



## COUNTY OF PRINCE WILLIAM

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PLANNING  
OFFICE

Stephen K. Griffin, AICP  
Director of Planning

April 12, 2006

### STAFF REPORT

**Applicant/Owner: Lehigh Portland Cement Company and Vulcan Materials Company**  
**Special Use Permit Application No : PLN #2005-00280**  
**Prince William County GPIN; 7392-79-9213, 7392-98-5389, 7392-78-7857, 7392-79-3726, 7393-71-8851, 7493-00-8779, and 7493-03-4403**  
**Special Use Permit Area: 536.500 +/- Acres (the "Property")**  
**Magisterial District: Brentsville**

**Planning Commission Public Hearing Date: April 19, 2006**  
**Staff Recommendation: Denial**

**I. Background is as follows:**

- A. Request - This is a request to allow the development and operation of a rock quarry and to allow an increase building height in the portion of the property zoned M-1 from 75 feet to 100 feet.
- B. Site Location - The special use permit site (the "SUP site") is located north of Warrenton Road, east of the Fauquier County Line, south of the Norfolk Southern Railroad and approximately 1.5 miles south of Route 28.
- C. Comprehensive Plan - The SUP site is designated AE, Agricultural or Estate and ER, Environmental Resource, in the Comprehensive Plan.
- D. Zoning/Acreage - The SUP site is zoned A-1, Agricultural and M-1, Heavy Industrial. The SUP site consists of approximately 536.50 acres, identified on County maps as GPIN #7392-79-9213, 7392-98-5389, 7392-78-7857, 7392-79-3726, 7393-71-8851, 7493-00-8779, and 7493-03-4403. The M-1 portion of the SUP site consists of approximately 459 acres according to the recent survey. The M-1 portion of the SUP site was rezoned from A-1 to M-1 (REZ #68-6) in February 15, 1968, without proffers. The A-1 portion of the SUP site consists of approximately 77.5 acres.

E. History of Previous Special Use Permit Request:

1. SUP #92-018, Vulcan Materials Company – The special use permit request to allow the extraction of mineral resources, in the form of a stone quarry, and related industrial/wholesale operation was denied by the Board on March 2, 1993. Transportation impacts and incompatible land use were reasons cited for denial
2. SUP #93-0021, Vulcan Materials Company – This application was rejected by the Planning Director, because the application did not meet the one-year re-filing period following denial of the similar request by the Board on March 2, 1993.
3. SUP #74-14, Leigh Portland Cement and Vulcan Materials – The special use permit request to allow for a stone quarrying and crushing operation was denied by the Board on December 18, 1973.

F. Surrounding Land Use & Zoning – Surrounding properties are zoned A-1, and land uses include agricultural and low density detached single-family dwelling units and vacant parcels on all sites. Nearby non-residential uses include The Family Off-Road Riders site (all terrain vehicle riding facility) to the north and the county police training facility to the southeast.

II. Current Situation is as follows:

- A. Office of Planning Recommendation - The Office of Planning recommends denial of SUP #PLN2005-00280, Prince William Quarry, subject to the conditions dated April 12, 2006, found in Attachment C. See Attachment B for the staff analysis.
- B. Public Hearing - A Planning Commission public hearing has been advertised for April 19, 2006

III. Issues in order of importance are as follows:

A. Comprehensive Plan

1. Long-Range Land Use - Is the proposed SUP consistent with the AE and ER classifications of the Comprehensive Plan?
2. Level of Service (LOS) - How does the proposal address the Prince William County Policy Guide for Monetary Contributions in place since June 1, 2004?
3. Environment – Will the proposed use have an impact on environmental resources? Will the proposed use produce excessive on level of noise and dust?
4. Transportation – Will the proposed use have impact on Route 28, nearby roads, and the railroad abutting the SUP site?

- B. Community Input - Have members of the community raised any issues?
- C. Legal Uses of the Property - What uses are allowed on the property? How are legal issues resulting from the Planning Commission action addressed?
- D. Timing - When must the Planning Commission take action on this application?

IV. Alternatives beginning with the staff recommendation are as follows:

- A. Recommend denial of SUP #PLN2005-00280, Prince William Quarry
  - 1. Comprehensive Plan
    - a) Long-Range Land Use - The land use classification will remain AE and ER. The M-1 district of the property is not intended to implement the AE classification. The purpose of the AE classification is to protect the existing agricultural lands and open space, as well as other important rural environmental resources, and to provide areas within the county where large-lot residential development is appropriate. The proposed land use is too intense for the area which is surrounded by residential and agricultural related uses.
    - b) LOS – LOS monetary contributions would be unavailable unless the property was rezoned or a special use permit was approved for a different use.
    - c) Environment – There would be no impact on environmental resources. Any impacts on the environment resulting from future development of the SUP site would be mitigated by the county and state regulations at the time of development.
    - d) Transportation – The SUP site could be developed to the uses permitted by right in the A-1 and M-1 districts. The applicant would be required to address the impacts of any development on county roads in accordance with the DCSM.
  - 2. Community Input - Notification of the application has been transmitted to adjacent property owners within 200 feet of the proposed use. The Planning Office has received the following input from the residents in the area as of the date of this report:
    - a) Noise associated with blasting and truck traffic
    - b) Air pollution due to dust and dirt
    - c) Truck traffic increase on Route 28 and its impact on commuters during the rush hours
    - d) Road safety will be reduced due to rock and stone being thrown from the trucks
    - e) Negative impact on the value of surrounding properties
    - f) Inadequate reclamation plan

- g) Undesirable use which will alter the rural character of the area
- h) Blasting could damage homes and other buildings in the vicinity of the SUP site and rupture the gas pipeline that runs along Route 28
- i) Negative impact on well water systems
- j) Crossing the railroad through the proposed access road to the SUP site could increase the number of railroad crossing accidents

There will be no community issues and/or concerns if the case is denied and the SUP site remains undeveloped.

- 3. Legal Uses of the Property - The property could be developed to the uses allowed by right in the A-1 and M-1 district without any proffers. Legal issues resulting from Planning Commission action are appropriately addressed by the County Attorney's office.
- 4. Timing - The Planning Commission has 90 days from April 19, 2006, the first public hearing date, to take action on this proposal. Denial of this application would meet the 90-day requirement.

B. Recommend approval of SUP #PLN2005-00280, Prince William Quarry, subject to the conditions dated April 12, 2006.

1. Comprehensive Plan

- a) Long-Range Land Use - The proposed use is for development and operation of a quarry, which is not a recommended use by the Comprehensive Plan in the AE land use classification. The SUP site is zoned M-1 and A-1. Although the proposed use is not a recommended use by the Comprehensive Plan, it is allowed by a special use permit in both M-1 and A-1 districts pursuant to the provisions of the Zoning Ordinance.
- b) LOS - The proposed use will generate additional fire and rescue service demand, impact on water quality, and transportation. The conditions of the SUP will mitigate the impact on fire and rescue, water quality, and transportation as follows:

Service	Contribution Per SF/AC	Total SF/AC	Total Contribution Amount
Fire & Rescue	\$0.53	18,100 Additional Contribution	\$10,136.00 \$9,864.00
Water Quality	\$75.00	Total Acreage: 536.50	\$40,237.50
Transportation	N/A	N/A	\$2,000,000.00
<b>Total</b>			<b>\$2,060,237.50</b>

The contributions are consistent with the Prince William County Policy Guide for Monetary Contributions in effect since June 1, 2004.

- c) Environment – The proposed use will impact the environmental resources on the SUP site, nearby wells, and may produce excessive levels of noise, vibration and dust. The proposed conditions are intended to mitigate the adverse impacts from the proposed use.
- d) Transportation – The proposed use will have impacts on Route 28, surrounding roads and the abutting railroad. However, the proposed conditions require the applicant to contribute \$2,000,000 for transportation improvements associated with Route 28, and make transportation improvements. The proposed public access road is not conditioned to be utilized until its acceptance into the public roadway system. There is a condition that there will be no crushed stone hauled by trucks until Route 28 is widened to four lanes. The conditions require 60% of the crushed stone hauling to be done by rail transport after Rt. 28 is widened. An operational plan will be coordinated with County school officials to reduce truck traffic at peak arrival and departure times at local schools. There will be no access to the SUP site from Route 606.

2 Community Input - Notification of the application has been transmitted to adjacent property owners within 200 feet of the proposed use. The Planning Office has received the following input from the residents in the area as of the date of this report:

- a) Noise associated with blasting and truck traffic
- b) Air pollution due to dust and dirt
- c) Truck traffic increase on Route 28 and its impact on commuters during the rush hours
- d) Road safety will be reduced due to rock and stone being thrown from the trucks
- e) Negative impact on value of the surrounding properties
- f) Inadequate reclamation plan
- g) Undesirable use which will alter the rural character of the area
- h) Blasting could damage homes and other buildings in the vicinity of the SUP site and rupture the gas pipeline that runs along Route 28
- i) Negative impact on well water systems
- j) Crossing the railroad through the proposed access road to the SUP site could increase the number of railroad crossing accidents

Most of the issues and concerns raised by the community are addressed by the proposed conditions.

3. Legal Uses of the Property - The property could be used for a quarrying operation pursuant to the SUP conditions. Legal issues arising from the Planning Commission's action are appropriately addressed by the County Attorney's office.
4. Timing - The Planning Commission has 90 days from April 19, 2006, the first public hearing date, to take action on this proposal. Approval of this application would meet the 90-day requirement

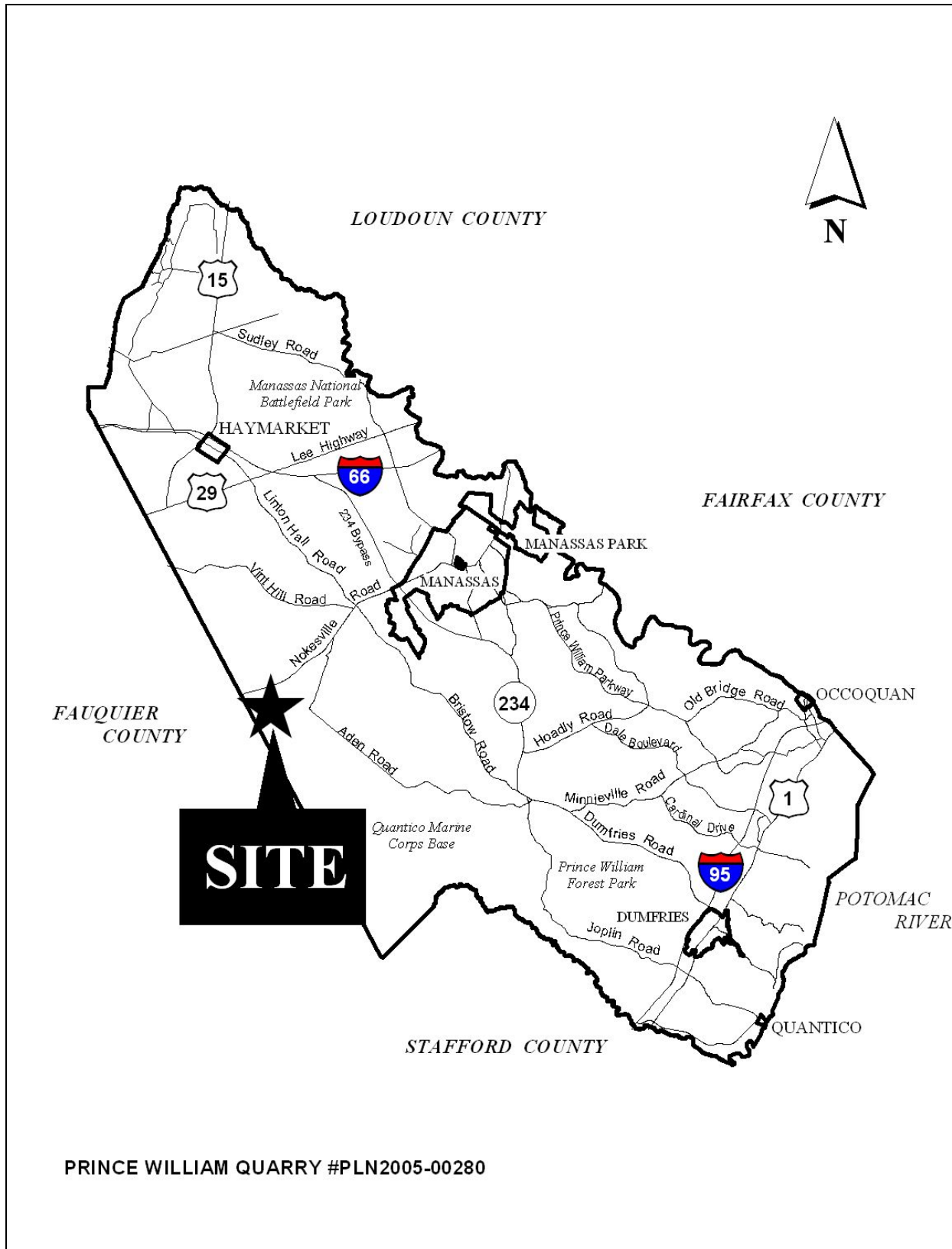
V. **Recommendation** is that the Planning Commission accept Alternative A and recommend denial to the Board of County Supervisors of SUP #PLN2005-00280, Prince William Quarry, subject to the conditions dated April 12, 2006.

Staff: Sid Rahnavard X6856

Attachment:

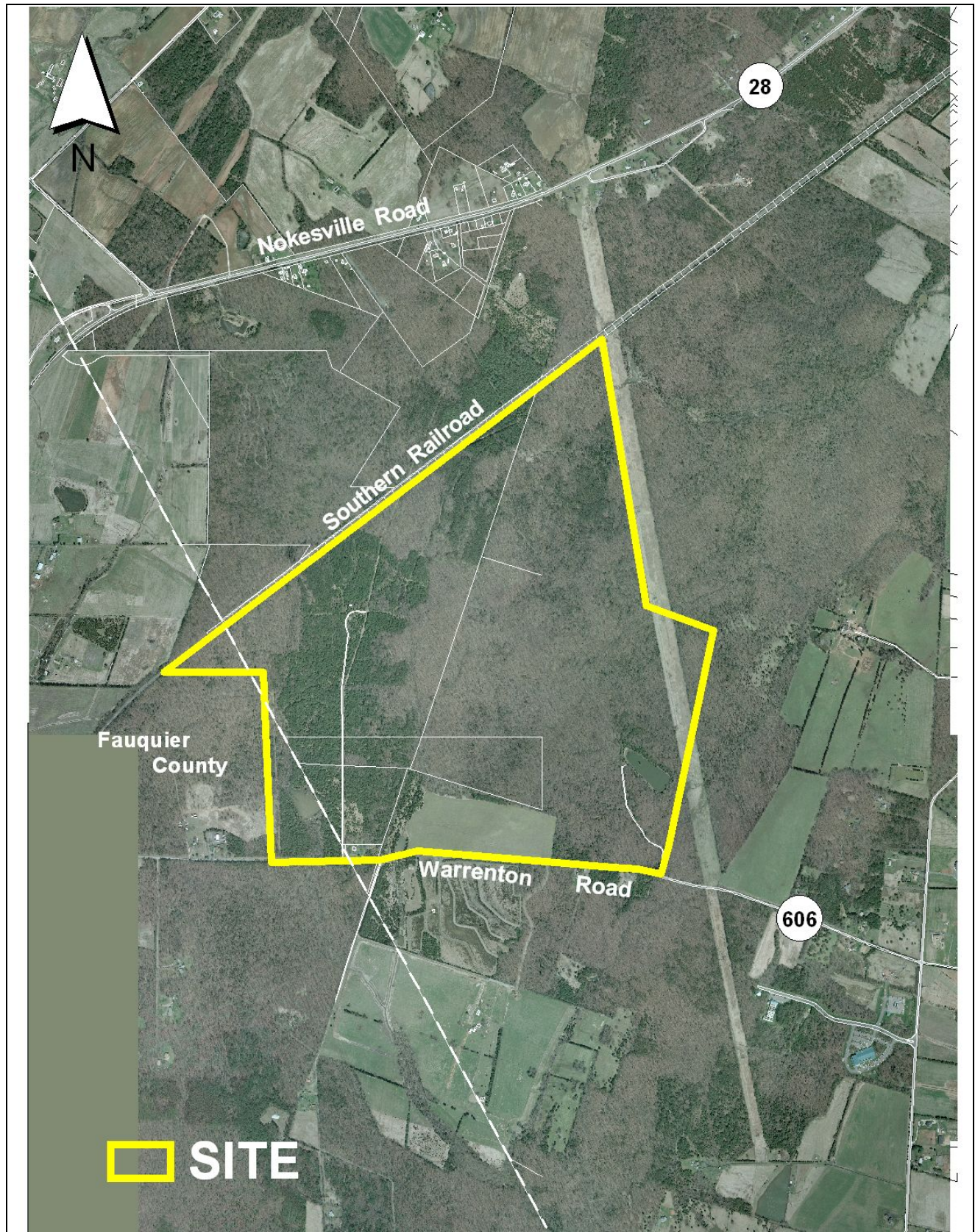
- A. Area Maps
- B. Staff Analysis
- C. Conditions
- D. Environmental Constraints Analysis

Attachment A – Maps  
VICINITY MAP



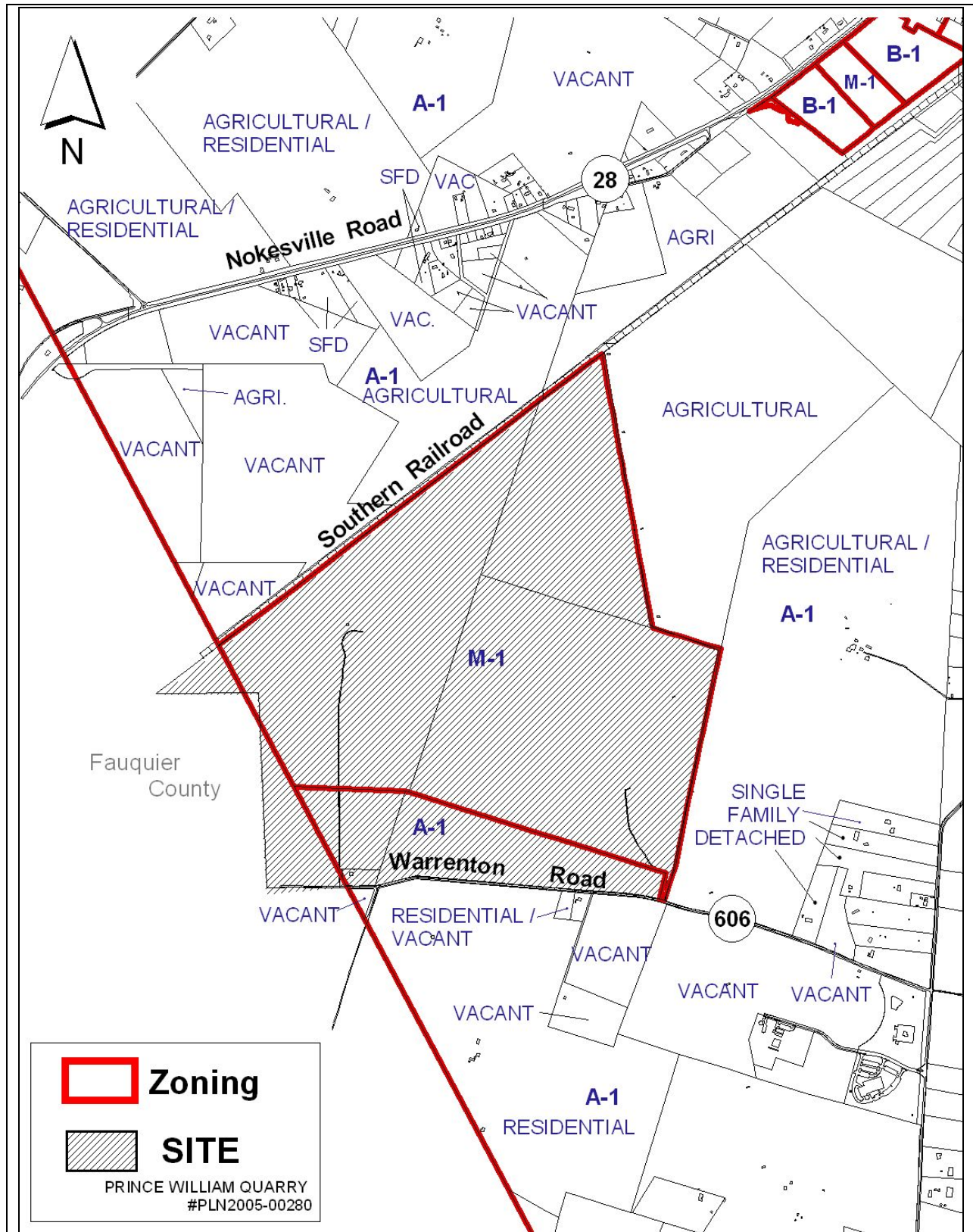
PRINCE WILLIAM QUARRY #PLN2005-00280

Attachment A – Maps  
AERIAL MAP

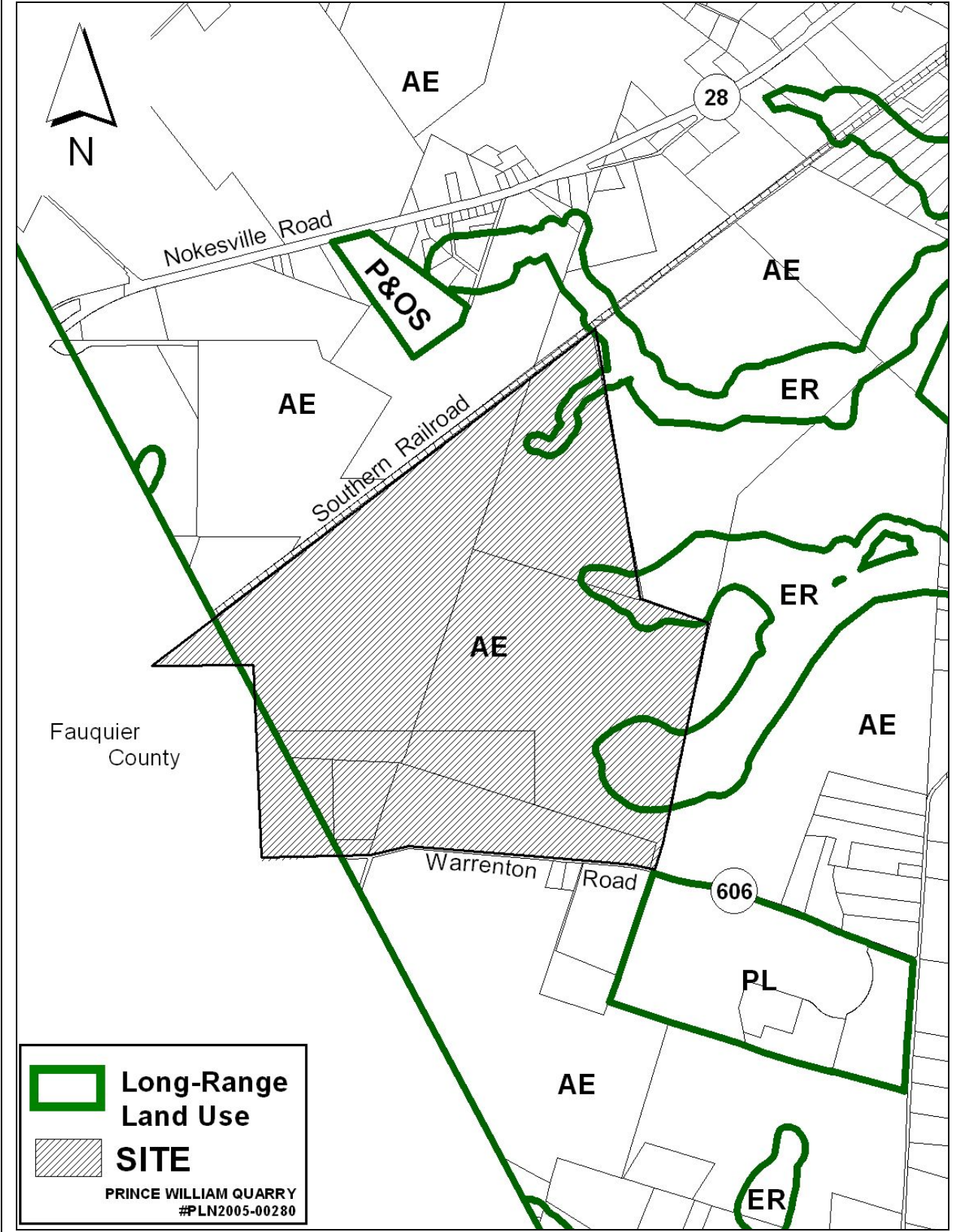




**Attachment A – Maps  
EXISTING LAND USE AND ZONING MAP**



Attachment A – Maps  
LONG-RANGE LAND USE MAP



<b>Part I. Summary of Comprehensive Plan Consistency</b>
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**Staff Recommendation: Denial**

The following is a summary of staff’s analysis of the applicant’s request. This analysis is based on the relevant Comprehensive Plan action strategies, goals, and policies. A complete analysis is provided in Part II of this report.

<u>Plan</u>	<u>Consistency</u>	<u>Reasons</u>
Long-Range Land Use	No	The SUP site is designated AE and ER on the Long-Range Land Use Plan Map. The SUP site is zoned M-1 and A-1. The purpose of the AE classification is to protect the existing agricultural lands and open space, as well as other important rural environmental resources, and to provide areas within the County where large-lot residential development is appropriate. A quarry is not an intended use in the AE classification. However, a quarry is allowed by a special use permit in the M-1 and A-1 districts pursuant to the provisions of the Zoning Ordinance.
Community Design	Yes	Proposed conditions require that the SUP site to be buffered by a 50-foot-tall landscaped berm to screen the facility from the surrounding land uses. The horizontal limit of the quarry faces will be a minimum of 300 feet from the property lines, and some of the processing facilities will not be closer than 400 feet from the property lines.
Cultural Resource	Yes	The SUP site contains cultural resources. The proposed conditions require archeological investigation prior to the final site plan submission, and in the event the evaluation determines a site is significant, a mitigation plan will be developed in consultation with the County Archeologist.
Environment	No	The proposed use will impact the environmental resources on the SUP site by eliminating approximately 11.8 acres of the existing wetlands. The proposed use may impact the nearby wells, and may produce excessive level of noise, vibration and dust. The mitigation measures proposed by the applicant are the minimum requirements set forth by the county, state and federal regulations. The baseline study area (800 feet required by DMME), which has been expanded to cover 3,000 feet from the site boundaries is proposed by staff.
Economic Development	Yes	The proposal is for an existing regional business which will be relocate in the County.

## Attachment B - Staff Analysis

Fire and Rescue	Yes	The northern portion of the SUP site is located within 2.5 minutes response time, but the southern portion is not. The SUP conditions require a monetary contribution of \$20,000 to mitigate the impact of the use on fire and rescue services. The monetary contribution amount exceeds the amount recommended by the Prince William County Policy Guide for Monetary Contributions. No explosive agents will be stored on the SUP site.
Potable Water	No	Public water is not available to the SUP site. No well location has been shown on the SUP Plan. The applicant has proposed to use bottle water for employees and visitors, and comply with the County and State Health Department, and Department of Environmental Quality requirements concerning use of on-site well water for the proposed plant operations and facilities. The applicant's proposal has not been approved by the Health Department.
Sewer	No	The SUP site has to be served by a private wastewater system. No drainfields are provided and shown on the SUP Plan. Instead, the applicant has proposed to comply with the County and State Health Department, and Department of Environmental Quality requirements concerning use of all on-site septic system drainfields or other alternative on-site sewage disposal facilities. The applicant's proposal has not been approved by the Health Department.
Transportation	No	The applicant is proposing to construct one public access road from Route 28 to the SUP site. In addition to making frontage improvements, the applicant is proposing a monetary contribution in the amount of \$2,000,000 for transportation improvements associated with Route 28, necessary right-of-way dedication along the access road onto Route 28 and Route 606, construction of turn lanes within the right-of-way of Route 28, to provide all required road crossing signals and signage for a private railroad crossing, including providing maintenance and liability for the railroad crossing. The applicant is also proposing no truck deliveries until Route 28 is improved to a 4-lane divided roadway, and developing an operational plan to reduce truck traffic at peak times at local schools. However, the applicant has not agreed to restrict the days and hours of the deliveries by trucks, there is no commitment for hauling of crushed stone by rail transport prior and after completion of the Route 28 improvements and its widening into 4-lanes, there is no firm commitment for installation of a traffic signal at the access road onto Route 28, railroad officials have not commented on accepting the proposed crossing and its maintenance and there is no guarantee that Aden and Fitzwater roads will not be used by trucks for non-local deliveries.

<b>Part II. Comprehensive Plan Consistency Analysis</b>
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The following table summarizes the area characteristics (see maps in Attachment A):

<b>Direction</b>	<b>Land Use</b>	<b>Long Range Future Land Use Map Designation</b>	<b>Zoning</b>
North	Norfolk Southern Railroad, vacant, agricultural, detached single-family dwelling units, All Terrain Vehicle Riding Facility (vacant).	AE, ER	A-1
South	Vacant, Warrenton Road	AE, PL	A-1
West	Agricultural, detached single-family dwellings	Agricultural (Fauquier County)	N/A
East	Detached single-family dwellings, agricultural	AE, ER	A-1

**Long-Range Land Use Plan Analysis**

Through wise land use planning, the County ensures that landowners are provided a reasonable use of their land while the County is able to judiciously use its resources to provide the services for residents and employers’ needs. The Long Range Land Use Plan sets out policies and action strategies that further the County’s goal of providing a land use pattern that encourages fiscally sound development and achieves a high quality living environment. In addition to delineating land use designations on the Long Range Land Use Map, the plan includes recommendations relating to ensuring adequate land for economic development opportunities, providing for a diverse housing market, protecting against the encroachment of incompatible land uses, encouraging infill development within the development area, protecting environmentally sensitive lands, promoting mixed use development where appropriate, encouraging the provision of adequate public facilities for existing and planned development, preserving valuable open space and environmental resources, encouraging higher density development near existing and future transit facilities, and utilizing the sector planning process to provide more detailed recommendations where appropriate.

The SUP site is located in the Rural Area, classified AE, Agricultural or Estates and ER, Environmental Resource on the Long-Range Land Use Plan Map. The purpose of creating the Rural Area of the county is to contain agricultural, open space, forestry and large-lot residential land uses, as well as occasional small-scale convenience retail centers and community facilities, in order to protect the county’s financial health, provide an exceptional quality of life, improve the value of land and existing development properties, preserve open space, support and expand business.

## Attachment B - Staff Analysis

The SUP site is zoned A-1, Agricultural and M-1, Heavy Industrial. The SUP site comprises approximately 536.50 acres, identified on County maps as GPIN #7392-79-9213, 7392-98-5389, 7392-78-7857, 7392-79-3762, 7393-71-8851, 7493-00-8779, and 7493-03-4403. The M-1 portion of the SUP site comprises approximately 459 acres which was rezoned from A-1 to M-1 (REZ #68-6) in February 15, 1968 without any proffers. The acreage referenced in the Board Resolution is 447.5 acres, however, the recent survey of the properties included in the rezoning reflect the acreage as 459 acres.

<b>Long-Range Land Use Plan Classification</b>	<b>Land Uses Intended</b>
ER	This classification is explained and defined in detail within the Environment Plan. Therein are located goals, policies, action strategies, and other plan components designed to protect the sensitive nature of the identified resources. Environmental resources include all 100-year floodplains as determined by the Federal Emergency Management Act (FEMA) flood hazard use maps, or natural 100-year floodplains as defined in the DCSM, and resource protection areas (RPAs) as defined by the Chesapeake Bay Preservation Act. In addition, areas with 25 percent or greater slopes, areas with 15 percent or greater slopes in conjunction with soils that have severe limitations, soils with a predominance of marine clays, public water supply sources, and critically erodible shorelines and stream banks are considered environmental resources. Allowable density precludes the development of habitable structures within 100-year floodplains. The allowable dwelling unit density for a property shall be calculated based on the area outside the floodplain and the Chesapeake Bay RPAs. The allowable dwelling unit density areas of the property encumbered by 100-year floodplain and Chesapeake Bay RPAs shall be based upon the maximum density permitted by the existing zoning of the property at the time of adoption of the Comprehensive Plan. Other relevant comprehensive plan components, such as the capacity of the transportation network, environmental constraints, and zoning requirements must be addressed, as well, in determining the appropriate number of dwelling units on a property.
AE	The purpose of the AE classification is to protect the existing agricultural lands and open space, as well as other important rural environmental resources, and to provide areas within the County where large-lot residential development is appropriate. The maximum density is one dwelling per 10 acres

This is a request to allow the development and operation of a rock quarry on the SUP site and increase building height in the M-1 district from 75 feet to 100 feet. The height increase is allowed pursuant to Section 32-400.03.2 of the Zoning Ordinance. The development will include a stone crushing plant and various sorting equipment typically associated with a quarry.

### **Proposal's Strengths**

- Soil Type – The soil types on the property are mostly suitable for a quarry operation to extract and process diabase rock in the areas indicated on the SUP plan.
- Development Phasing Plan - The proposed mining of the SUP site will be in accordance with the phasing plan as shown on the GDP.
- Land Use and Zoning District –The SUP site is zoned M-1 and A-1. Although the proposed use is not a recommended use by the Comprehensive Plan, it is allowed by a special use permit in both M-1 and A-1 districts pursuant to the provisions of the Zoning Ordinance.
- Prohibited Uses – The proposed conditions prohibit non-quarry uses, including asphalt concrete plants, landfill and junkyard.
- Rezoning of the Property At the Termination of the Quarry Operation - The applicant has agreed to a condition to file a rezoning application for the entire SUP site to a zoning district consistent with the Comprehensive Plan designation at the time of quarry termination.

### **Proposal's Weaknesses**

- Long-Range Land Use Plan. A quarry is not an intended use in the AE classification for the following reasons:
  - The proposed use is a large-scale industrial use, which is too intense for the rural area. Most of the existing properties surrounding the proposed SUP site are residential and agricultural related uses.
  - The proposed use will destroy valuable environmental resources.
  - The proposed use will diminish the nearby resident's quality of life.

**On balance**, this application is found to be inconsistent with the relevant components of the Long-Range Land Use Plan.

## **Community Design Plan Analysis**

An attractive, well-designed County will attract quality development, instill civic pride, improve the visual character of the community, and create a strong, positive image of Prince William County. The Community Design Plan sets out policies and action strategies that further the County's goals of providing quality development and a quality living environment for residents, businesses and visitors, and creating livable and attractive communities. The plan includes recommendations relating to building design, site layout, circulation, signage, access to transit, landscaping and streetscape, community open spaces, natural and cultural amenities, stormwater management, and the preservation of environmental features.

### **Proposal's Strengths**

- **Site Layout** - The SUP plan is conditioned and shows a detailed site design, including plant location and landscaping.
- **Entrance Feature** –The applicant has proposed to construct an entrance feature at the Prince William Quarry entrance road onto Route 28 on the Park Authority's property to include a "Welcome to Prince William County" sign and the name of the park (Lehigh Park ), and landscaping with a mixture of evergreen, deciduous and ornamental trees as shown on the SUP plan.
- **Landscaping and Buffering** – To reduce the adverse visual impact of the proposed use in the surrounding area, the applicant has proposed a 300-foot wide perimeter berm with fencing and landscaping as shown on the GDP.

### **Proposal's Weaknesses**

- None identified.

**On balance**, this application is found to be consistent with the relevant components of the Community Design Plan.

## **Cultural Resources Plan Analysis**

Residents of and visitors to Prince William County are aware of the important links of the County today with the rich heritage of the past because of the preservation and enhancement of our cultural resources. The Cultural Resources Plan sets out policies and action strategies that further the County's goal of identifying and protecting our historical, archaeological, architectural and cultural resources, including those significant to our minority community, for the benefit of citizens and visitors. The plan includes recommendations relating to the identification of assets, preservation through the use of federal, state, local, and private initiatives, mitigation of negative impacts, and public education/awareness programs. Land use applications should include appropriate records review for prehistoric and historical resources, as well as Phase I, II, and III level archaeological studies as appropriate.



The project area has not been subjected to a Phase I archaeological survey. However a preliminary report was prepared (entitled *A Preliminary Study of the Vulcan Quarry, Nokesville, Virginia*, by Michael Petraglia, Christopher Martin, and Madeleine Pappas, 1991). The preliminary report identified one Civil War fortification, state site number 44PW0576. The site appears to be intact. More Civil War sites are likely present on the property. There is also a high potential for finding historic sites from other time periods and there is a high potential for finding prehistoric sites. Twelve archaeology sites have been identified within a one-mile radius of the project area. Archaeological survey and evaluation is warranted.

### **Proposal's Strengths**

- Archeological Studies – The proposed conditions require the applicant to employ a qualified professional to conduct archeological studies and comply with the recommendations of the study prior to submission of a final site plan for review.

### **Proposal's Weaknesses**

- None identified.

**On balance**, this application is found to be consistent with the relevant components of the Cultural Resources Plan.

## **Economic Development Plan Analysis**

An enhanced, diverse nonresidential tax base creates quality jobs, allowing people to live, work, and recreate in Prince William County. The Economic Development Plan sets out policies and action strategies that further the County's goal of attracting and fostering the growth of environmentally sound industries to create quality jobs and diversify the nonresidential tax base, creating a climate where citizens can live and work in Prince William County. The plan includes recommendations relating to business attraction, retention and expansion, the provision of adequate infrastructure, redevelopment of less competitive areas, telecommuting and other information-age opportunities, and recognition of tourism as an industry.

### **Proposal's Strengths**

- Relocation of Existing Business - The proposed use is a regional business, an exporter of materials, and importer of revenues into the county. This application permits an existing business to expand and relocate in the county.

### **Proposal's Weaknesses**

- None identified.

**On balance**, this application is found to be consistent with the relevant components of the Economic Development Plan.

**Environment Plan Analysis**

Prince William County has a diverse natural environment, extending from sea level to mountain crest. Sound environmental protection strategies will allow the natural environment to co-exist with a vibrant, growing economy. The Environment Plan sets out policies and action strategies that further the County's goal of preserving, protecting and enhancing significant environmental resources and features. The plan includes recommendations relating to the incorporation of environmentally sensitive development techniques, improvement of air quality, identification of problematic soil issues, preservation of native vegetation, enhancement of surface and groundwater quality, limitations on impervious surfaces, and the protection of significant viewsheds.

The applicant is proposing to use the +/-536.5 acres on this site to develop a mining quarry. Excavation pit areas will be constructed on a significant area of the property. Phasing of the site development and pit excavation will be done over an estimated 20 year span. Identification of streams and wetlands on this site has been submitted with a Perennial Flow determination (#05-00404—Prince William Quarry) and Preservation Area Site Assessment (PASA #05-00405—Prince William Quarry). Confirmation of the Resource Protection Areas (RPA) on this site has been finalized with some RPA recommended for removal. A site visit by staff with an environmental scientist was performed on September 1, 2005, and streams on the site were investigated. The non-perennial nature of the stream draining from the onsite pond in the southeast of the site was confirmed as only a shallow drainage way with no flowing water and RPA was therefore not field verified in that area.

The SUP site is located in Subwatershed # 302 which drains into Run in the Cedar Run watershed.

**Proposal's Strengths**

- Stream Preservation – The proposed conditions require protection of a stream system in the central portion of the site (Channel 004) is proposed to be preserved with this development.
- Monetary Contribution for Water Quality Monitoring - The proposed conditions require a monetary contribution of \$40,237.50 for water quality monitoring purpose.
- Buffers, Berms, and Landscaping –Varying width open space and natural landscape buffer that exceeds the minimum required buffer width of 50 feet shall be located and maintained around the perimeter of the SUP site as shown on the SUP Plan.
- Supplemental E&S Controls Adjacent to RPA and Wetland - The proposed conditions require the applicant to install a double layer of siltation controls (super silt fencing) or other similar devices for erosion/sedimentation control at the vicinity of the field verified RPA and the wetlands.

- Noise – Many concerns have been registered by citizens considering the impact of noise on the adjacent residences from the proposed quarry operation. Impacts from operations within the SUP site area are not anticipated to produce noise that will disturb adjacent uses. The proposed conditions require blasting monitoring in accordance with the state mandated DMME regulations which require monitoring at the nearest off-site structure (which currently measures 800 ft.). Use of explosives to crack large boulders (“boulder blasting”) is prohibited. The applicant shall be required to use a hydraulic rock breaker or equivalent method of cracking boulders other than blasting.
- Water Quality Protection – The proposed conditions require the applicant to prevent leakage of any petroleum or hazardous substances into runoff, and to protect water quality, a pretreatment device acceptable to the Watershed Management Branch of the Department of Public Works shall be provided in the areas where such hazardous materials are stored.

### **Proposal’s Weaknesses**

- Disturbance of RPA & Wetlands - Approximately 21.5 acres of wetlands and 4.6 acres of open water (pond) habitat have been identified during the wetlands delineation field study. Approximately 11.8 acres of wetlands are proposed to be disturbed during this phased development. Wetland mitigation for these wetlands impacts has been proposed and will require state and federal permits for the disturbance. Some of the wetland and open water disturbance will occur in headwater areas of two of the stream systems on this site (Channel 002 and Channel 003). These areas are currently mapped as RPA but are proposed for removal with the submitted PASA. Even if these headwater areas are removed from RPA protection, their contribution to the hydrology of the stream system should be considered and protection considered. The applicant’s response to earlier review comments dated October 20, 2005, states that the applicant will explore means of preserving flows in offsite stream by diverting clean treated water from the site. However, the applicant has not proposed a means to preserve hydrology of the onsite drainage ways.
- Structural Damage to Nearby Buildings and Structures – The current DMME limits on blasting intensity are designed to provide zero risk of structural damage located within 800 feet of quarry pit. The applicant has not agreed to extend the well & structural assurance program to 3000' from the boundaries of the SUP site to include more residential and non-residential buildings and structures in the assurance program.
- Dust Control - Dust Control is of concern in the vicinity of the proposed quarry. The applicant is proposing to employ wet suppression to control dust emission from the process equipment and roadways. The release of treated water into the stream system has not been addressed by the Applicant at this time.
- Baseline Groundwater Characterization Analysis – Contamination and damage to underground water are of concern in the vicinity of the proposed quarry. The applicant is proposing to compile baseline groundwater data from the area located within 2000 feet of the proposed quarry pits. However, this inventory cover all the properties located within 3,000 feet from the boundaries of the SUP site to include majority of the existing and future wells.

## Attachment B - Staff Analysis

- SWM/BMP Facility – The Applicant has not identified and/or provided any on-site SWM/BMP facilities on the SUP plan. Instead, the applicant has proposed to provide stormwater management and best management practice (BMP) facilities in compliance with applicable DCSM requirements and DMME requirements, at the final site plan stage.
- Poor Soil Type - Soil type 31C is mapped on a portion of this site and has a high shrink-swell potential. The effect of blasting on this soil type and other soils has not been addressed.

**On balance**, this application is found to be inconsistent with the relevant components of the Environment Plan.

### **Fire and Rescue Plan Analysis**

Quality fire and rescue services provide a measure of security and safety that both residents and businesses have come to expect from the County. The Fire and Rescue Plan sets out policies and action strategies that further the County's goal of providing timely response to fire, medical, hazardous material and natural disaster emergencies. The plan includes recommendations relating to equipment and facility needs to meet desired levels of service and encouraging the use of fire and safety features beyond the minimum required by the Virginia Uniform Statewide Building Code.

The proposed new development and operational facilities, in the northern portion of the property, is 2.45 minutes from the Nokesville Fire and Rescue station #5. It is within the travel time LOS standard for fire and rescue facilities. The southern portion of the property does not meet LOS standards.

### **Proposal's Strengths**

- Level of Service (LOS) Travel Time – The northern portion the SUP site is located within 2.5 minutes travel time from the nearest fire and rescue station, but the southern portion is not. To mitigate the impact of the development on fire and rescue, the proposed conditions require a \$20,000.00 monetary contribution to mitigate impacts on the fire and rescue system from the proposed use. The monetary contribution amount exceeds the amount recommended by the Prince William County Policy Guide for Monetary Contributions.
- Prohibition of Storage of Blasting Agents– The proposed conditions found in Attachment C prohibit storage of blasting agents on the SUP site.
- Safeguarding Off-Site Gas Line – The proposed conditions do not allow any blasting closer than four hundred (400) feet from the existing CNG pipeline easement located on the east side of the quarry property.

### **Proposal's Weaknesses**

- None identified.

**On balance**, this application is found to be consistent with the relevant components of the Fire and Rescue Plan.

### **Potable Water Plan Analysis**

A safe, dependable drinking water source is a reasonable expectation of County residents and businesses. The Potable Water Plan sets out policies and action strategies that further the County's goal of providing an economically and environmentally sound drinking water system. The plan includes recommendations relating to system expansion, required connections to public water in the Development Area, and the use of private wells or public water in the rural area.

The SUP site is located in the Rural Area, and public water is not available to the subject site.

### **Proposal's Strengths**

- None identified.

### **Proposal's Weaknesses**

- **Well Water Service** - Public water is not available to the SUP site. No well location has been shown on the SUP Plan. The applicant has proposed to use bottled water for employees and visitors, and comply with the County and State Health Department, and Department of Environmental Quality requirements concerning use of on-site well water for the proposed plant operations and facilities. The applicant's proposal has not been approved by the Health Department.

**On balance**, this application is found to be inconsistent with the relevant components of the Potable Water Plan.

### **Sewer Plan Analysis**

Appropriate wastewater and sanitary facilities provide needed public health and environmental protections. The Sewer Plan sets out policies and action strategies that further the County's goal of providing an economically and environmentally sound sanitary and stormwater sewer system. The plan includes recommendations relating to system expansion, required connections to public sewer in the Development Area, and the use of either private or public sewer systems in locations classified as Semi-Rural Residential (SRR), as well as the rural area.

### **Proposal's Strength**

- None identified.

**Proposal's Weaknesses**

- The SUP site will have to be served by a private wastewater system. No drainfields are shown on the SUP Plan. Instead, the applicant has proposed to comply with the County and State Health Department, and Department of Environmental Quality requirements concerning use of all on-site septic system drainfields or other alternative on-site sewage disposal facilities. The applicant's proposal has not been approved by the Health Department.

**On balance**, this application is found to be inconsistent with the relevant components of the Sewer Plan.

**Transportation Plan Analysis**

By providing a multi-modal approach to traffic circulation, Prince William County promotes the safe and efficient movement of goods and people throughout the County and surrounding jurisdictions. The Transportation Plan sets out policies and action strategies that further the County's goal of providing a complete, safe and efficient multi-modal circulation system that includes sufficient capacity to meet the demands placed upon it. The plan includes recommendations relating to improving existing service levels, increasing capacity of the existing system, minimizing negative impacts to environmental and cultural resources, supporting targeted industries and major activity centers, exploring innovative funding mechanisms, promoting regional approaches to transportation issues, and promoting transit opportunities. At a minimum, projects should include strategies that result in a LOS of "D" or better on all roadways, the dedication of planned rights-of-way, the provision of pedestrian pathways, and access to mass transit and other commuter facilities as appropriate.

The applicant seeks to develop and operate a quarry for the extraction and processing of mineral resources, principally stone. The property subject to this application consists of +/-536.5 acres. The property is located directly south of the Norfolk Southern Railroad line, east of the Fauquier County line and north of Warrenton Road (Route 606). The project plans to gain access through a public access road from Nokesville Road (Route 28). A Traffic Impact Analysis (TIA) was included with this application to determine the impacts of the proposed use on the surrounding roadway network.

Route 28 (Nokesville Road) is currently a two-lane roadway. According to the applicant's TIA, this segment of Route 28 (from Fitzwater Dr. to Fauquier Dr.) has 14,696 vpd with a level of service of D. VDOT's 2004 traffic counts have 15,000 vpd for this segment of Route 28. According to the County's model, this segment of Route 28 has a level of service E. Under future conditions, Route 28 is planned to be widened to 4-lanes with a median. According to the County's 2025 transportation model, Route 28 will perform at LOS D or better if widened to 4-lanes.

### **Proposal's Strengths**

- Access – The access to the SUP site is limited to one from Route 28. The proposed conditions require the entrance road to be constructed as a public road in accordance with the DCSM standards in the general location shown on the SUP Plan, and within eighteen months of approval of the SUP. The condition also prohibits any access to the SUP site from Route 606.
- Monetary Contribution - The applicant shall contribute \$2,000,000 to the Board of County Supervisors of Prince William County for transportation improvements associated with Route 28.
- Turn Lanes - The proposed conditions require the applicant to construct the acceleration and deceleration lanes on the eastbound lane of Route 28 to the proposed entrance and a left turn lane on westbound Route 28 at the proposed access point as shown on the SUP plan in accordance with the DCSM and VDOT standards.
- Road Crossing Signals and Signs - The proposed conditions require the applicant to construct the private railroad crossing in accordance with all railroad policies and procedures, provide all required road crossing signage and signals as required by applicable County and/or railroad policies and procedures, and an execute a maintenance agreement for a private railroad crossing with authorized railroad officials.
- Stubbed Entrance to Lehigh Park - The applicant has agreed to provide a stubbed entrance to Lehigh Park at a location acceptable to the Park Authority.
- Right-of-Way Dedication - The proposed conditions require the applicant to dedicate, at no cost, right of way up to twenty five feet (25') from the centerline of Route 606, and necessary easements for the future widening of Route 606 as detailed on the SUP plan. In addition, the applicant will acquire any additional right of way necessary to construct the Route 28 improvements.
- Truck Traffic Management - The proposed conditions require the applicant to coordinate with the appropriate County school officials to develop an operational plan to reduce customer truck traffic at peak arrival and departure times at local schools including the Nokesville Elementary School and the Brentsville High School. The applicant shall comply with the truck operational procedure set forth in the proposed conditions to ensure safety on the county roads. In addition, the applicant shall maintain a citizen complaint log to register any concerns and complaints related to the operation of the quarry including the use and operation of vehicles serving the quarry.

**Proposal's Weaknesses**

- Off-Site Intersection Improvements - The applicant has not provided mitigation measures for the intersections of Rt.28 at Fitzwater Drive and Rt.28 at Fauquier Drive.
- Use of The Access Road - The applicant is proposing to utilize the public access road without its acceptance into the public roadway system. The proposed condition prohibits the use of the access road without its acceptance into the public roadway system. The applicant has not accepted this condition.
- Rail Transport – The applicant has not committed to haul 100% of the crushed stone by rail transport, after completion of the Route 28 improvements and it's widening to four lanes from Fitzwater Drive to the Route 234 By-Pass.
- Truck Transport - The applicant has not committed to limit hauling of the crushed stone by truck to 40%, after completion of the Route 28 improvements and it's widening to four lanes from Fitzwater Drive to the Route 234 By-Pass.
- Use of Fitzwater and Aden Roads for Non-Local Deliveries By Trucks – The applicant has proposed in cooperation with County staff, to petition VDOT to post “No Through Truck” signage along Fitzwater Drive and Aden Road. Since the outcome of this proposal is unknown, there is no guarantee that these roads will not be used for non-local deliveries.
- TIA Analysis - The executive summary of the TIA states “Prince William Quarry is expected to be phased with operations starting in 2010 and continuing to a 2020 build out.” However, the TIA only analyzes two “future year” scenarios of 2010 and 2020. It is not clear what is going to occur between 2010 and the build out of 2020.

**On balance**, this application is found to be inconsistent with the relevant components of the Transportation Plan.

**Materially Relevant Issues**

This section of the report is intended to identify issues raised during the review of the proposal, which are not directly related to the policies, goals, or action strategies of the Comprehensive Plan, but which are materially relevant to the County's responsibilities in considering land use issues. The materially relevant issues in this case are as follows:

- Safety and Security Measures - The Police Department has recommended the safety and security measures that should be incorporated into the design of the site. These measures are available in the Planning Office for the applicant's reference.



**Agency Comments**

The following agencies have reviewed the proposal and their comments have been summarized in relevant Comprehensive Plan chapters of this report. Individual comments are in the case file in the Office of Planning:

Planning Office, Urban Designer  
Public Works, Environmental Services Division  
Public Works, Transportation Division  
VDOT  
Police Department  
Historical Commission  
County Archeologist  
Health Department  
Prince William Park Authority  
Fire and Rescue Department  
Zoning Administration  
County Urban Designer  
Fauquier County  
Norfolk Southern Railroad

**SPECIAL USE PERMIT CONDITIONS**  
**PRINCE WILLIAM QUARRY**

**Applicant/Owner:** Lehigh Portland Cement Company and Vulcan Materials Company  
**Special Use Permit Application No :** PLN #2005-00280  
**Prince William County GPIN;** 7392-79-9213, 7392-98-5389, 7392-78-7857, 7392-79-3762,  
7393-71-8851, 7493-00-8779, and 7493-03-4403  
**Special Use Permit Area: 536.5 +/- Acres (the “Property”)**  
**Magisterial District: Brentsville**

April 12, 2006

The following conditions are intended to render the application fully consistent with the applicable Chapters of the Comprehensive Plan and the surrounding areas. For the purpose of these Conditions, the Special Use Permit Plan (“SUP Plan”) shall be defined as PLN#2005-00280, dated January 7, 2005 and revised through April 7, 2006, including sheets 1 through 9 prepared by Dewberry and Davis, Inc. The sheets that make up the SUP Plan include the: cover sheet (sheet 1), Special Use Permit Plan (sheet 2), Environmental Constraints Analysis (sheet 3), Typical Perimeter Landscaping and Entrance Plan (sheet 4), Development Phasing Plan (sheet 5), Conceptual Future Land Use Plan (sheet 6), Plant and Stockyard Area Illustrative (sheet 7), Route 28 Improvements (sheet 8), and Nearest Well Locations Exhibit (sheet 9). The Conceptual Future Land Use Plan may be modified at the termination of quarrying activities at which time the Applicant agrees to file an application for rezoning of the entire Special Use Permit (“SUP”) site to a zoning district consistent with the Comprehensive Plan designation in effect at that time. Consistent with Commonwealth of Virginia law, “Termination of the quarrying activities” shall be defined as when the site is reclaimed, the mining permit bond is released by the Virginia Department of Mines, Minerals and Energy (“DMME”) and the DMME mining permit is terminated. A final site plan may include all of the quarry phases which shall occur sequentially, as included on sheet 5 of the SUP Plan. Consistent with Section 700.56 of the Zoning Ordinance, the final site plan shall be submitted within one year from the time the Prince William County Board of Supervisors approval the SUP (“SUP approval date”) and commencement of the use shall occur within five years from the site plan approval date. The issuance of the site development permit from the Planning Office for the construction of the access road and grading of the plant and stock pile area shall constitute commencement of the use.

**General**

1. In the event of conflict of the conditions of SUP and SUP Plan and any provisions of the Zoning Ordinance or the Design and Construction Standards Manual (“DCSM”), the more restrictive standards shall apply, unless specifically waived or otherwise specified in these Conditions. This SUP and all conditions governing the development and operations of the Prince William Quarry shall be in substantial conformance, subject to final engineering requirements, with SUP Plan, PLN#2005-00280, dated January 7, 2005 and revised through April 7, 2006, consisting of sheets 1 through 9 prepared by Dewberry and Davis, Inc. This SUP approval is only for development and operation of a rock quarry and quarrying related activities on the site. This SUP approval allows the maximum structure height in the M-1 District to be increased from 75 ft. to 100 ft. in the area defined as the Plant and Stockpile Area on the SUP Plan pursuant to Section 32-400.03-2 of the Zoning Ordinance. The development will include but not be limited to a stone crushing plant, various sorting equipment, office, shop and employee buildings typically associated with a quarry.

**Attachment C – Conditions  
Dated April 12, 2006**

Only quarry related operations shall be permitted on this property; no other non-quarry uses, including asphalt and concrete plants, shall be permitted.

2. The Applicant shall file annually, by the end of each calendar year with the Prince William County (“PWC”) Planning Office, a copy of a liability insurance policy by a corporate insurance company authorized to do business in the Commonwealth.
3. The Applicant shall comply with all Federal, State and County regulations regarding quarry operations conducted at the Prince William Quarry.

**Mine Permit**

4. Prior to the county approval of the final site plan, the applicant shall obtain a mine permit from the Virginia Department of Mines, Minerals and Energy (“DMME”).

**Termination of Quarry Operations – Reclamation Plan and Conceptual Future Land Use Plan**

5. A reclamation plan shall be included with the mine permit application and shall be approved by DMME prior to and as a condition of, the County’s approval of the final site plan. A copy of the reclamation plan shall be provided to the PWC Planning Office.
6. Upon completion of all quarrying operations a Reclamation Plan will be carried out which may include vegetative planting ground cover for all disturbed but unquarried areas. Grading and drainage of the re-vegetated previously disturbed but unquarried areas will be established to prevent water pockets or undue erosion and to allow stormwater runoff to leave the property at natural drainage points.
  - (a) The Applicant agrees that during the operation of the quarry and after termination of quarry operations, the property shall not be used as a landfill or junkyard.
  - (b) At the termination of quarrying activities, the Applicant agrees to notify the Planning Director and within 90 days of the termination of quarrying activities file an application for rezoning of the entire SUP site to a zoning district consistent with the Comprehensive Plan designation in effect at that time. The Applicant shall diligently seek the County’s approval of the rezoning request. The rezoning is not required to be consistent with the Conceptual Future Land Use Plan submitted as part of the SUP Plan.
7. The Applicant shall participate in the Commonwealth’s Mineral Reclamation Fund in accordance with Section 25-31-320. Of the Virginia Code and to ensure restoration of the property, in accordance with Section 45-183 and 45.1-197.9 of the Virginia Code. Evidence of participation in said fund shall be provided to the PWC Planning Office at the time of final site plan approval.

**Hours of Operation, Blasting Criteria, Noise and Vibration**

8. All quarry activities including deliveries by rail, and all repair works to company vehicles shall be permitted to occur only between the hours of 9:00 a.m. and 5:00 p.m., Monday through Friday. Deliveries by trucks shall be limited between the hours of 9:30 a.m. and 3:00 p.m., Monday through Friday.

**Attachment C – Conditions**  
**Dated April 12, 2006**

These times shall be strictly adhered to except in the case of emergency circumstances as declared by an agency of the Federal Government, the Commonwealth of Virginia or PWC. In such an emergency instance, the Applicant may supply materials including all necessary quarrying activities for construction or maintenance work that specifies alternative delivery time because of traffic management control, public safety concerns or other factors.

9. All blasting shall be monitored by the Applicant as required by the DMME with a seismograph and all blast results will be evaluated by a qualified, independent seismology firm to be paid for by the Applicant. Certified written results showing peak particle velocity and air overpressure taken from the closest off-site occupied structures not owned or controlled by the Applicant shall be kept on file by the Applicant and made available to the County for review upon request. No blasts shall be permitted to occur closer than four hundred (400) feet from the existing CNG pipeline easement located on the east side of the quarry property.
10. The vibration levels from blasting, as measured on the ground adjacent to the closest off-site occupied residential or non-residential buildings (not on the SUP site), shall not exceed the State limit of peak particle velocity of 2.0 inches per second on any single component of motion, longitudinal (horizontal motion along the line between the blast and the structure of concern), transverse (horizontal motion at right angles to the longitudinal), or vertical. The vibration intensities shall be measured with a three-component portable seismograph yielding a direct recording of particle velocity, in accordance with the regulations set forth by the Virginia DMME.
11. The peak atmospheric overpressure produced at the nearest off-site occupied residential or non-residential buildings (not on the SUP site ) by each blasting operation shall not exceed the DMME limit of 133 dB(L) (0.0081 pounds per square inch) as measured with an impulse sound meter designed in accordance with the recommendations of the International Electro-Technical Commission, or with sound recording systems capable of accurately reproducing the low frequency wave forms associated with the airborne vibrations from quarry blasting operations.
12. Blasting vibration shall be limited to a peak particle velocity for a corresponding frequency level. The seismograph(s) used to monitor blast, sound and vibration levels shall be placed at locations designed to comply with all Federal and State regulations. At the written request of the County, the Applicant shall periodically monitor blasts from other locations as designated by the County.
13. Airborne sound emanating from continuous sound sources from extractive operations shall not exceed 60db (A-RMS as regulated by Section 14-7 of the Prince William County Ordinance regulations.

**Site Development**

14. The Applicant shall clear the subject property in phases and only as necessary to meet operational needs and the proposed mine Phasing Plan submitted as part of the SUP plan eventually to the extent of clearing and grading as determined in the final site plan. The west pit will be mined first.
15. The maximum horizontal limits of the proposed quarry faces shall be limited to the general area as shown on the submitted SUP Plan and in no case be closer than 300 feet to the property boundaries. Compliance with this condition shall be demonstrated on the final site plan.
16. The two triangular parcels leased to the Applicant located to the west of the SUP property and in Fauquier County shall not be part of the quarry operation. These parcels shall remain undisturbed.

**Attachment C – Conditions**  
**Dated April 12, 2006**

17. The following stone aggregate processing facilities shall not be located any closer than 400 feet to the limits of the SUP site: Crushers; screening towers; train car loading hoppers; maintenance building and wash racks. Compliance with this condition shall be demonstrated on the final site plan.
18. Fencing, a minimum of six (6) feet in height, shall enclose all pit areas, operational areas, and pond areas. Said fencing may be adjusted periodically to accommodate the expansion of the quarry. Compliance with this condition shall be demonstrated on the final site plan.

**Buffers, Berms, and Landscaping**

19. Varying width screening and berm construction limits shall be located and maintained around the perimeter of the subject property as shown on the SUP Plan. The berms shall be constructed in phases as overburden becomes available, in accordance with the SUP plan and shall be a minimum of 20 to 50 feet in height. The County, as a part of final site plan approval, may permit adjustments to the berms location and length of the berms in order to accommodate the final delineation of wetlands and Resource Protection Areas (RPA's). If a waiver from the requirements of Section 710.01 of the DCSM is granted by the Director of Public Works to maximize the preservation of trees and existing vegetation, the berms shall have a 2 to 1 slope. Berms in excess of 15 ft. shall have benches or diversions on slopes. Special stabilization measures, such as reforestation shall also be provided. The berm shall be landscaped with a variety of indigenous, drought tolerant or other plantings subject to the County's approval. No blasting will be permitted in any pit phase until the adjacent berms required for the phase have been constructed as detailed on the Phasing Plan (part of SUP plan). The berms shall be predominately constructed of overburden, and the berms shall be seeded and suitably stabilized per the DMME mine permit (which shall be obtained prior to the final site plan approval) and in accordance with the Prince William Design and Construction Standards Manual (DCSM).
20. In connection with the final site plan for the internal access road, the Applicant shall landscape the Prince William Quarry entrance road onto Route 28 with a mixture of evergreen, deciduous and ornamental trees as shown on the SUP plan. The trees shall be a minimum of six feet (6') in height at time of planting.
21. As a condition of final site plan approval, the Applicant shall offer to construct a "Welcome to Prince William County" sign which may also name the park property on the Park Authority property know as Lehigh Park (GPIN # 7393-85-2844). The design specifications shall be coordinated with the Park Authority. The sign will be subject to a sign permit. If three years after the PWC Board of Supervisors approves the SUP, the Park Authority does not want the sign to be constructed, the Applicant may dedicate cash in lieu of the sign to the Park Authority equal to the cost of the sign as determined by the Construction Cost Index.

**Water Quality Monitoring, Stormwater Management, RPA and Wetlands**

22. Prior to and as a condition of the final site plan approval, the Applicant shall contribute \$40,237.50 for water quality monitoring to PWC.
23. Applicant will provide stormwater management and best management practice (BMP) facilities in compliance with applicable DCSM requirements and will fulfill DMME requirements. These facilities shall be reviewed and approved by PWC at the time of final site plan approval. The Applicant shall also obtain runoff/discharge permits required by the Virginia Department of

**Attachment C – Conditions  
Dated April 12, 2006**

Environmental Quality (DEQ). Compliance with this condition shall be demonstrated on the final site plan.

24. The Applicant has prepared a wetland study and shall procure Federal or State permits required for the construction and operation of the quarry construction prior to commencing any land disturbing activities on the property which will impact wetlands in that phase of development.
25. The Applicant shall comply with the Chesapeake Bay Preservation Act and shall preserve and protect the RPA as required by the PWC regulations adopted at the time of this application. In addition, the applicant shall install a double layer of siltation fencing or other similar devices for erosion/sedimentation control at the vicinity of the field verified RPA.
26. At the time of final site plan review, the Applicant shall work with the Watershed Management Branch of the Department of Public Works to determine an appropriate means for releasing treated water into the stream system.
27. The Applicant will develop a wetland and watercourse protection plan to include the on-site construction and restoration of wetland mitigation on the SUP site in the areas as shown on the SUP Plan to mitigate wetlands which will be disturbed during the life of the quarry prior to final site plan approval. The construction of the wetland mitigation area will commence concurrently with or prior to the excavation and stripping of overburden of the west pit. The mitigation plan will include restoration of on-site watercourses. The Applicant shall obtain all required permits allowing wetland disturbance from the U.S. Army Corps of Engineers and State required wetlands permits from the Virginia Department of Environmental Quality.

**Sewer and Water**

28. Prior to the county approval of the final site plan, the applicant shall obtain a plan approval from the Virginia Department of Mines, Minerals and Energy (“DMME”) for minimization of effects on water quality or quantity prepared in accordance with the Reclamation Regulations for Mineral Mining, hereafter referred to as the “groundwater protection plan.”
29. The SUP site shall be served by on-site septic systems consistent with the Sewer Chapter of the Comprehensive Plan, Compliance with this condition shall be evidenced on the final site. No on-site septic system or septic field shall be located any closer than 100 feet to a designated RPA.
30. As a condition of final site plan approval, the Applicant shall properly abandon all on-site non-operational wells in accordance with the applicable County and State regulations prior to issuance of any site development permit.
31. The SUP site shall be served by on-site well(s). The Applicant shall comply with the PWC Health Department, and Department of Environmental Quality requirements concerning on-site wells at the time of final site plan approval.

**Baseline Groundwater Characterization Analysis**

32. Prior to excavation of the initial quarry area and development which is defined as the stripping of overburden in the west pit, the Applicant shall establish general site area baseline ground-water data. In this regard, the Applicant shall employ a qualified professional Virginia licensed Certified Professional Geologist/Hydrogeologist. This program shall consist of the four phases described below:

**Attachment C – Conditions**  
**Dated April 12, 2006**

Phase I: Pre-Operation Domestic Well Survey

(a) A pre-operation inventory of all or part of existing wells located within 3,000 feet from the boundaries of the SUP site will be made at least one year prior to excavation and stripping of overburden in the west pit (as shown on the SUP Plan). Copies of the notification letter to the affected property owners detailing the purpose and intent of the study will be sent to the County Health Department. The Applicant will conduct, at no cost to the property owner, a pre-operation survey of each domestic well. The data will consist of well location, well owner, well depth, if known, depth of static water level and general condition of the well and well output (yield). A sample of well water shall be taken and submitted for laboratory analysis to determine chemical constituents including those listed in Paragraph Phase II below, plus a bacteriological examination and testing for total petroleum hydrocarbons (TPH). The results of this investigation shall be provided in report form to the PWC Health Department and the pertinent property owner within thirty (30) days of completion of laboratory analysis. This property owner well survey shall be undertaken not more than two (2) months prior to excavation and stripping of overburden. A property owner with new domestic wells that are installed within 3,000 ft. from the boundaries of the SUP site will be eligible to request a baseline survey. The Applicant will conduct the same pre-operation survey on these new wells only with prior written property owner permission. The Applicant will contact the PWC and Fauquier County Health Departments every four (4) years to inquire as to whether any new wells have been dug and then send a notification letter regarding the monitoring program to new well owners.

Phase II: On-site Pre-Operation Monitoring

(a) Pre-operation groundwater elevation measurements will be obtained on-site for a period of two (2) years prior to the initial blasting. The depth-to-groundwater shall be measured in monitoring wells located in the immediate area of the quarry pit. A minimum of five (5) monitoring wells shall be located on site based on the recommendations of the qualified professional Geologist/Hydrogeologist. The exact number of monitoring wells and the locations of the monitoring wells shall be approved by Virginia DMME with a copy supplied to the PWC's Health Department and Planning Office.

Phase III: On-site Operational Monitoring

(a) Water levels shall be measured in all on-site monitoring wells using automatic water level recording instruments with a frequency of measurement no larger than one measurement every four hours. This data shall be kept on file at the quarry site and an annual summary report will be provided to the PWC Health Department and Planning Office upon written request.

(b) Groundwater quality analyses shall be taken in each monitoring well semi-annually for the first three years and once each year thereafter from each on-site monitoring well for the next seven (7) years unless conditions under Paragraph c below occur, in which case the water quality analysis will revert to a quarterly frequency until any such chemical release has been characterized and the source of the chemical release determined. At the end of this initial ten (10) year period, the Applicant's personnel, the County Planning Director or his/her designee, and the PWC Health Department, based on compiled monitoring data may adjust the location, reduce the number of monitoring wells and/or of types of chemical constituents being analyzed, and also, if technology permits, allow the analysis to be performed by on-site field testing equipment acceptable to the County. The wells that are selected for monitoring at the end of this ten (10) year period shall be sampled annually thereafter, and groundwater elevations measured on a monthly frequency for the

**Attachment C – Conditions**  
**Dated April 12, 2006**

period of operation unless conditions under Paragraph c below occur, in which case the water quality analysis shall revert to a quarterly basis until any such chemical release has been terminated.

(c) If any laboratory analyses reasonably indicates that the quarry operation is the source of a chemical release in violation of any State and/or Federal groundwater standard, the Applicant shall send immediate written notification to the PWC Health Department and Planning Office and shall perform a fast track study to determine the specific source and shall exercise due diligence to contain and mitigate the problem.

(d) The monitoring wells on the Applicant's property shall be analyzed only for chemical and biological constituents, including the following list of parameters: Total Coliform, Field and Laboratory pH, Field Temperature, Field Specific Conductance, Turbidity, Alkalinity, Chloride, Sulfate, Nitrate, Phosphorus, Potassium, Sodium, Magnesium, Calcium, Iron, and Manganese and Turbidity. The samples will also be analyzed for petroleum-type compounds using both USEPA Method 8270 for Base Neutral Organic compounds and USEPA Methods, Method 602 for Gasoline (BTEX with additives.) and 625. Reports of the laboratory analysis shall be included in the annual monitoring report.

Phase IV: Well Complaint Resolution Program (if necessary)

In the event of a residential or non-residential complaint of a diminished or lost water supply from a domestic well with PWC or Fauquier County, the Applicant will complete the following steps within the specified time frames, as measured from the time of receiving the complaint:

(a) Within 24 hours, Applicant will contact the property owner and will provide bottled water for drinking and cooking unless requested otherwise by the property owner or tenant.

(b) Within 48 hours, Applicant will provide a well and pump contractor licensed in Virginia ("Contractor") to evaluate the operational function of the pump and pump motor unless requested otherwise by the property owner or tenant. If the pump has experienced mechanical failure attributed to a water level decline or water quality change, Applicant will replace the pump or pump motor. If the well impairment is not caused by a mechanical failure of the pump, the pump contractor will immediately contact Applicant and a qualified Geologist/Hydrogeologist will be called in to evaluate the problem. The pump contractor will make every effort to provide a temporary supply of water to the residential or non-residential structure during the investigation period.

(c) Within 72 hours, Applicant will initiate a study at its own expense by a qualified Geologist/Hydrogeologist to determine if the Applicant operation was responsible for the well impairment. This study will be completed within one week (240 hours from receiving the complaint). The Geologist/Hydrogeologist will rely upon all available hydrologic monitoring data from both the operational and pre-mining monitoring periods as well as hydrologic data collected from the pit and publicly available sources to determine if the Prince William Quarry development was the cause of the domestic well failure. The Geologist/Hydrogeologist will provide an immediate verbal assessment to Applicant and the property owner prior to the 240 hour time period and to provide notice to the PWC Health Department as well.

(d) Within two weeks, the well complaint assessment will be documented in a letter report by the Geologist/Hydrogeologist to Applicant and the property owner. The letter report will review the available relevant data and the technical reasons which support the Hydrogeologist's assessment regarding the causation of the well failure. A copy of this letter shall be sent to the PWC Health Department.



**Attachment C – Conditions  
Dated April 12, 2006**

(e) If Applicant is responsible for the well failure as determined by the Geologist/Hydrogeologist, Applicant or their designated Contractor will make the necessary repairs or replacement of the well to provide a reliable water supply and will provide a copy of the assessment to the PWC Health Department.

The criteria to determine if impairment has occurred will be based upon a comparison of the established baseline data for ground-water elevation and water quality as measured in the monitoring wells on the proposed Prince William Quarry against the specific domestic well results of the pre-mining domestic water well survey. This data comparison and assessment will determine if the well has experienced an adverse impact during the period of pit development that is caused by quarrying activities. An adverse impact is defined as a reduction in groundwater level or a change in groundwater quality that limits the ability of any pre-existing groundwater user, who is lawfully withdrawing groundwater, to continue to withdraw the same quantity and quality of groundwater required by that existing use.

In general, the resolution of complaint and the determination of adverse impact will be dependent upon several criteria regarding the domestic water well including but not limited to: (1) the percentage of the total water column loss in the well, (water level decline in the well from baseline), (2) the concentration of water quality parameters has increased to above regulatory standards for drinking water, which will be addressed on a case-by-case basis, if the domestic well has not experienced any water level decline, (3) the operational conditions of the well and the pump which will be addressed on a case-by-case basis if the domestic well has not experienced water level declines as specified above. The occurrence of pump failure does not indicate causation by Applicant unless the pump failure is due to the loss of water saturation within the subject well as specified in (1) above and the pump apparatus prematurely fails.

33. The conditions for groundwater monitoring and remediation shall also apply to properties in Fauquier County within this same 3,000 ft. perimeter radius.

**Pre-Blast Inspection Survey**

34. Prior to blasting, the Applicant shall compile baseline data on all habitable dwelling units, main accessory structures and non-residential buildings all or in part located within 3,000 feet of the boundaries of the SUP site. The pre-blast inspection protocol is explained in more detail in Exhibit A. The Applicant shall employ a qualified professional architect, engineer or blasting expert to conduct this analysis. This program shall be conducted in the following manner:

(a) A pre-operation inspection of each off-site habitable dwelling unit and main accessory structure located within 3,000 feet of the SUP site shall be made to ascertain and document the general structural integrity of the buildings. The information obtained from this survey will serve as baseline data for determining potential impacts to property owners' structures from the Applicant's future quarrying operation. The results of these inspections shall be made available to each pertinent property owner and to the PWC Planning Office within 30 days of completion. The investigation shall be undertaken not more than six months prior to excavation and stripping of overburden. Upon the owner's written request, a survey of new dwelling units constructed after the opening of the quarry and during the life of the quarry located within 3,000 feet of the boundaries of the SUP site shall also be conducted and included in any applicable remedial conditions as stated below.

(b) In the event the Applicant's quarrying activities are determined to have caused structural damage in any off-site habitable dwelling unit, main accessory structure or non-residential building within all or part of the 3000 feet from the boundaries of the SUP site, the Applicant shall be responsible for correcting such damages at its own cost. The Applicant shall be responsible for

**Attachment C – Conditions  
Dated April 12, 2006**

making such repairs to the subject structure which will reasonably repair or restore the damaged structure to its pre-existing condition.

**Blasting Monitoring**

35. Blasting Monitoring shall be conducted in accordance with the state mandated DMME regulations.

**Blasting Safety and Spill Prevention Control**

36. The Applicant shall not use explosives to crack large boulders (“boulder blasting”) but shall use a hydraulic rock breaker or equivalent method of cracking boulders other than blasting.
37. The Applicant shall construct all petroleum storage tanks as above ground tanks and all tanks shall be located within an appropriate containment facility meeting the requirements of local, State and Federal requirements. A valid Spill Prevention Control and Countermeasure Plan will be prepared and maintained for the duration of the operations. Compliance of this condition shall be demonstrated on the final site plan.
38. The truck maintenance facility area shall include an impervious surface to minimize petroleum spills. The truck maintenance facility and any area where petroleum or hazardous substances are dispensed and may be spilled and carried into runoff shall be protected and also include a pretreatment device acceptable to the Watershed Management Branch of the Department of Public Works. This will assure that all oils and greases collected shall be recycled and/or disposed of in accordance with all applicable environmental laws. Compliance with this condition shall be demonstrated on the final site plan.
39. All chemicals and petroleum products shall be stored and disposed of in accordance with Federal, State, and County requirements. Tanks for the fueling area or other petroleum products stored onsite shall be registered with state (DEQ) and procure necessary permits. Blasting agents will not be stored on-site. The Applicant shall provide a Spill Prevention Control and Counter-Measure (SPCC) plan to the Fire Marshal’s Office for all chemicals and petroleum products to be used at the Prince William Quarry, and shall submit a copy of it to the PWC Health Department Planning Office prior to and as a condition of approval of the final site plan.
40. The Applicant shall employ a qualified geotechnical engineer to prepare a detailed geotechnical report to address the on-site soil type(s), if required by DPWES at the time of final site plan review.

**Dust Control and Monitoring**

41. The Applicant agrees that the dust control measures will meet all applicable State mandated dust/clean air requirements and will meet all Federal New Source Performance Standards. Wet suppression will be employed to control dust emissions from all process equipment and roadways. In the event of any offsite runoff resulted from this process, it shall be contained on-site and treated with on-site control measures. At the time of final site plan, the Applicant shall provide and show on the plan a control measure for the off-site runoff acceptable to the Department of Public Works.
42. Subject to PWC Park Authority’s approval and to preserve existing vegetation, the Applicant shall provide additional trees within a 50-foot wide area along the entire Park Authority’s property frontage on the proposed public access road, if the existing mature vegetation is determined to be inadequate to meet the DCSM planting standard for a 50-foot wide buffer.

**Attachment C – Conditions  
Dated April 12, 2006**

**Trucks**

43. The Applicant shall not load stone on any trucks which do not have operational tailgates in proper working order. All trucks shall be loaded by the Applicant in accordance with the Commonwealth of Virginia's legal load limits and all trucks carrying construction aggregates shall be weighed by the Applicant to ensure they meet legal load limits. All loaded trucks leaving the site shall utilize covers, if applicable in accordance with Virginia law, to control dust and prevent materials from escaping.
44. The Applicant shall post signs in proximity to the weigh scales and prior to exiting the property requiring truckers to check and clear sideboards and tailgates of any potential stone spillage prior to leaving the quarry site.
45. All trucks will exit through a wheel wash or equivalent to remove mud, dust and loose stone. The runoff from this wheel wash and the water used to wash quarry stone shall be recycled for use and not drained naturally from the site. Stormwater runoff from other areas of the quarry shall be managed in accordance with applicable State Water Control Board discharge permit requirements. Compliance with this condition shall be demonstrated on the final site plan.
46. The Applicant shall post all trucks which are under contract to the Applicant and which are hauling crushed stone from the Prince William Quarry with a number to call in case of unsafe driving, speeding or other concerns. The Applicant shall investigate and take reasonable action to address any truck driving complaints.
47. The Applicant shall maintain a citizen complaint log to register any concerns and complaints related to the operation of the quarry including the use and operation of vehicles serving the quarry. The Applicant shall be responsible for timely investigation of logged complaints and to attempt a prompt, reasonable resolution of any complaint that alleges the terms, obligations and conditions contained in these development conditions are not being violated. The Applicant shall inform the person raising the complaint of the action taken (provided they leave their contact information), if any, to remedy the situation and shall maintain the log book in a manner to demonstrate clearly what action was undertaken. The log book shall be available for PWC review during normal business hours.

**Site Access**

48. The entrance road shall be constructed as a public road in accordance with the DCSM standards in the general location shown on the SUP Plan, but its exact location may be reasonably adjusted to accommodate final engineering requirements, VDOT site distance requirements or County Park Authority requirements. The public road will terminate in a cul-de-sac at the edge of the railroad crossing right-of-way. From the public cul-de-sac and railroad crossing right-of-way, a private access driveway shall provide a connection to the site and cross the railroad tracks. The access road shall be constructed concurrently with or prior to site grading, excavation and stripping of overburden.
49. Commercial access to Warrenton Road shall be prohibited.
50. The Applicant shall construct the acceleration and deceleration lanes on the eastbound lane of Route 28 to the proposed entrance and a left turn lane on westbound Route 28 at the proposed access point as shown on the SUP Plan and any other associated frontage improvements necessary for traffic management in accordance with the DCSM and VDOT standards. Additional details on the frontage improvement specifications shall be provided at the time of Final Site Plan. The turn lanes shall be

**Attachment C – Conditions  
Dated April 12, 2006**

constructed in conjunction with the construction of the entrance road. The improvements shall be made within the available right of way or the Applicant will acquire any additional right of way necessary to construct these improvements at the Applicant's cost. The improvements will be subject to PWC and VDOT review and approval. The construction of the acceleration and deceleration lanes shall be completed prior to excavation and stripping of overburden.

51. The Applicant shall provide all required road crossing signage and signals as required by applicable County and/or railroad policies and procedures. The Applicant shall provide to the County a letter of consent and approval signed by authorized railroad officials for a private rail crossing along with a description of maintenance responsibilities and liability prior to the final site plan submission. VDOT shall not be responsible for either maintenance of liability responsibilities associated with the rail crossing. The Applicant shall construct the road in accordance with all railroad policies and procedures. The Applicant shall complete the construction of the entrance road to public road design standards within eighteen months of approval of the final site plan. The timing of its acceptance as a public roadway is controlled by others. The Applicant shall be responsible for maintenance of the road until it has been accepted into the public roadway system. The Applicant shall not utilize this road for hauling any crushed stone by truck from the Prince William Quarry until this road is accepted into the public roadway system, and Route 28 is widened to four lanes from Fitzwater Drive to the Route 234 By-Pass.
52. The Applicant will provide a stubbed entrance to Lehigh Park at a location acceptable to the Park Authority and Department of Public Works in accordance with the DCSM standards. The stubbed entrance will be shown on the final site plan associated with construction of the public access road. Further, if requested by the PWC Park Authority, the Applicant will provide crushed stone for the development of the Lehigh infrastructure improvements including roads and drainage for the park's initial construction at no cost to the PWC Park Authority.

**Transportation Improvements**

53. Prior to completion of the Route 28 improvements and its widening to four lanes from Fitzwater Drive to the Route 234 By-Pass, hauling of any crushed stone shall be done by rail transport. After that, minimum hauling by rail transport shall be 60%.
54. In addition to the specified frontage improvements, the Applicant commits to a contribution to Prince William County of \$2,000,000 for transportation improvements associated with the Route 28 corridor. Subject to County SUP approval, the contribution may consist of: monetary contribution, in-kind contribution of materials (in-kind calculations would be reviewed and approved by County), engineering or design services and/or any combination thereof to be determined by the County and when requested by the County.
55. All on-site unpaved roads and other on-site unpaved travel areas within the entire property shall be treated as often as necessary to control dust without the use of oil/petroleum products.
56. The Applicant shall dedicate upon the request of the PWC, at no cost, right of way up to twenty five feet (25') from the centerline of Route 606, and necessary easements for the future widening of Route 606 as detailed on the SUP Plan.
57. Prior to the hauling of crushed stone by trucks, the Applicant shall establish procedures ensuring that Prince William Quarry truckers are advised that Fitzwater Drive and Aden Road are not to be used as a through road by any trucks for non-local deliveries of crushed stone from the Prince William Quarry to construction projects beyond and south of Rt. 234. The Applicant, in cooperation with

**Attachment C – Conditions  
Dated April 12, 2006**

County staff, will petition VDOT to post “No Through Truck” signage along Fitzwater Drive and Aden Road. The Applicant shall file this petition prior to the final site plan submission and will fund any necessary administrative costs associated with the petition filing.

58. The Applicant shall coordinate with the appropriate PWC school officials to develop an operational plan to reduce customer truck traffic at peak arrival and departure times at local schools including the Nokesville Elementary School and the Brentsville High School at such time that Route 28 is widened to four (4) lanes and the road is accepted into the State public road system. Once said coordination plan has been developed, the Applicant shall employ policies, procedures and controls to ensure said customer truck restrictions (reductions) are implemented. In addition, the Applicant will provide funding to the PWC Board of Supervisors to provide a crossing guard in front of Nokesville Elementary School for the first two (2) years following commencement of hauling aggregate by truck at which time the need for the crossing guard will be evaluated with the Principal of the school. These funds will be paid to the PWC Board of Supervisors at the time of final site plan approval.
59. Prior to approval of the final site plan, the Applicant shall submit a warrant study to VDOT to seek permission to install a traffic signal at the site entrance along Route 28. If warranted, the Applicant shall pay for and install the traffic signal subject to VDOT specifications, review and approval. In the event a traffic signal is not warranted prior to the final site plan approval, the Applicant shall provide other transportation improvements to ensure that access road onto Route 28 performs below LOS D. In addition, the Applicant shall submit the warrant study at a later date upon VDOT’s request, and shall install a traffic signal as indicated in this condition.

**Fire and Rescue**

60. The Applicant shall not store any explosive agents on the SUP site.
61. Prior to and as a condition of the final site plan approval, the Applicant shall contribute \$20,000 toward fire and rescue services.

**Outdoor Educational Center**

62. The Applicant will construct an outdoor educational center and offer use of such facility to local schools for educational purposes. The Applicant will notify the PWC schools that the center is open and available for use five (5) years after excavation and stripping of overburden has started in the west pit.

**Archeological Survey(s)**

63. The Applicant shall retain a qualified professional to conduct a Phase I archeological survey to identify and evaluate archeological resources that are known and predicted to be present on the property. After the Phase I archeological survey report is approved by the County and in the event the findings of the Phase I survey indicate a Phase II archeological evaluation is warranted, the Applicant shall conduct such Phase II archeological evaluation on sites and resources identified in the Phase I survey. In the event the Phase II evaluation determines a site is significant, a mitigation plan will be developed in consultation with the County Archeologist. This plan may include Phase III data recovery excavations and report.

**Attachment C – Conditions**  
**Dated April 12, 2006**

- a) Archeological Survey Standards - The qualified professional, the archeological survey(s) (Phase I, potential Phase II, III) and mitigation plan if required, and the report(s) shall meet the standards set forth in the current version of the *Virginia Department of Historic Resources (VDHR) Guidelines For Conducting Cultural Resource Surveys In Virginia*. The Phase I survey methods may use systematic metal detector surveys, remote sensing techniques or other appropriate methods/technologies commonly used to identify Civil War sites and potential Civil War burials. All archeological studies shall be submitted to the County Archeologist for review and approval. Prior to archeological surveys, scoping sessions shall be held with the County Archeologist.
- b) Timing - The Phase I archeological survey, Phase II archeological evaluations and mitigation plans shall be approved by the County prior to preliminary plan or sketch plan approval. Phase III data recovery excavations (if any) stipulated under the mitigation plan shall be completed prior to final site plan approval. Final Phase I, Phase II, and Phase III reports shall be submitted in quantities and formats, and media as requested by the County Archeologist after the report or reports have been approved by the County and prior to site plan approval.
- c) Curation – Within two months of acceptance of the final report, the Applicant shall curate with the County all artifacts (unless the land owner wishes to retain the artifacts), field records, laboratory records, photographic records, general project records, computerized data and other records recovered and produced as a result of the above excavations. All records submitted for curation shall meet current professional standards and *The Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation*. A curation fee will be paid by the Applicant at the time of delivery to the County. Ownership of all records submitted for curation shall be transferred to the County with a letter of gift.

**EXHIBIT A**

**PRE-BLAST INSPECTION PROTOCOL**  
**PROPOSED BY THE APPLICANT**

**1.0 NOTIFICATION OF PROPERTY OWNERS**

All property owners and residences within 3,000 feet of the SUP site boundary will be contacted via phone calls and letters to set up an appointment for the voluntary survey. Public County records and maps will be used to get an accurate listing of property ownership.

All letters will contain a self-addressed stamped return envelope to simplify property owner response. In that even that phone calls and letters do not produce a response from the property owner or residence, a follow-up certified, return-receipt letter will be sent.

This survey is entirely voluntary and is being offered to help the property owner with a thorough assessment of the then existing conditions of their structure(s) as well as to help identify any conditions that may contribute to future changes in the structural integrity of the home. Cultural and environmental factors exert stress on a structure that will affect its future condition. Therefore, changes in structures are expected and should not be used as an indicator of blasting induced damage. This information combined with blasting records and seismograph monitoring must be evaluated when responding to any property owner inquiries regarding blasting operations.

**1.1 PRE-BLAST SURVEY**

General Information

At the time of the survey, the property owner will be asked for relevant information related to the home such as name, address, phone number, whether or not they own the home, age of the home, type of water supply and any other pertinent information they can give to us.

Past history of the home will be recorded, including but not limited to when the home was last remodeled or painted, any recent water leaks, and repairs completed on the home.

Documentation – Exterior

The survey will typically start on the exterior of the home. A hand drawing will be completed for each side of the house and any accompanying outbuildings. The inspection will continue from the north to the east, south and finally west side of the home. On each drawing, a number will be written designating the photographs taken for that area or separation.

Any pertinent information about the site around the house will also be documented. This includes trees close to the house, erosion, and drainage problems. Direction of drainage and slope of the site are noted as well.

List of separations or defects noted and photographed include:

- Overall view of each side of hou
- Driveway separation
- Sidewalk separations
- Brick and mortar separations
- Door and window areas
- Vinyl and siding separations
- Gutters and drain spout defects
- Wall alignment
- Broken glass
- Chimney
- Roof

## **Attachment C – Conditions Dated April 12, 2006**

### Documentation – Interior

Photographs will be taken of any visual defects and documented on the survey with an abbreviation of the defect along with a picture number. The interior survey will start with the first room past the front door and will continue using the same methods as the exterior portion of the survey. All interior rooms will be labeled as to what they are used for, approximate dimensions will be recorded along with the construction materials used in the floors, walls and ceiling. Photographs will be taken of any visual defects and documented on the survey with an abbreviation of the defect and a picture number.

List of separations or defects noted and photographs include:

- Door and window molding separations
- Floor and ceiling trim separations
- Sheetrock nail pops
- Wall and ceiling separation
- Water stains
- Floor and stairway creaks
- Uneven floors and walls
- Kitchen cabinet separations
- Doors opening and closing properly

### Photographs

All photographs are taken with a minimum 5.0 Mega-Pixel digital camera. The jpeg files will be recorded onto a mini-CDR in the camera ensuring safe and accurate storage. Photographs will be detailed and show the full extent of the crack or other defect from start to finish. For a typical single family home, a survey usually consists of approximately 200 pictures.

### 1.2 **STORAGE**

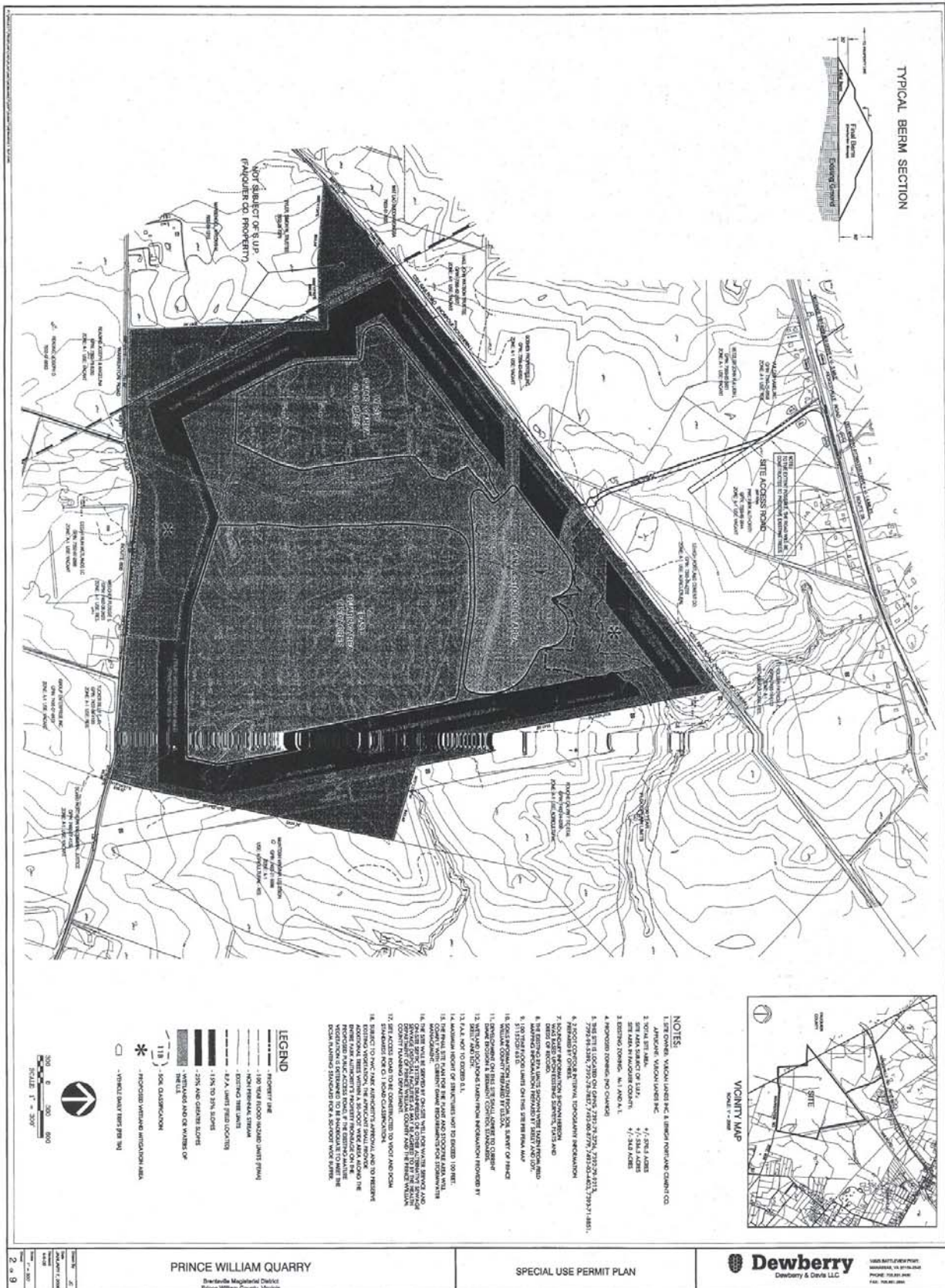
Vulcan will store one original of each survey in a fireproof safe for the life of the project. An electronic copy of each survey (complete with pictures) will be stored indefinitely at our regional office. Copies of these surveys will be made available to the County upon written request.

The property owner will also be provided a copy of the completed survey.

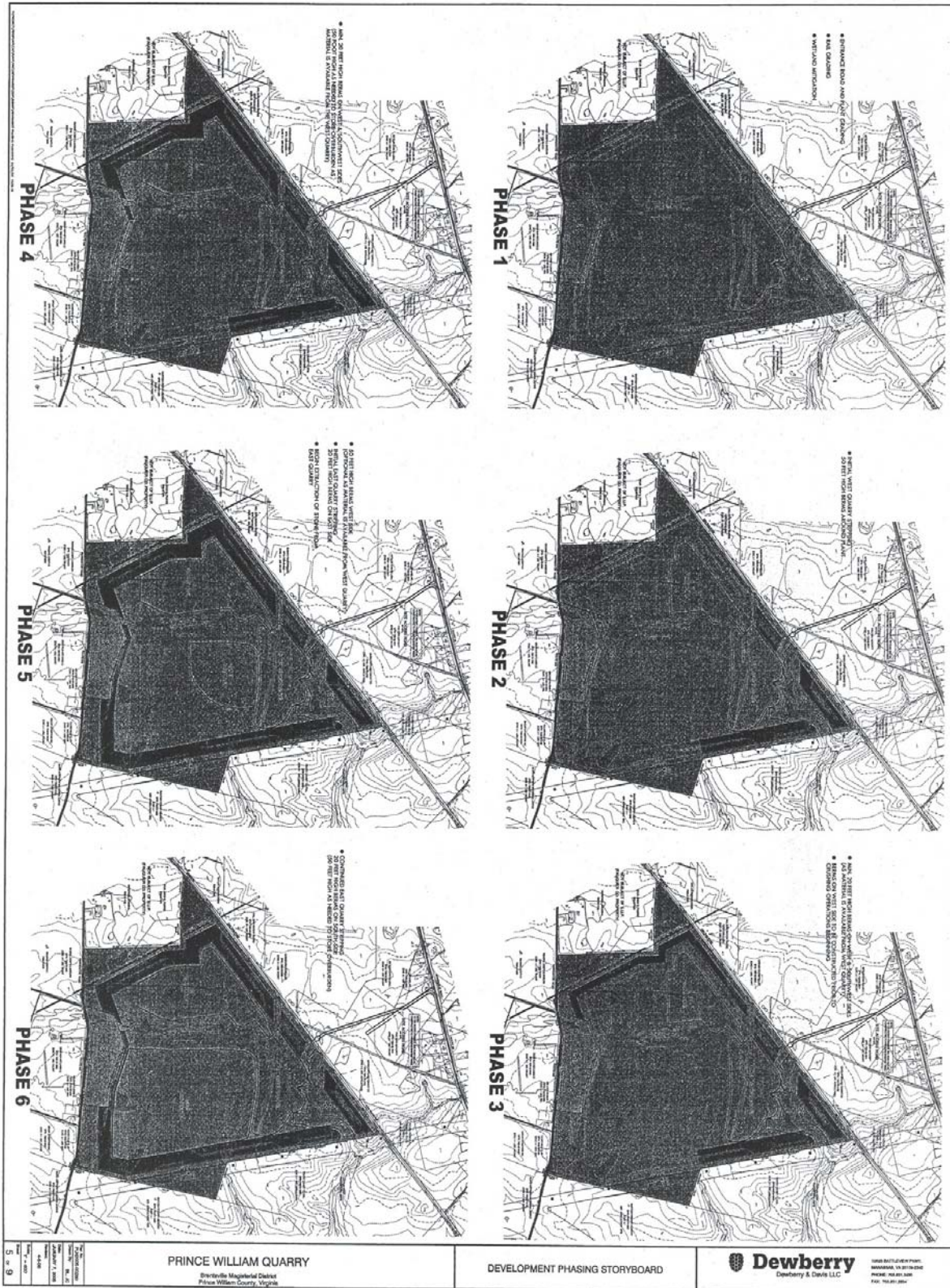
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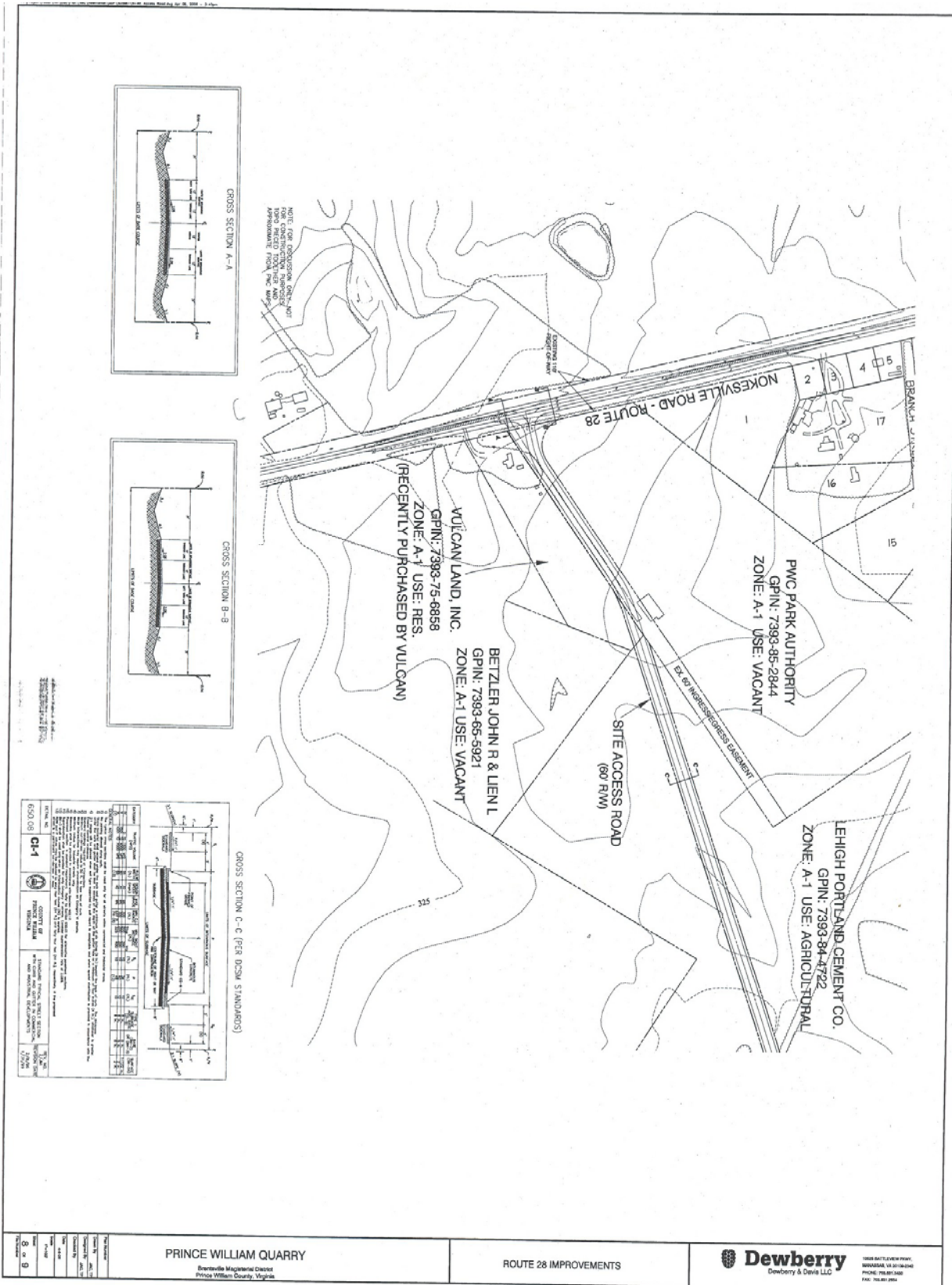
Attachment C  
 SUP Plan dated January 7, 2005, and revised through April 6, 2006



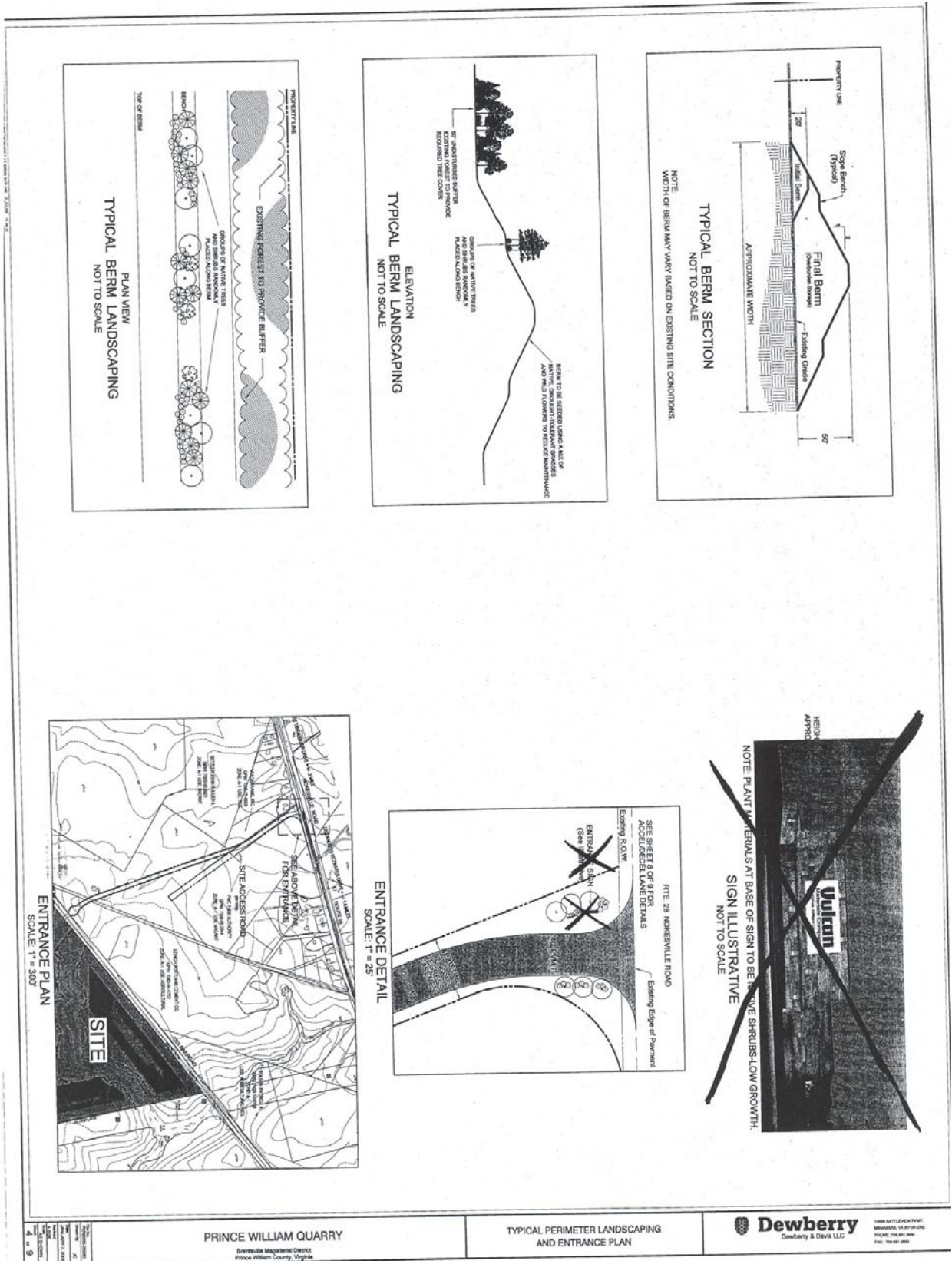
Attachment C  
 Development Phasing Storyboard dated January 7, 2005, and revised through  
 April 6, 2006



**Attachment C**  
**Route 28 Improvements dated January 7, 2005, and revised through**  
**April 6, 2006**

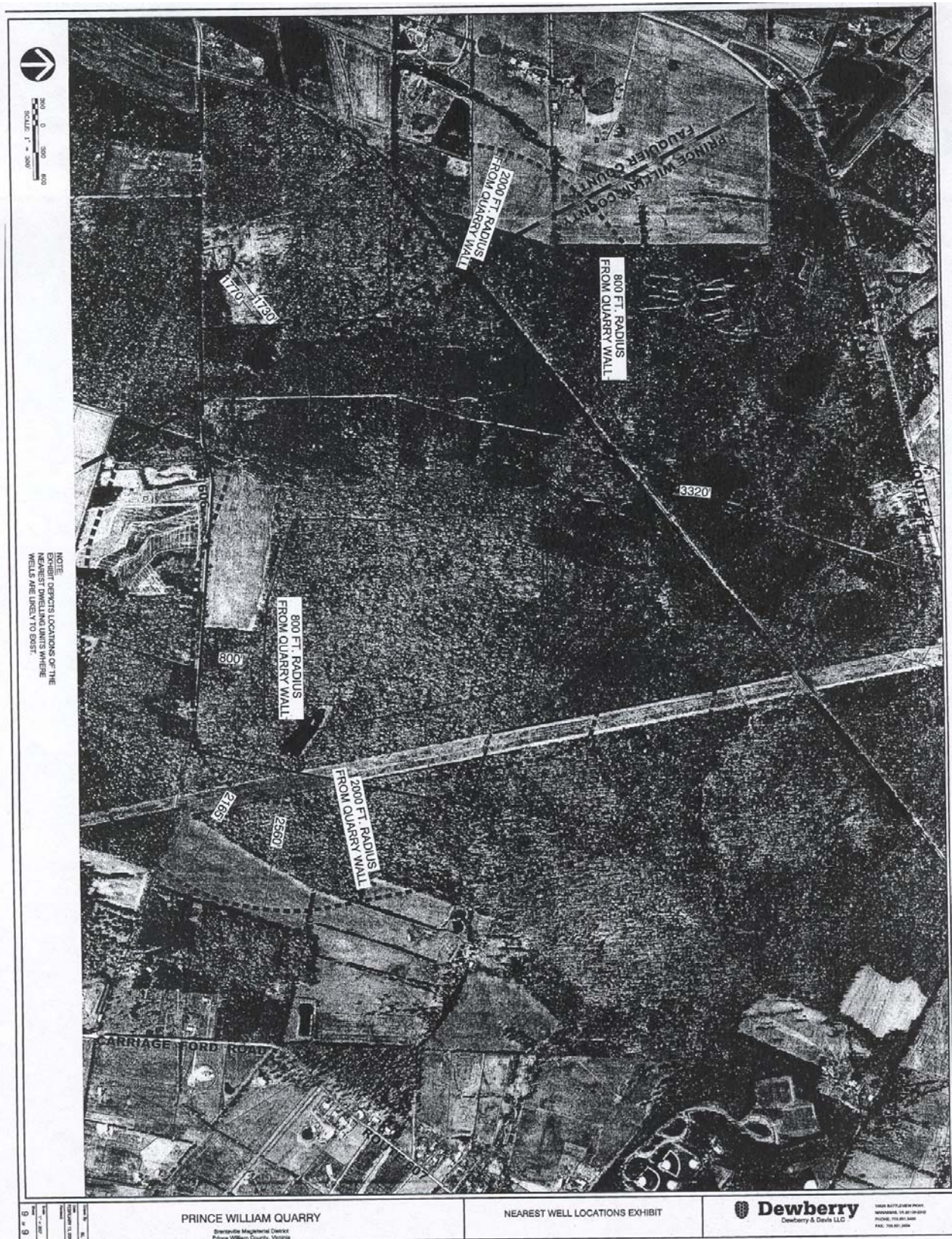


**Attachment C**  
**Typical Perimeter Landscaping and Entrance Plan dated January 7, 2005, and**  
**revised through April 6, 2006**



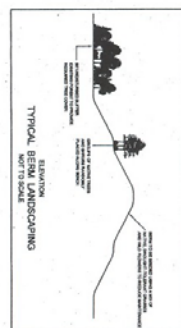
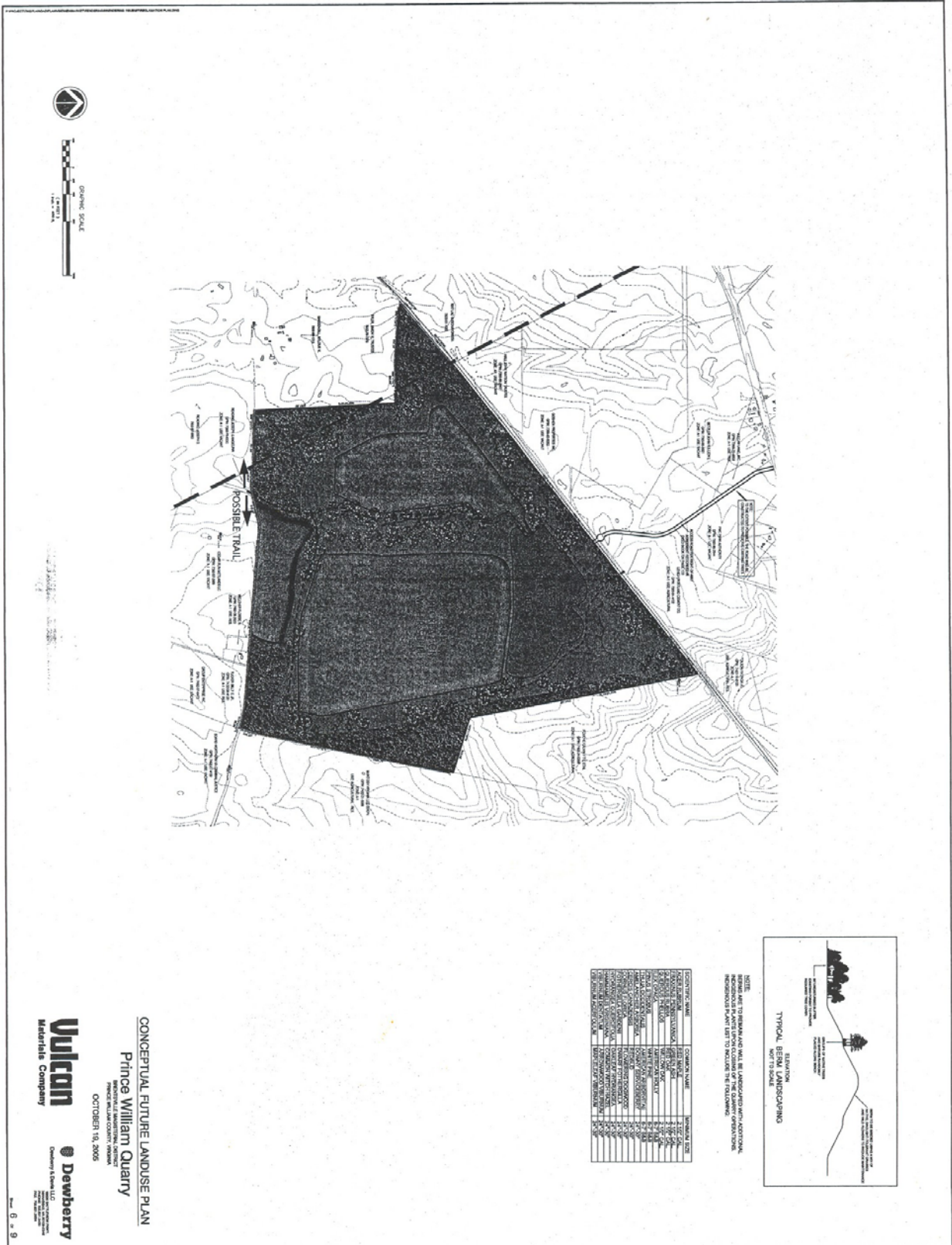
# Attachment C

## Nearest Well Locations Exhibit dated January 7, 2005, and revised through April 6, 2006





**Attachment C**  
**Conceptual Future Land Use dated January 7, 2005, and revised through**  
**April 6, 2006**



**NOTE:**  
 ALL PLANTING SHALL BE LANDSCAPED WITH APPROXIMATELY 10% MORE PLANTS THAN SHOWN TO ALLOW FOR LOSS OF PLANTS TO INCLUDE THE FOLLOWING:

PLANT NAME	COMMON NAME	PLANT SIZE
1. ...	...	...
2. ...	...	...
3. ...	...	...
4. ...	...	...
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**CONCEPTUAL FUTURE LANDUSE PLAN**  
**Prince William Quarry**  
 PRINCE WILLIAM COUNTY, VIRGINIA  
 OCTOBER 18, 2005

**Vulcan**  
 Materials Company

**Dewberry**  
 Consulting Engineers, Inc.

Scale: 6" = 9'

