Fox Spring Farm SPEX Narrative

Use Description:

The owner proposes to develop the site as a sand and gravel mining operation. The adjacent property to the west is an existing mining and wet processing facility, located in Spotsylvania County. The adjacent wet processing facility will be utilized to process the mined material from this site. Ingress and egress from the mine site to the adjacent wet processing facility will be provided by an internal access road. Public roads will not be used to transport material to the wet processing facility. The frontages along Tidewater Trail (U.S. Route 17) and Prospect Hill Lane will not be utilized as an entrance into the site. The existing site entrance on Tidewater Trail (U.S. Route 17) will provide access for both uses. No additional entrances or accesses are proposed for this use. Please see the attached "Aerial Exhibit", page 5, and Special Exception Permit plan set for site specifics.

Approximately 186 acres of the site is currently used for agriculture. Snow Creek runs through the site and has steep, wooded side slopes. This stream, its buffer and the intermittent tributary will not be disturbed by the mining. The site area northeast of the stream will not be used for the mining operation and will remain as farmland.

Impact on Character and Established Pattern of Area Development:

The nature of the surrounding area is rural in character. Farming and mining are established uses in the area. Once the mining operations are completed, the reclaimed land can return to being farmed and the reclaimed ponds can be utilized for recreation.

Impact on Adjacent Properties:

The owner proposes to mitigate the effect of this project on adjacent properties as much as possible. The property to the south is mostly forested; a 25 foot buffer will be established along the property line. The existing tree line will remain undisturbed and a berm will be provided. The properties to the north and east are mostly farmland with some wooded areas. The mining operation will have an established 25 foot buffer in this area and the forested buffer will remain undisturbed. The property to the west of the site is currently being mined and contains the existing wet processing facility that will be utilized for the processing of the mined material. The parcel along the northwest corner of the site will be screened with a 25 foot buffer and a landscaped berm.

Location and Height of Existing and Proposed Structures/Landscaping:

25 foot wide buffers will be established along the south boundary and berms will be constructed to decrease the noise levels and screen the operation from adjacent owners. The Resource Protection Area (RPA) and wetlands have been identified on the site and will be preserved. No buildings, walls or fences will be constructed on the site. The parcel along the northwest corner of the site will be screened with a 25 foot landscaped berm.

Impact on Public Health, Safety or Welfare of Surrounding Community:

The operating hours for the mining site shall be 6 a.m. to 6 p.m., Monday through Friday and 6 a.m. to 2 p.m. on Saturdays. There shall be no operation on site on Sunday's or major holidays: New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day. In the event of an emergency such as a natural disaster the operating hours may be waived as needed upon giving notice to the county.

No public utilities are proposed.

Site lighting shall be used to the minimum extent necessary to facilitate safe mining activities. Lighting shall be reduced to no more than security level when the site is idle. No stationary lighting will be required onsite.

Conformance with the Comprehensive Plan and Zoning Ordinance:

The County's Comprehensive Plan, "Natural Resources" Chapter 4-1, notes:

"Floodplain deposits and low alluvial terraces are found in three main belts: the North Anna River South of I-95, the Mattaponi, which branches up the Matta River, South River, Polecat Creek, and Maracossic Creek, and along the Rappahannock River. Sand and gravel with some silt and clay are the main constituents of these deposits. These sand and gravel deposits along the Mattaponi and Rappahannock Rivers are of sufficient depth and size to be attractive for extraction and processing for development use."

"Land Use" Chapter 8 of the Comprehensive Plan designates this area's future use as Agricultural Preservation. As noted previously, the reclamation plan for this site includes reclaimed pasture land, along with several ponds.

This site is located in the Rural Preservation (RP) zoning district. Sand and gravel extraction is permitted by Special Exception with Board of Supervisor's approval. This Special Exception request satisfies the requirements of the Zoning Ordinance.

This site is located within the Chesapeake Bay Preservation Area (CBPA) Overlay District. A Resource Protection Area has been delineated onsite by ECS Mid-Atlantic. No disturbance of the RPA is proposed. As typical with sand and gravel operations, once materials have been mined, open pits are usually converted into reclamation ponds that serve as Best Management Practices (BMP's). This site will contain several ponds, and the remaining mined land will be reclaimed as pasture land. It is anticipated that at the conclusion of the reclamation process and with the utilization of these ponds as BMP's, the pollutant load in the stormwater runoff will be reduced as compared to the current farming conditions.

Wetland areas have been delineated on the site by ECS Mid-Atlantic. A buffer will be maintained around any wetlands located outside of the RPA so that no disturbance of wetlands is proposed.

All required permits for land disturbance, including Virginia Water Protection (VWP), U.S. Army Corps of Engineers, Virginia Stormwater Management Program (VSMP), and the Virginia Department of Mines, Minerals and Energy (DMME) will be obtained prior to beginning the mining operation. As required by the VSMP, all disturbed areas will be controlled to minimize sediment and pollutants in stormwater runoff leaving the site.

No increase in impervious area is anticipated with this mining operation.

This site is located within the Approximated Floodplain District. The property lies within Flood Zone "A" (special flood hazard areas subject to inundation by the 1% annual chance flood) with no base elevations and Zone "X" (other areas; areas determined to be outside of the 0.2% annual chance flood), all as shown on Flood Insurance Rate Map (FIRM) numbers 51033C0075C & 51033C0100C, effective date: March 2, 2009, see attached "Floodplain Exhibit", page 6. The floodplain will not be disturbed with the proposed mining operation.

A portion of this site from Snow Creek and north is within the Resource Sensitive Area Overlay District. The proposed mining operation will not disturb any of the area within this District.

Impact on Air Quality, Surface and Groundwater Quality and Quantity

Noise shall be kept to a minimum on the site. All equipment used on site shall be kept in good working order, especially mufflers to insure quiet operation. The volume of the backup warning devices shall be minimized to a level that meets the federal safety standards. The use of explosives/blasting will not be a part of the mining operation. Dust generated by the mining operation will be minimized by the use of water sprayed from a truck when required.

As mentioned above, at the conclusion of the reclamation process and with the utilization of these ponds as BMP's, the pollutant load in the stormwater runoff will be reduced as compared to the current farming conditions. A negative impact on groundwater is not expected; however, groundwater monitoring will be conducted to ensure groundwater quality and quantity during the mining operations.

Anticipated Traffic Impacts:

No impacts are expected to schools, utilities or roads. All mining activity will be contained within this site and the adjacent existing mining facility in Spotsylvania County. It is not anticipated that truck traffic will increase from the adjacent site, as the mining operation will shift from that site to this one.

Previous Site Special Requests:

There is no known rezoning or variance requests on the property. A previous special exception for mining was applied for more than 10 years ago on this site. The adjacent mining and wet processing facility was not in operation at that time.

Fiscal Impact:

Direct Economic Benefits:

- 1. 14 jobs will be extended and preserved into the future. The mining related jobs are good paying positions with an average annual wage in 2013 of \$59,036. This wage exceeds the Caroline County average wage by 68.8% (\$34,937).
- 2. 15 Independent Hauler's contracted for service to deliver the finished materials.
- 3. Competitive cost of materials for customers both private and public due to location and transportation costs. The finished materials are generally consumed within a 40 mile radius of the facility.
- 4. County revenue generated by the collection of real estate taxes, minerals tax estimated to be \$8,300/year at the current rates, machinery and tools tax estimated to be \$52,414/year at current rates. The site will also be subjected to the roll back real estate tax due to a change in use estimated to be \$7,000.
- 5. Local spending by company employees and hauler's/contractors.
- 6. Local spending exceeding \$300k per year for parts, supplies, fuel, tires, office supplies, uniforms, and other associated equipment.
- 7. Capital Investment in Equipment: \$2.5M

Indirect Economic Benefits:

The economic benefit as it directly relates to mineral extraction is hard to quantify on a per ton basis for any one specific town or area. The mining operations do generate good paying jobs; the sites generate real estate, fuel, sales, machinery & tools, BPOL and mineral tax revenue. But the true economic benefit actually is larger than just one area or entity. It is a fact that sand and gravel is a low cost commodity that is essential in providing the quality of life that we have become accustomed to. Producing the materials locally is essential in keeping the construction cost lower for local residents and businesses. One of the major components of the cost of the finished product is the transportation or hauling cost to the end user. We live in homes, travel roads, work in buildings, attend schools and shop in centers that at some point in time required sand and gravel as a basic building block material for construction. The main ingredient in

concrete and hot mix asphalt is sand. These materials must be produced in and around the local market to control the overall cost of the processed material. For example a cubic yard of concrete contains approximately 1200 lbs. of sand (fine aggregate) and 1820 lbs. of gravel or stone (coarse aggregate). If the local market ceased production of these basic materials and for this example the sand and gravel cost per ton remains constant excluding hauling costs and the materials were transported an additional 50 miles due to they were no longer available in the local marketplace. The cost of a yard of concrete would increase theoretically \$7.55 per cubic yard or \$75.50 per 10 cubic yard truck load. A building project such as a school or recreational facility requiring 5000 cubic yards of concrete would cost an additional \$37,500 in direct costs related to the increased transportation costs. The economic impact increases the costs for any project requiring aggregate materials at the expense of the citizens and tax payers. Another example is Aggregate Industries annually supplies VDOT with snow sand in the winter months of the year. We produce and stockpile this material specifically for VDOT for use on the roads in the winter. As per the example above if our industry was to stop producing and the material had to be transported an additional 50 miles each ton purchased by VDOT theoretically would increase by \$5.00 per ton. A 10,000 ton contract with VDOT would increase by approximately \$50,000 due to increased direct transportation costs. The consequence of not having locally mined minerals increases costs for all users of the product including homeowners, commercial businesses, and governmental bodies.

Special Exception Permit Plan:

See the attached Special Exception Permit plan set for the RPA, wetland, and floodplain locations and for the General Development Plan. The Special Exception Area to be used for the mining operation is approximately 161.4 acres. This plan set also includes a phasing plan that demonstrates how the mining and reclamation process will be accomplished. Note that the current farming operations can continue activities on the portions of the site not under excavation. This phasing plan is a general depiction of the applicant's prediction of the mining operation's progression in the Special Exception Area.