

Planning Commission Staff Report

File #: C-21-6
Applicant: Vulcan Lands, Inc. and their agent Jack R. Wilson, III
CUP Request: To allow for a stone or granite quarry to include crushing or grinding, storage and distribution of same on property and to include sand and gravel operations, crushed stone operations, cement, concrete, lime and gypsum manufacture, asphalt mixing plant
Property Location: 23306 Cox Rd., North Dinwiddie, Virginia
Tax Map Parcel #'s: 21-1 and 9-4
Property Size: Approximately 243.37 +/- acres
Current Zoning: Agricultural, General, A-2 & Residential, Limited, R-1, Requested Industrial, General, M-2 with Proffers
Magisterial District: Rohoic
Planning Commission Mtg.: January 12, 2022
Board of supervisors Mtg.: February 15, 2022

CUP REQUEST & EXISTING CONDITIONAL USE PERMIT

The applicant, Vulcan Lands, Inc. and their agent Jack R. Wilson, III, are seeking a conditional use permit to allow for a stone or granite quarry to include crushing or grinding, storage and distribution of same on property containing approximately 243.37 +/- acres. The M-2 zoning district allows, for a stone or granite quarry to include crushing or grinding, storage and distribution of same and to include sand and gravel operations, crushed stone operations, cement, concrete, lime and gypsum manufacture, asphalt mixing plant with a conditional use permit. The property is located near 23306 Cox Rd., North Dinwiddie, Virginia and is further defined as Tax Map Parcel Nos. 21-1 and 9-4. As indicated in the Dinwiddie County Comprehensive Land Use Plan, the subject property is located within the Urban Area, which allows for industrial and residential uses for this general area.

The subject property was originally rezoned to A-2, Agricultural General, in March 1989, and at the same time a conditional use permit was approved to permit the existing sand, gravel, and crushed stone quarry/mining operation on 107 acres of the subject property. The property housing the Tindall Concrete manufacturing facility and related product storage yard was originally zoned Industrial, General, M-2, in August 1985.

RELATED ATTACHMENTS

- CUP Application
- Vulcan Site Plan (Furnished by the Applicant)

OVERVIEW OF PROPOSED MINING OPERATION and ANCILLARY USES

The existing open pit mining operation with a crushed stone operation is operating on approximately 107 + acres on the western portion of the subject property, which is shown on the applicant's Site Plan. The associated crushed stone, asphalt and concrete/cement mixing plants and stone stockpile areas and hauling are operating as part of the existing Jack quarry/mining operation. In addition to the existing perimeter buffer areas on the northern, northeastern, and southeastern portion of the subject property,

the applicant is proposing landscaped buffer areas around these areas of operation as shown on the aforementioned Site Plan. The applicant is not proposing any mining operations on Tax Map Parcel # 9-3, and this parcel is to be utilized for the 75-foot buffer, stormwater management, and berming of overburden and topsoil.

GENERAL ZONING ANALYSIS

The properties in the immediate area surrounding this land parcel include single-family residential land uses (Appomattox Manor, Mansfield, Sysonby Ridge, and Gunderson subdivisions on the north and northeast as well as Rohoic Farms subdivision on the southeast) and the railroad line on the southeastern border of the subject property with residential land uses on the southeastern side of the aforementioned railroad. The aforementioned residential property to the southeast is zoned Residential, Limited, R-1 and Residential Limited, R-2 (the manufactured home park off Cox Road). Also on the southeastern side of the railroad off Addison Street and Cox Road are Gentry Well Works and a mini-storage facility that are on property zoned B-2, Business General. In 2002, a conditional use permit was approved allowing the mini-storage facility.

The purpose of the Industrial, General, M-2, zoning district is for industrial and manufacturing related development. The M-2 zoning classification allows for continued operation of the existing Jack Quarry as a stone or granite quarry to include crushing or grinding, storage and distribution of same, with a conditional use permit on the subject property. The proposed rezoning will allow for the continued operation of the stone or granite quarry including crushing or grinding, storage and distribution of same and to include sand and gravel operations, crushed stone operations, cement, concrete, lime and gypsum manufacture, asphalt mixing plant on Tax Map Parcel # 21-1 and will allow for stormwater management, berming of overburden and maintaining the perimeter landscaped buffer on Tax Map Parcel # 9-4.

The subject property is located within the Urban Planning Area as defined by the Comprehensive Land Use Plan. This Urban Planning Area is expected to accommodate industrial facilities and residential land uses within this general area of the County.

OVERVIEW OF DEVELOPMENT & OPERATIONAL IMPACTS

VDMME Permit/License and Related Mining Agencies

The Virginia Division of Mineral Mining (DMM) of the Virginia Department of Mines, Minerals, and Energy (VDMME) administers the required permit/license to operate the mining/quarry operation. If the CUP request is granted, the subject property will be subject to the existing DMM permit and as such the mining operation will be subject to the requirements of the permit/license. All mining practices and operation of the proposed mine, including safety and reclamation practices are made a part of the mining permit as are periodic inspections by the operator and VDMME inspector. The Virginia Department of Environmental Quality (DEQ), Air Division, must approve plans for dust control, which is proposed to be controlled through the use of wet suppression and/or bag house applications. The DEQ Water Division permits any stormwater discharges and mine/quarry de-watering, and emergency response plans and corrective action policies are to be developed in accordance with DEQ and the Environmental Protection Agency (EPA) regulations. The U.S. Department of Labor's Mine Safety and Health Administration (MSHA) covers employee safety related to mining operations.

Dust, Blasting, Noise, and Time & Manner of Operation Impacts

The quarry pit and equipment are planned to operate from 7:00 AM to 6:00 PM Monday through Saturday except that no mining or crushing shall be permitted on Saturdays. The shipping portion of the proposed facility is proposed to operate under the same times and days: 7:00 AM to 6:00 PM Monday through Saturday. In addition to the aforementioned hours and days of operation, shipping, loading no operations shall be permitted on the following holidays: New Year's Day, Martin Luther King, Jr. Day, Memorial Day, July 4th, Thanksgiving, and Christmas. Hours beyond those stated above shall be permitted in the case of an emergency. An emergency operation shall be permitted if and only if it is designated by the Commonwealth of Virginia or its agent when the product of the mine is required for the use of the Commonwealth on short notice. In such an event, notice shall be provided to Dinwiddie County.

For blasting at the mine extraction area, it is proposed that blasting is not to occur before 10:00 AM or after 5:00 PM. Notwithstanding the foregoing, if an emergency operation need (as set forth in the paragraph above) exists blasting beyond these hours shall be permitted. Additionally, if a safety condition arises requiring a blast beyond these hours such a blast may be permitted by Dinwiddie County.

Fugitive dust is a byproduct from the mining and processing operation, and a Condition is in place to help address fugitive dust by on-site wet suppression and/or dry dust collection systems. Fugitive dust is also generated by the vehicular traffic and is proposed to be controlled by the application of water to the roadways and other traveled surfaces on the subject property.

In the Comprehensive Plan there are Goals and Objectives set forth addressing the environment and impacts on the same such as Chapter XI Policies, Goals, and Objectives, G. Environment, Goal "Protect the County's high level of environmental quality" there are Objectives which include: "Assure that new development minimizes adverse impacts on the natural and/or built environment"; "Preserve the County's scenic, cultural, and historic resources as being essential to both the County's rural and historic character and the overall quality of life"; "Protect the availability, quantity, and quality of Lake Chesdin, all surface water and groundwater resources"; and "Protect and preserve the natural and physical environment".

Public Utilities, School System, & Public Safety Impacts

The impacts on the subject property are minimal. Water and sanitary sewer is provided using the public DCWA system, which has been upgraded in the area as a part of the recent Tindall facility expansion project. There is no impact on the public school system. As the Jack quarry is already in operation, the potential impact on public safety will not be further impacted with the rezoning of the property.

Transportation Impacts

The impacts on the existing transportation network are minimal. With the existing entrance to the existing quarry/mining operation, the subject property has adequate access to Cox Road and the road

system in this particular area is adequate to handle the traffic generated by the current uses and the proposed quarry/mining operation improvements.

RECOMMENDED CUP CONDITIONS

C-21-6 Conditions:

1. Generally. The use of the property shall be limited to sand and gravel operations, crushed stone operations, cement, concrete, lime and gypsum manufacture, asphalt mixing plant, and stone and granite quarry to include crushing or grinding, storage and distribution of same and shall be subject to this conditional use permit. Sand and gravel operations, crushed stone operations, cement, concrete, lime and gypsum manufacture, asphalt mixing plant, and stone and granite quarry to include crushing or grinding, storage and distribution of same may occur only on Tax Map Parcel # 21-1 (totaling approximately 221.56 acres). The only access to and from the mining and crushing sites on Tax Map Parcel # 21-1 shall be across Tax Map Parcel #'s 20-32B, 20-33A, and 20-24. Other than creating and maintaining the landscaped buffer, maintaining the stormwater management areas, and creating, grading and maintaining the berm, no mining, crushing, or any other mining related activity shall occur on Tax Map Parcel # 9-4.
2. Conceptual site plan. Improvements and uses shall generally conform to the site plan submitted with the application entitled "Vulcan Materials Company, T.M. 21-1 & 9-4 County Use Permit Map Jack Quarry, Dinwiddie County, Virginia" dated 09/17/2020 attached as "Exhibit A".
3. Screening and buffer areas. A buffer a minimum of 75 feet in width shall be established and maintained around the perimeter of the property, except along the access road, as shown on the conceptual site plan. The continuous buffer may contain fences, undisturbed woods, and landscaping. Roads may traverse the buffer in a generally perpendicular manner. The following shall be provided within the 75-foot landscaped buffer:
 - a. The existing wooded area shall be maintained where possible and where landscaping is required to complete the buffer ten large evergreen trees with an ultimate height of 50 feet or greater and six small evergreen trees with an ultimate height of 20 feet or greater and 25 shrubs shall be planted for every 100 linear feet or portion thereof. The landscaped buffer must be maintained and if the trees or shrubs die or are destroyed, the trees or shrubs must be replaced.
4. Overburden and overburden storage areas. Topsoil and overburden which is removed and relocated in the process of mining may not be placed or stored within the 75-foot perimeter buffer. Overburden storage areas shall be limited to 100 feet in height.

5. Time of operation. The hours and days of operation for mining, crushing, and transportation to and from the mining and crushing sites shall be limited as follows:
 - a. 7:00 a.m. - 6:00 p.m. Monday through Saturday, except that no mining or crushing shall be permitted on Saturdays. Additionally no operations shall be permitted on the following holidays: New Year's Day, Martin Luther King, Jr. Day, Memorial Day, July 4th, Thanksgiving, and Christmas.
 - b. Hours beyond those stated above shall be permitted in the case of an emergency if and only if it is designated by the Commonwealth of Virginia or its agent when the product of the mine is required for the use of the Commonwealth on short notice. In such an event, notice shall be provided to Dinwiddie County.
6. Blasting. As part of the mining operation, blasting of quarry material is allowed on the mine site between the hours of 10:00 a.m. and 5:00 p.m. Notwithstanding the foregoing, if an emergency operation need as set forth in Condition 5 (b) exists blasting beyond these hours shall be permitted. Additionally, if a safety condition arises requiring a blast beyond these hours such a blast may be permitted by Dinwiddie County.
7. Dust Control. Fugitive dust is to be controlled by on-site wet suppression and/or dry dust collection systems. Fugitive dust is also generated by the vehicular traffic and is to be controlled by the application of water to the roadways and other traveled surfaces on the subject property.
8. No public access. No public access shall be permitted to the mining and crushing sites.
9. Security Fencing. A security fence at least eight feet in height shall be installed and maintained around the perimeter of the Property.
10. Lighting. All exterior lighting shall be dark sky compliant and shall not exceed ½ foot candle at the property line.
11. Hauling operations. Route 633 (Addison Street) shall not be used to haul mined material to include sand, gravel, cement, asphalt, lime and gypsum, topsoil, overburden, and spoils. The operator shall be required to make a daily inspection of the road, Route 226 (Cox Road), within 200 hundred feet of the entrance to the mine and shall be required to sweep any debris within 200 hundred feet of any entrance to the mine placed on the road by the hauling of sand, gravel, top soil, over burdens, oil and other materials associated with the operation of the mine.
12. Permits, reports, etc.
 - a. All applicable federal, state, and local permits shall be obtained and filed with the Dinwiddie County Planning Department prior to commencing operations. This conditional use permit is effective only upon receipt by the Dinwiddie County Planning Department of all such permits.

- b. All applicable federal, state, and local permits shall be maintained in good standing by owner/operator. Owner/operator shall provide copies of such permits to Dinwiddie County Planning Department during operations. Failure to maintain all applicable permits shall be grounds for revocation of this conditional use permit.
 - c. Copies of violations and/or reports to or from applicable federal and state agencies shall be made available to Dinwiddie County upon request of the County.
13. Compliance with laws. All operations pursuant to this conditional use permit shall be conducted in compliance with all applicable federal, state and local laws and regulations.
14. Annual review. This conditional use permit shall be reviewed a minimum of once per calendar year to evaluate compliance with conditions contained herein. Violation(s) of the conditions of the conditional use permit may include revocation of the conditional use permit by the Board of Supervisors after notice and hearing.

Planning Staff Recommendation:

As set forth in the Zoning Ordinance Sec. 22-22. Conditional Use Permits Generally, “Any provisions of this Chapter which allow a use with a conditional use permit shall not prohibit the Board of Supervisors from denying an application for a particular permit upon finding, after public hearing, that the issuance of such permit would not be in compliance with the intent, purpose and design of this Chapter and/or Section 22-2 of this Code”. Section 22-2. Purpose and Design of Chapter states that “For the purpose of promoting the health, safety and general welfare of the public and of further accomplishing the objectives of Va. Code Section 15.1-427 of the Code of Virginia, 1950, as amended, the provisions of this chapter are hereby adopted as the zoning regulations of the County, together with the accompanying map. This Chapter has been designed:

- 1) To provide for adequate light, air, convenience of access and safety from fires, floods and other dangers;
- 2) To reduce or prevent congestion in the public streets;
- 3) To facilitate the creation of a convenient, attractive and harmonious community;
- 4) To expedite the provision of adequate police and fire protection, disaster evacuation, civil defense, transportation, water, sewerage, schools, parks, forests, playgrounds, recreational facilities, airports, and other public requirements;
- 5) To protect against destruction of or encroachment upon historic areas; and
- 6) To protect against one or more of the following: overcrowding of land, undue density of population in relation to the community facilities existing or available, obstruction of light and air, danger and congestion in travel and transportation or loss of life, health or property from fire, flood, panic, or other dangers.”

The Planning staff reviewed the applicant’s conditional use permit request for compliance with the intent, purpose, and design of the Zoning Chapter of the County Code and with the aforementioned provisions of Zoning Chapter Section 22-2 and Planning staff’s recommendation is for approval with conditions of the requested conditional use permit, C-21-6, to allow for the continued operation of the stone or granite quarry including crushing or grinding, storage and distribution of same and to include sand and gravel operations, crushed stone operations, cement, concrete, lime and gypsum manufacture,

asphalt mixing plant on Tax Map Parcel # 21-1 and will allow for stormwater management, berming of overburden and maintaining the perimeter landscaped buffer on Tax Map Parcel # 9-4.

PLANNING COMMISSION RECOMMENDATION

Mr. Bassett asked if there were any questions from the Planning Commission.

The Chairman said if there are no questions for Mr. Bassett, would the applicant like to come forward and add anything.

Mr. Jack Wilson, 9401 Courthouse Road, Suite 204, Chesterfield, VA, the agent representing the applicant, explained more about the berm and buffer at the northeastern portion of the property and their relationship to and with the rezoning and conditional use permit.

Mr. Cunningham asked if there was going to be any mining in the area where the berm and buffer would be constructed.

Mr. Wilson said no there will not be any mining in that area, Tax Map Parcel 9-4.

The Chairman asked if there had been any studies done involving the long-term effect of blasting on structures around the perimeter of a blasting site.

Mr. Wilson said federal blasting studies have been conducted. In short, the studies looked at the impact of a series of mining related blasts. Based on that study a standard was then set. That standard said simply that if a blasting facility stays below their standard, there will be no long term structural damage on structures surrounding the facility. That is the standard Virginia Mines and Minerals follows and that is the standard Vulcan follows.

The Chairman said if there are no more questions for the applicant's agent, he is opening the public hearing portion of rezoning case, P-21-7, and conditional use permit case, C-21-6. He asked if anyone signed up to speak.

Mr. Allen Marcum, 4410 Alyssa Lane, North Dinwiddie said his property abuts the Vulcan property and currently there are wetlands that separate our properties. He wanted to know how this new proposed work would affect those wetlands. Also, he stated that I built my house in the nearby subdivision three (3) years ago and there is some cracking in my walls and my foundation due to the blasting. I've been around construction for some 30 plus years and I know what blasting can do. He mentioned that everyone on Alyssa Lane and McIlwaine Drive were against the rezoning and conditional use permit.

Mr. Melvin Farrar, 24015 Bancroft Drive, North Dinwiddie said he lives next to the where the berm is being proposed. When they blast, I can feel my house shake. It is affecting the houses around the blasting site. I believe if they move closer, it will affect the houses even more.

The Chairman said if there are no more comments he was closing the public hearing for cases P-21-7 and C-21-6.

Mr. Wilson wanted to comment on what the citizens were concerned about. Mr. Wilson said, as it relates to the gentleman's wetlands question, the Army Corp of Engineers governs wetlands and any disturbance of them. They have a permit process that we would have to adhere to if we do choose to disturb them. I just wanted everyone to know that. As for the blasting that was mentioned, Vulcan only does one blast a week and it lasts about one second. Vulcan also limits the hours when that blast occurs. Currently under the existing conditional use permit conditions, they are not limited to how and when the blast can occur. He said Vulcan also has a policy of reaching out to citizens who say they are having problems after there has been blasting. They have installed seismographs on some of the properties adjacent to their quarry. This is an effort of seeing or registering the size of the blast coming from the quarry. Often times what most people feel in their homes is the air pressure from the blast and that is exactly what the berm we want to put in place will address.

The Chairman asked the Commissioners if they had anything else to add. If not, he would entertain the motions.

Mr. Titmus made a motion and read the following: BE IT RESOLVED, that in order to assure compliance with Virginia Code Section 15.2-2286(A) (7) and 15.2-2286(A) (3) & (7) it is stated that the public purpose for which this Resolution is initiated is to fulfill the requirements of public necessity, convenience, general welfare and good zoning practice, I move that rezoning, P-21-7 and C21-6, be recommended for approval with proffers and conditions to the Board of Supervisors. It was seconded by Mr. Simmons and with Mr. Simmons, Mr. Titmus, Mr. Hayes, Mr. Cunningham, Mr. Harvell, Dr. Prosis and Mr. Tucker voting "AYE" C-21-6 and C-21-7 is recommended to the Board of Supervisors for approval with rezoning proffers and conditional use permit conditions.

BOARD OF SUPERVISORS ACTION

Motion for approval with conditions by the Board of Supervisors:

BE IT RESOLVED, that in order to assure compliance with Virginia Code Section 15.2-2286(A) (3) & (7) it is stated that the public purpose for which this Resolution is initiated is to fulfill the requirements of public necessity, convenience, general welfare and good zoning practice, I move that conditional use permit request, C-21-6, as presented, be approved with conditions by the Board of Supervisors.

Motion for disapproval by the Board of Supervisors:

BE IT RESOLVED, that in order to assure compliance with Virginia Code Section 15.2-2286(A) (3) & (7) and Zoning Ordinance Sections 22-22 and 22-2 it is stated that the public purpose for which this Resolution is initiated is to fulfill the requirements of public necessity, convenience, general welfare and good zoning practice, I move that conditional use permit request, C-21-6, as presented, be disapproved by the Board of Supervisors as the issuance of a conditional use permit would not be in compliance with the intent, purpose, and design of the Dinwiddie County Zoning Code.