits.asp>

#### 4.8.4 Noise Impacts

During project construction, some nuisance levels may be produced by the engines of construction equipment representing short-term negative impacts. The noise levels produced will not be at any health-endangering thresholds. Construction will be limited to normal daylight hours, Monday – Friday, except in emergency situations. Completed project operations will not produce any noise levels.



The Callan Drive Recreational Park project is not anticipated to significantly impact any environmental resources or to cause irreversible environmental changes within the project area. However, in order to minimize potential short-term impacts of the project, the following mitigation measures will be implemented:

- Best Management Practices will be implemented to minimize impact from surface runoff due to construction.
- A plan will be implemented for the treatment of unanticipated archaeological discoveries.
- Activities will follow all applicable local, state, and federal regulations. All permits will be obtained prior to any land disturbing activity.
- In the event that wetlands are encountered, measures will be followed to minimize impacts.
- During construction, measures will be implemented to ensure compliance with federal and state regulations and to minimize potential impacts to air quality.
- The project will be coordinated with the DCR Karst Protection Specialist to field verify the cave locations and to identify strategies and mitigation measures to minimize impacts to the karst features.

## CHAPTER 5

### Coordination and Consultation

Letters concerning environmental resources were sent to various regulatory agencies requesting their comment on the proposed project. The following agencies were contacted:

- ✓ Delaware Nation, Oklahoma
- ✓ Eastern Band of Cherokee Indians
- ✓ Mount Rogers Planning District Commission
- ✓ United States Army Corps of Engineers
- ✓ United States Department of Agriculture - Natural Resources Conservation Service
- ✓ United States Fish and Wildlife Service
- ✓ Virginia Department of Conservation and Recreation - Division of Natural Heritage
- ✓ Virginia Department of Environmental Quality
- ✓ Virginia Department of Historic Resources
- ✓ Virginia Department of Transportation
- ✓ Virginia Marine Resources Commission

Copies of all responses received to date are included in Exhibit B.

Ms. April Lane of The Lane Group, Inc. was the primary preparer of this report. Ms. Lane has extensive experience with the preparation of environmental impact assessments and environmental site assessments. She obtained a B.S. in Biology from Virginia Tech in 1997 and a M.S. in Environmental Health from East Tennessee State University in 1999.