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SPECIAL EXCEPTION APPLICATION NO. 4383

Application	General Data	
Project Name	Date Accepted	5/18/00
Cross Road Trail, Inc. Location 1.8 miles east of US 301/Cherry Tree Crossing Road intersection on the north side of Cross Road Trail	Planning Board Action Limit	N/A
	ZHE Hearing Date	N/A
	Plan Acreage	342.29 Acres
	Zone	O-S
Applicant Cross Road Trail, Inc. c/o Shipley & Horne, P.A. 1101 Mercantile Lane, Suite 240 Largo, Maryland 20774	Dwelling Units	N/A
	Square Footage	N/A
	Planning Area	86A
	Council District	09
	Municipality	N/A
	200-Scale Base Map	215SE10 216SE10/11

Purpose of Application		Notice Dates		
Rubblefill		Adjoining Property Owners N/A (CB-15-1998)		
		Previous Parties of Record N/A (CB-13-1997)		
		Sign(s) Posted on Site	N/A	
			Variance(s): Adjoining Property Owners	N/A
Staff Recommendation			Staff Reviewer	Catherine H. Wallace
APPROVAL	APPROVAL WITH CONDITIONS	DI	SAPPROVAL	DISCUSSION
	X			

DATA.FRM

February 21, 2001

TECHNICAL STAFF REPORT:

TO: The Prince George County Planning Board

The Prince George's County District Council

VIA: Arie Stouten, Zoning Supervisor

FROM: Catherine H. Wallace, Planner Coordinator

SUBJECT: Special Exception Application No. 4383

REQUEST: Rubblefill

RECOMMENDATION: Approval; with conditions

NOTE:

This application is on the agenda for the Planning Board to decide whether or not to schedule a public hearing. If the Planning Board decides to hear the application, it will be placed on a future agenda.

Any person may request the Planning Board to schedule a public hearing. The request may be made in writing prior to the agenda date or in person on the agenda date. All requests must specify the reasons for the public hearing. All parties will be notified of the Planning Boards decision.

You are encouraged to become a person of record in this application. The request must be made in writing and sent to the Office of the Zoning Hearing Examiner at the address indicated above. Questions about becoming a person of record should be directed to the Hearing Examiner at 301-952-3644. All other questions should be directed to the Development Review Division at 301-952-3530.

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FINDINGS:

- A. <u>Location and Field Inspection</u>: The subject property consists of approximately 342 acres of land located in a rural section of the county, about 1.8 miles east of US 301 on the north side of Cross Road Trail. The site is bisected by a PEPCO power line and has access to Cross Road Trail in two locations. The larger, western portion of the site has been the site of two sand and gravel operations which operated under the terms of approval of Special Exception Nos. 2786 and 3930. The eastern portion of the site has been in agricultural use. Approximately 180 acres of the site are currently wooded. Several streams are found on the property, including Mataponi Creek, located at the southeastern corner of the site, and three unnamed tributaries.
- B. <u>History</u>: During the 1977 sectional map amendment, the property was rezoned from the R-R (Rural Residential) to the O-S (Open Space) Zone. Portions of the site were first mined for sand and gravel in 1975, after the approval of SE-2786 for 115 acres in the westernmost part of the site. In 1990 a second mining operation was approved for 60 acres just west of the PEPCO right-of-way (SE-3930).

In 1992, an application for a rubblefill on the western portion of the property was denied by the District Council. The following findings were made by the District Council in its denial of SE-4029:

- The District Council finds that the neighborhood surrounding the proposed special exception is primarily rural in nature, consisting mostly of rural homes and undeveloped agricultural land.
- The District Council finds that there is a rubble fill currently in operation across from the
 proposed rubble fill, and this existing rubble fill is allowed to operate with unlimited truck
 trips.
- 3. The District Council concludes that, given the existence of the adjoining rubble fill currently in operation, granting the proposed rubble fill would adversely impact the surrounding properties in a manner unique and different from the adverse impact which would otherwise result if a rubble fill were located elsewhere within the O-S Zone.
- 4. •The District Council concludes that the proposed rubble fill and its resulting increase in heavy truck traffic, stacking of trucks, and noise and dust created by the proposed rubble fill would be an intrusion into this primarily rural neighborhood and would adversely affect the health, safety and welfare of the residents in this area and would be detrimental to the use and/or development of adjacent properties and the general neighborhood.
- 5. •The District Council finds that the proposed use is not in harmony with the purposes of the Zoning Ordinance.
- 6. The District Council concludes that under the facts in the record, imposing conditions upon its approval of the proposed special exception would not adequately protect the health, safety and welfare of the residents in this area.
- C. <u>Master Plan Recommendation</u>: The 1993 Subregion VI Study Area Master Plan shows the subject site in a rural planning area and recommends low rural land uses for the area. The subsequent sectional map amendment for Subregion VI (1994) placed the site in the O-S Zone. This zone

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permits a residential density of one dwelling per every five acres. Uses permitted by special exception include rubblefills. The master plan also shows the western portion of the subject property as recommended for private open space. The plan map also shows portions of the site in the natural reserve and conditional reserve areas.

D. Request: The applicant proposes to use the subject property as a place to dispose of demolition material resulting from construction projects. The rubblefill will serve contractors and haulers involved in construction and demolition activities. It will also be open to the general public. The applicant proposes hours of operation from 7:00 a.m. to 5:00 p.m. on weekdays and 8:00 a.m. to 4:00 p.m. on Saturdays. A maximum of 325 truckloads per day is proposed, for a total of 650 truck trips to and from the facility. The applicant requests permission to operate the facility for 30 years.

The Ten-Year Solid Waste Plan defines rubble as construction, demolition and land clearing debris. Examples of construction debris include cement, concrete, bricks, plaster, wallboard, insulation, glass, wires, carpet, wallpaper and roofing materials. Construction debris does not include paint, tar, caulking compounds, solvents or adhesives. Demolition debris means debris associated with the razing of buildings, roads, bridges and other structures; and includes materials such as steel, concrete, bricks, lumber, plaster wallboard, insulation material, shingles and roofing material, floor and wall tile, asphalt, pipes, wires and other items physically attached to the structure, including appliances. Land clearing debris includes materials such as clay, sand, rock, gravel, topsoil, tree stumps, roots and other vegetative matter. A rubblefill differs from a landfill in that it does not accept municipal solid waste.

The rubblefill was originally proposed to be separated into two areas; however, the applicant is revised site plan, dated December 2000, proposes to separate the site into three excavation and fill areas. This proposed revision is in response to concerns raised by M-NCPPC Environmental Planning staff regarding the potential destruction of a small stream located in the western portion of the site, as a result of the excavation and filling as originally proposed.

The applicant*s revised Statement of Justification (January 10, 2001) discusses the applicant*s proposed method of operation:

- ■The proposed fill operation is now separated into three areas, two to the east and one to the west of the PEPCO right-of-way traversing the site. On the western side, Phase IA is located to the west of the steam valley and is the smallest of the three mounds proposed for the site. Phase IB is the central mound between the stream valley and PEPCO right-of-way. Phase IB is envisioned to proceed first and will be excavated in stages (cells) with the earth stockpiled for use in cover and cap. Material for the cover and cap will also be provided from a borrow area in the eastern fill area. Additional material will then be excavated from the eastern fill area for the western area final cap. As Phase IB is closed, the fill operation will shift to Phase IA and finally to Phase II, the eastern area. Dirt from the eastern area will be stockpiled for final cover and cap of the eastern area. By utilizing on-site fill for the cover and cap operations to the greatest extent possible as proposed herein, additional truck trips on the surrounding roadway will be limited to the rubble fill operations only and not to hauling cut and cover material.
- ■In order to maintain the viability of the steam valley during construction, while the operations are on-going in Phase IB, all sediment from the operations will be directed away

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from the stream valley. Meanwhile, the stream valley will continue to be fed via rainwater and groundwater from the western side of the stream. Upon completion of Phase IB permanent bioretention ponds will be installed in two places as shown on the revised site plan to treat future rainwater falling onto Phase IB, manage same and release it into the stream for recharge. The operations of these ponds will maintain the stream viability while Phase IA is under fill operations. The same sequence will occur in Phase IA with three bioretention ponds constructed on the western side upon completion of Phase IA. Five bioretention ponds will ultimately maintain essentially the same quality and quantity of water in the stream as exists today. This process is delineated in more detail in a letter of 18 December 2000 by Jeffrey W. Moore, PG., P.E., Construction Service International, Inc., previously submitted.

■The fill operations will commence approximately 40 ■ 65 feet below the existing grade of the land through excavation and stockpile operations to provide dirt for cap and cover requirements. The footprints of the fill area consist of approximately 113 acres for the two western areas and 53 acres for the eastern area. The fill operation will place approximately one million cubic yards of fill per year on the site. Beginning below grade and covering 113 and 53 acres, respectively, the fill will increase in height at a very gradual rate. It is expected that each fill area will operate below existing grade and only return to existing grade after 10 to 15 years. Beyond that, fill levels will begin to increase in height. The western fill will be phase one operations(sic) and utilize some fill from phase II; however, phase II filling will not commence until Phase I is complete. At the time of completion of the operation, the two westernmost fill areas may ultimately be approximately 40 and 145 feet above the existing ground level and the easternmost area may ultimately be approximately 77 feet above existing ground level. Additionally, because the site and much of the surrounding area is wooded, the fill operations will not be within view of homes for many years. Approximately 177.29 acres of the site will remain undisturbed. •

E. <u>Neighborhood and Surrounding Uses</u>: The boundaries of the neighborhood in this case have been well established by previous special exception cases on this and surrounding properties. The boundaries are:

North - Old Indian Head Highway and Van Brady Road

East - Molly Berry Road

South - North Keys Road

West - Cherry Tree Crossing Road and US 301

The neighborhood is rural in character, consisting of scattered residences on large parcels. Large tracts of land have been mined and reclaimed, and the Brandywine Rubblefill, just south of Cross Road Trail, is in the process of being completed. There is one remaining active mine (owned by Percontee) which operates by virtue of its certification as a nonconforming use. Access to this site is obtained from US 301, and no traffic from that operation uses Cross Road Trail. The boundaries of this site extend eastward to the subject property.

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There are two residences currently on the subject property. The applicant indicates that the majority of the existing residential dwellings contiguous to the property boundaries are located at least 500 feet and some over 1,000 feet from the proposed limit of disturbance of the fill area. This is essentially correct. However, the closest homes to the proposed fill areas are about 400 feet away at 11104 Cross Road Trail, and about 450 feet away at 12500 Windsor Manor Road, a small subdivision east of the property. There are about 7 homes along Cross Road Trail within 500 to 700 feet of the proposed fill areas. To the north are about 20 homes located along Van Brady Road. These homes are located from 1,000 to 2,400 feet from the proposed areas of disturbance on the subject site.

F. Specific Special Exception Requirements (Sec. 27-406):

(a) A sanitary landfill or rubble fill may be permitted as a temporary Special Exception.

A rubblefill is, by its very nature, temporary. Once the capacity in the site has been used, the operation must cease. Although it could be argued that an operation which is proposed to last for 30 years will outlast many land uses considered permanent, there is nothing in either the Zoning Ordinance or case law that suggests that the term temporary be restricted to a particular time frame.

(b) The District Council shall determine the period of time for which the Special Exception is valid.

The applicant requests permission to operate a rubblefill on the site for 30 years. Neither the Subregion VI master plan nor the Ten-Year Solid Waster Management Plan contains guidance on this issue. Subsection (g) below requires a determination of need based on growth projections within the county over a period of 15 years. This determination is also to be used in setting the period of time for which the special exception is valid. If a longer timeframe were used to determine need, a greater need would obviously be shown. However, 15 years is a reasonable planning period, and demographic and demand projections beyond that timeframe tend to lose reliability.

The District Council may also consider the cumulative impact of mining activities and rubblefill activity in this neighborhood as it considers the appropriate timeframe for this use. Mining activity started on the subject property over 25 years ago. This neighborhood has seen numerous sand and gravel operations during the past 25 years, and the rubblefill south of Cross Road Trail is only now closing its operations. The approval of a 30-year timeframe for this request would mean that this neighborhood would be subjected to the impacts of sand and gravel and rubblefill operations for a total of 55 years.

The staff recommends that should this application be approved, it be limited for a period of no more than 15 years.

(c) In the R-E Zone, the landfill is only allowed if the neighborhood is substantially undeveloped and the landfill is an extension of an existing sanitary landfill on abutting land for which the approved Special Exception has not expired. This is not an amendment to an approved Special Exception under Subdivision 10 of Division 1, above.

This section does not apply to the subject application.

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(d) An application for a sanitary landfill or rubble fill that includes a "rock crusher" on the site must show the location of the proposed "rock crusher" on the site plan.

A rock crusher is not included in the proposed application.

(e) The Technical Staff Report prepared in response to the application shall include a current, Countywide inventory of the locations, dates of approval, and conditions of approval concerning haul routes and estimated loads per day for all approved and pending Special Exceptions for sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining, as indicated by the record in the case. The inventory shall also include the locations of all nonconforming sand and gravel wet-processing, sanitary landfills and rubble fills, and surface mining operations throughout the County that were certified after September 6, 1974.

The countywide inventory, dated February 2001 is attached to this report. The inventory lists 61 sites comprised of 48 sand and gravel mines, 8 wash plants, 3 rubblefills and 2 sanitary landfills.

(f) In reviewing the application for compliance with the required findings set forth in Sections 27-317(a)(4) and 27-317(a)(5), the District Council shall consider the inventory required in Section 27-406(e).

See Sections 27-317(a)(4) and (a)(5) on pages 27 through 28 of this report.

- (g) The Technical Staff Report prepared in response to an application for a rubble fill shall include an analysis of need based on the most current available projections of residential and employment growth in Prince George's County over a fifteen-year period. The District Council shall consider this analysis when determining compliance with the finding required in Subsection (h), below, and when determining the period of time for which the Special Exception is valid.
- (h) When approving a Special Exception for a rubble fill, the District Council shall find that the proposed use is necessary to serve the projected growth in Prince George's County.

The applicant submitted a report entitled *Analysis of Need, Construction and Demolition Debris Land Fill: Cross Road Trail, Inc.*, prepared by Giegerich and Associates in March 2000. Staff reviewed this study and prepared its own analysis in September 2000. (See *Analysis of Rubble Landfills Capacity in Prince George* County, MD*,2000-2014: SE-4383, prepared by the Environmental Planning Section of the M-NCPPC Countywide Planing Division in September 2000.) The staff study identifies three existing rubblefills in or near the county and two landfills (which also accept rubble materials). The rubblefills are Ritchie, Brandywine and PST (in Anne Arundel County). The landfills are Sandy Hill and Brown Station Road. By 2002, three of these facilities will cease operations, leaving only Brown Station Road Landfill and Ritchie Rubblefill.

The *Landfills Capacity Report* evaluates several scenarios with respect to allocation of materials between various sites, growth in demand and the amount of recycling. The report also takes into account the new recycling facility located on Dower House Road. It also analyzes the need scenarios based on projections of residential and employment in the county over a 15-year period. The

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scenarios make it possible to evaluate the expected remaining life of the existing and proposed facilities:

(<u>Note</u>: The scenarios analyze the original proposal for 24 million cubic yards of fill. The application was revised on 12-20-00 to reduce the proposed fill to 19.7 million cubic yards.)

Scenario A - Existing Facilities (Worst case for existing rubble landfill capacity)

- \blacksquare 1. Rubble generation per capita and per employee per year = 0.2824 tons.
- ■2. The out of County rubble will increase by 1.1 percent per year.
- Existing facilities: Brandywine, Ritchie, Sandy Hill, Brown Station and PST Reclamation.
- ■4. Remaining total capacity as of end of 1999: 1,507,520 cubic yards.
- ■5. Recycling: constant at 25% at Brandywine, 15% at Ritchie and 0% at others.
- ■6. Dynamics: The following facilities will direct the materials to Ritchie: Brandywine upon reaching capacity; Sandy Hill upon closing on June 30, 2000; PST Reclamation upon closing on June 30, 2001.
- ■7. Conversion factors used to convert tons to in-place cubic yards: Ritchie, 0.61; Brandywine, 0.88; Brown Station, 1.82; PST Reclamation, 1.43; and Sandy Hill, 1.54.
- <u>Note</u>: Brown Station has capacity to 2018. However, if Sandy Hill and perhaps other rubble fills upon closing redirect the materials to Brown Station, the capacity is exhausted in 2009 or before.

Scenario B (Scenario A plus the proposed Dower House Road Recycling Plant)

- ■1. Dower House Road Recycling Plant begins operation on January 1, 2001 as follows:
 - 2001 capacity of 150,000 tons/year
 - 2002 capacity of 200,000 tons/year
 - 2003 and 2004 capacity of 250,000 tons/year
 - 2005 2030 capacity of 300,000 tons/year
- **2**. Recycling will be 50% throughout the operating period.
- Unrecycled materials will be disposed as a proportion of the materials going to each facility.
- ■All the assumptions made in Scenario A.

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Scenario C (Scenario A and Proposed (SE-4383) Rubble Landfill)

- ■1. Scenario A
- **2**. Capacity of the facility is 24,000,000 cubic yards.
- \blacksquare 3. The operation of the proposed landfill will start on 1/1/2003
- ■4. No recycling will take place at the facility
- ■5. Conversion factor used to convert tons to in-place cubic yards: 1.00 (1 ton = 1 in-place cubic yard).

■Scenario D (Scenario A, B, and C)

All the assumptions listed for Scenarios A, B and C.•

The main findings are briefly listed below:

- ■1. In 1997, nine counties in the State of Maryland have rubble landfills and two counties have land clearing debris landfills. Harford County has three rubble landfills and Prince George*s County has two rubble landfills.
- During 1997, the State of Maryland accepted 2,048,695 tons of rubble and land clearing debris. PST Reclamation rubble landfill, which is located in Anne Arundel County, accepted 828,123 tons in 1997, representing 40 percent of the total materials in the State of Maryland. In 1999 it accepted 284,696 tons or 17 percent of total rubble materials.
- According to a 1998 Maryland Environmental Service report, in 1995 Maryland imported about one million tons of rubble; in 1997, Maryland imported about half a million tons of out-of-state rubble.
- ■4. During 1999, in the State of Maryland, the construction and demolition component represented 28 percent of the tonnage of total solid waste received at landfills and incinerators in the state; in Prince George County, this component and D) represents 53 percent of the county tonnage of total solid waste handled by the county (Table 2).
- 5. During 1999, 768,068 tons of rubble materials handled by Prince George County, represented about 46 percent of the 1,659,913 tons of rubble received at rubble landfills in the State of Maryland.
- ■6. About 348,154 tons, representing 45.3 percent of the total, were generated in Prince George County during 1999.

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- ■7. During 1999, a total of 499,837 tons of rubble materials were disposed in five solid waste management facilities (four in Prince George County and one in Anne Arundel County) as follows: Brandywine, 34.7 percent; Ritchie Land Reclamation, 46.7 percent; PST Reclamation (Anne Arundel County), 6.2 percent; Brown Station, 1.7 percent; and Sandy Hill, 10.5 percent.
- ■8. If operated independently <u>and the out-of-county amounts</u> of materials remain constant, then:
 - Sandy Hill will close in mid 2000
 - PST Reclamation will close in mid 2001
 - Brown Station will close in 2018
 - Brandywine will close in 2001
 - Ritchie Land Reclamation will close in 2005
- If operated under the conditions specified in Scenario A, the countywide deficit for the demand of <u>in-county generated</u> rubble materials will occur approximately in May 2007, while for the total rubble materials (which include the <u>out-of-county component</u>), the deficit will occur approximately in July 2003.
- ■10. The recycling plant located on Dower House Road (Scenario B) is expected to increase the capacity for in-county material by about two years (2011) and by about one year (2004) for total materials when compared to Scenario A.
- ■11. The proposed Cross Road Trail rubble landfill (SE-4383) (Scenario C) will add about 24 million cubic yards of capacity, and will provide sufficient capacity for the in-county rubble for approximately 75 years (2072), well beyond the 15-year period. The total demand (in- and out-of-county) for capacity is expected to be sufficient for about 20 years (2034) beyond the planning period.
- ■12. Scenario D, which includes the existing facilities and the proposed Cross Road Trail landfill and the recycling facility, shows sufficient countywide capacity for in-county demand for approximately 153 years (2152). Sufficient capacity for total demand is expected for about 43 years (2042).

Conclusions:

- ■1. Countywide capacity at the existing solid waste facilities (Scenarios A) will not be sufficient to meet the in-county demand as well as the total (in- and out-of-county) demand. The incounty demand will be sufficient until May 2007, while the total demand will be sufficient to July 2003.
- Under Scenario B, the recycling plant will increase the capacity for in-county rubble materials from 2007 to 2011 and for total materials, the capacity will be increased from 2003 to 2004.

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- ■3. The in-county as well as the total (in-and out-of-county) demands for a 15 year period can be satisfied by the countywide rubble fill capacities under Scenario C (existing plus Cross Road Trail landfill) and D (existing plus Cross Road Trail and Processing Facility).
- ■4. There are two main options that can be used to address the rubblefill capacity in Prince George County before 2003 for total demand and by 2007 for in-county demand only:
 - Allow the industry to export the excess rubble that can not be disposed in the county to other out-of-county rubble landfills; and
 - ■b. Approve additional rubble fill capacity, preferable with a high rate of recycling either at the facility or in conjunction with a recycling facility similar to the one on Dower House Road.

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In his January 12, 2001 memorandum, John Markovich, Environmental Planning Section, noted that:

Staff has analyzed the applicant proposed reduction in capacity and finds that this change does not result in a modification of the results of Scenarios A, B, C, or D within the 15-year analysis period. The impact of the volume reduction will not be realized until several years beyond December 2014. The volume proposed in this application exceeds the needed capacity of the county in the 15-year period.

In conclusion, if no new facilities are opened in the county, the existing rubblefills and landfills will be closed out by 2007, assuming all rubble materials were generated within the county. The actual capacity of these facilities is more likely to be reached by 2003, since materials coming from both inside and outside of Prince George*s County are placed in these fills. Even with the addition of the Dower House Road Recycling Plant, which will reduce the need for some rubblefill capacity, there will be a need for a new rubblefill by 2011 if only in-county material is considered, and by 2004 with materials from both inside and outside the county.

During the 15-year study period, the total in-county deficit (or need) is only 1.6 million cubic yards (MCY), while the total estimated need from all sources is 4.9 MCY. The applicants proposal is for a facility to handle 19.7 MCY of fill (down from the 24 MCY originally proposed). In other words, the applicant is proposing to construct a rubblefill roughly four times the size of the projected needs, both in and out of county, for the 15-year study period.

Because there is a need for a rubblefill in the county, it would be appropriate to consider this proposal at this location, as long as an appropriate size for the facility is determined. Based on the above findings, staff recommends that approval of this facility be limited to a capacity of five million cubic yards of fill.

- G. <u>Parking Regulations</u>: The special exception site plan conforms to all applicable regulations of Part 11 of the Zoning Ordinance.
- H. <u>Zone Standards</u>: The proposed special exception meets the standards of the O-S Zone for lot coverage, setbacks and yard requirements.
- I. .<u>Subdivision Considerations:</u>

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- ■The subject property is made up of several acreage parcels (Parcels 40, 41, 52, 66, 67, 109, and 144) on Tax Map 136. The applicant is proposing to construct a 9,600 square-foot office and a 15,000 square-foot maintenance building. The total gross floor area of building is 24,600 square feet. Since the proposed gross floor area exceeds 5,000 square feet, a subdivision plat will be required. •
- J. <u>Sign Regulations</u>: The site plan shows the location of a freestanding identification sign at each entrance to the site. The sign proposed for the eastern entrance is located in the proposed right-of-way for Cross Road Trail. The site plan should be amended to show a ten-foot setback from the right-of-way line.
- K. <u>Landscape Manual Requirements</u>: The <u>Landscape Manual</u> classifies a rubblefill as a low-intensity use. The proposal must comply with the requirements of Sections 4.2 (Commercial and Industrial Landscape Strip Requirements) and 4.7 (Buffering Incompatible Uses) of the <u>Landscape Manual</u>. According to a memo from the Urban Design Planning staff (M-NCPPC) dated January 11, 2001, the landscaping and screening requirements of the <u>Landscape Manual</u> have been addressed by the revised plans. Other issues regarding views into the site are discussed in section L below.
- L. <u>Visual Impacts</u>: The application for this rubblefill would create three mounds with footprints of approximately 83 acres, 51 acres and 12 acres. The proposed mounds would be constructed with side slopes of 33 percent, except for the three top layers of fill material, which would have side slopes of 20 percent.

This type of geographical feature does not occur naturally in this part of the country, let alone Prince George's County. This region of Prince George's County is characterized by a rolling landscape where slopes are typically less than 15 percent although the slopes close to stream valleys often range from 15 to 30 percent for short distances. Typical elevations are between 140 and 250 feet above sea level. (The section of Cross Road Trail near the western portion of the site has an elevation of 230 feet. Sections near the eastern portion of the site range from 120 to 220 feet in elevation.) The rolling landscape of this area has a variety of land uses including farm fields, pasture, open gras land, and forest which cover a majority of the landscape. Other uses include houses on large lots and surface mines. In addition, there are a number of rubble mounds along the south side of Cross Road Trail created by the Brandywine Rubblefill during the past decade.

The proposed rubblefill would be seen approximately 0.5 to 0.75 miles away. The plans as revised have relocated the highest point of the central fill area approximately 450 feet east of the previous highest point. In addition, the ultimate height of the fill area has been reduced by 10 feet to 365 feet above sea level. At the request of staff, the applicant provided a number of cross sections to illustrate the visual impacts of the final stages of the project. They are described by the applicant as follows:

■The preservation of the stream resulted in two smaller mounds in Phase I rather than one large mound. The cross sections now reflect two mounds in Phase I, west of the PEPCO right-of-way. The cross section exhibits also contain photos of the views from the approximate location of the cross-section. Review of these cross sections together with the aerial photograph and woodland conservation plan reveals the following:

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- **=**1. Section A - An east-west section across the top of the fill mounds from Route 301 on the west toward the properties and subdivision to the east of the site. This section reflect Phase IA, at approximately 40' height above existing ground being screened by existing woodland along the property line from views from Route 301 and Cherry Tree Crossing Lane residents. Views to Phase IB at approx. 145' above existing ground would be screened by existing woodlands both close to the homes and at the property line of the subject property. Phase II at approx. 77' high would be screened by woodlands at the property line from views from Windsor Manor. The existing screening is reflected in Photos 1214 and 1195 on the cross sections. Based on the extensive existing woodlands located between Cross Road Trail residents to the west and the subject property views from the west should be sufficiently screened. From adjoining residences and the neighborhood to the east, preservation of woodlands on the subject property per the tree conservation plan and as shown on the aerial photo will provide screening of the views to the residents to the east of the property.
- 2. Section B A north-south section across the top of the Phase IB from Cross Road Trail to Van Brady Road. This section reflects Phase IB, at approximately 145' height above existing ground. View to this mound, would be screened from Cross Road Trail at this location by existing vegetation as shown in Photo 1203. Views from Van Brady Road would be open to the fill, at time of its ultimate height due to the lack of woodlands on the existing farms and the topographic change in elevation falling from the high point of Van Brady Road toward the stream valley forming the northern property line of the subject property. Views from this location may be open to Phase IB fill from Lots 1 and 3 of Subdivision 1510009, Parcel 8, Parcel 3, and Parcel 64 as generally reflected on photo 1185. As recommend in the memorandum from Urban Design, buffer plantings on these properties would be the only way to provide screening for the owners. The screening would also serve to screen and soften views from Van Brady Road travelers in general and properties to the north.
- ■3. Section C A north-south section across the top of the Phase II from Cross Road Trail to Van Brady Road. This section reflects Phase II, at approximately 77' height above existing ground. View to this mound, would be filtered, but not screened from Cross Road Trail by some existing vegetation to be retained as shown on the Tree Conservation Plan, and as generally shown in Photo 1209. Views from Van Brady Road would be screened by existing woodlands both on the properties between Van Brandy Road and the subject application and woodlands retained on the application, photo 1190. As recommend by the Environmental Planning section, the tree conservation plan has been revised to reflect additional afforestation in the area along Cross Road trail to be planted during the first phase operations in order to allow time for woodlands to grow and mature before commencement of Phase II in 10 15 years. This should address the concern of views from Cross Roads trail in the vicinity of Phase II.
- Section D A north-south section across the top of the Phase IB from Cross Road Trail to Van Brady Road. This section reflects Phase IB, at approximately 145' height above existing ground. View to this mound from the location where Cross

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Road Trail crosses the PEPCO right-of-way would be open to the site due to the topographic downgradient from the elevation of Cross Road Trail, through the right-of-way and portions of the subject property, photo 1207. Views from Van Brady Road would also be open across existing farm fields on Parcel 8 and lots 1 and 3 of Subdivision 151009. Buffer plantings on these properties is recommended to address these views.

- ■5. Section E A north-south section across the top of the Phase IB from Cross Road Trail to Van Brady Road. This section reflects Phase IB, at approximately 145' height above existing ground. View to this mound, would be screened from Cross Road Trail and the few residents to the north of Cross Road Trail surrounded by this application by existing vegetation as shown in Photo 1204 and as evidenced by the aerial photograph. However, views from these properties to the main access points to the site and the exit road on the western side may be of concern. In order to address these potential view concerns, the recommendation for on-lot buffer plantings should be offered to parcels 70, 126, 110 and 69 as well. This section also reflects the views from Van Brady Road across the existing farm fields, photo 1188, on Lots 1 and 3, Subdivision 1510009 and parcel 8. These views would be addressed by on-lot buffer plantings as well.
- ■6. Section F A north-south section across the top of the Phase IB from Cross Road Trail to Van Brady Road. This section reflects Phase IB, at approximately 145' height above existing ground. This view is taken at the point of the secondary exit point from the subject application, photo #1202. In order to address views to the fill from this point in the roadway, staff requested that a curve be added to the exit road to provide screening to the fill. The view to this mound, would be screened from Cross Road Trail by the retention of existing woodlands as shown on the Tree Conservation Plan. This section also reflects the views from Van Brady Road farther east along Van Brady Road from Views E and F, photo #1189. These views are generally screened from this point along Van Brady Road. The buffering recommendations of the Urban Design Section for the specific lots and parcels mentioned above are contained in the recommended conditions in the conclusion section of this report. ●

As noted above, the proposed fill will result in an unnatural geographic formation, larger and taller than those already in the area south of Cross Road Trail. Although there is woodland which intervenes between the residences in the area and the proposed fill site, most of this woodland is not on the subject property and is not currently owned by the applicant; therefore, the status of said woods in 20 to 25 years is unpredictable. In particular, wooded areas west of the site are owned by Percontee and are likely to be affected by plans to continue to mine this nonconforming use. Views from residences along Cross Road Trail west of the site are the most likely to be affected by this probable loss of woodland.

The submitted cross sections show that several residences along Van Brady Road, as well as motorists traveling on a segment of Van Brady Road, would have unobstructed views of the rubblefill after it attains approximately half of its ultimate height. Buffering and screening attempts by the applicant within the subject property would not be effective in addressing these impacts due to the topography and the angle from which the rubblefill would be viewed on the horizon. In order for

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trees and other vegetative plantings to be beneficial they would need to be placed no further than 200 to 400 feet from the observation point. In addition, the width of the plantings necessary would be dependent on the species being planted. Typically, deciduous buffer plantings would have to be at least 200 feet in width to effectively screen the viewshed, whereas coniferous buffer plantings could be as little as 100 feet in width to provide effective screening.

The applicant has proposed to provide a forest or landscaping buffer planting program for visually impacted properties. The program would have a limited timeframe, possibly five years, during which the affected property owners could have the applicant plant a forest buffer on their properties for screening purposes. The timeframe on such an offer would have to be limited since plantings would not provide immediate benefit but rather a long-term benefit. In addition, for plantings to be effective, the trees would have to be planted early enough in the process to allow the trees to grow to a sufficient height prior to the rubblefill becoming visible on the horizon. The plan would have the following elements:

- Prior to final special exception approval, the applicant shall identify lots that have the
 potential of being negatively impacted by this project and submit the information to the
 Development Review Division.
- 2. Prior to the approval of any permit, the applicant shall provide a landscape package on the identified lots with the location, quantity, size and variety of plant materials being approved by the Urban Design Section. The applicant may be required to provide a cross section to determine the visibility of the ultimate height of the rubblefill and the appropriate mitigation for each affected lot.
- The property owner shall have seven years to decide if this option would benefit the affected property
- 4. Should the property owner decide at the end of this timeframe that additional landscaping is not necessary on their lot to mitigate views of the subject site, the applicant would not be held responsible for mitigation screening.

Notwithstanding this proposal, staff remains concerned about the lasting effects on the landscape and horizon of these proposed mounds. Even if screening from the views of surrounding residences were provided, there will be views from Van Brady Road, Cherry Tree Crossing Road, and probably portions of Cross Road Trail which cannot be screened. This is particularly relevant when it has been determined that about 75 percent of the proposed capacity is not needed. It appears that a significant amount of the fill capacity, about 30 percent, will be located below grade. Given the fact that a need for only 5 million cubic yards of fill has been established, there is no reason, from the perspective of demand over the next 15 years, to place any visible mounds on the site at all.

Providing continuity with the existing landscape is a significant concern for this site because past applications have identified concerns with respect to the size, shape, and location of the proposed mounds and how those mounds fit into the landscape. In order to alleviate these concerns, the final grades for this application should be redesigned. The redesign should generally limit slopes to a maximum of 20 percent with small areas that may include slopes not to exceed 33 percent or 3:1 slopes. These areas with 3:1 slopes should not exceed a height of 25 feet nor exceed a length of 75 feet. The slope areas should not appear to be engineered but rather include topographic undulations

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that mimic those often found in undisturbed forest areas. The recommended slopes will have the added benefit of allowing reforestation to occur on-site, rather that off-site. The following condition is, therefore, recommended:

The proposed rubblefill shall be redesigned by the applicant prior to final approval of this special exception. The redesigned plan shall be submitted to the M-NCPPC Environmental Planning Section, to review for conformance with the following criteria.

- A. The post-development elevations of the site shall not exceed 250 feet above sea level and shall mimic the topography of surrounding areas.
- B. Final grades on the site shall not exceed 20 percent of 5:1 slopes, unless a lesser slope is required to achieve a safety factor of 1.5 as determined by the Department of Environmental Resources. The slope limitation shall apply to 90 percent of the area disturbed for disposal of rubble and shall not apply to accessory areas where construction and demolition debris is not being disposed.
- C. A maximum of 10 percent of the fill area may include slopes between 20 percent and 33 percent unless a lesser slope is required by the Department of Environmental Resources for safety reasons. Those areas shall be distributed around the site so that there is no area with a rise of more than 25 feet or a run of more than 75 feet. These areas must be further distributed so that no two areas are within 250 of each other.
- D. The final grade shall include topographic undulations as are found on non-engineered lands such as forest, pastures and farm fields in this portion of Prince George's County.
- E. The post-development drainage area for each watershed impacted by this application shall be designed to replicate the acreage of each pre-development drainage area o within 2.5 percent of the pre-development acreage.

M. <u>Environmental Issues</u>:

The Environmental Planning Section, in their referral dated January 12, 2001, evaluated this request and made the following findings:

■Site Description

■The subject property is 342.29 acres in size and is located on the north side of Cross Road Trail approximately 1.3 miles east of US 301. The woodland on the property accounts for 219.59 acres, or 64.1 percent of the total area of this application. The forested areas are generally associated with the streams systems and the slopes leading to the upland areas. Much of the upland area was previously mined and reclaimed in accordance with COMAR reclamation requirements for surface mining operations or has been in agricultural production. Nearly all of the previously mined areas are located west of the PEPCO transmission line which bisects the property, while the agricultural areas are east of the transmission line.

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- Several streams are found to occur on this property including Mataponi Creek which is located at the southeastern corner of the property, and three (3) unnamed tributaries to Mataponi Creek. The first tributary, which feeds directly into Mataponi Creek, is located along the northern boundary of this application, has a drainage area of approximately 1,158 acres from the confluence with Mataponi Creek, and includes numerous other properties. The second tributary, which has a drainage area of approximately 171 acres, is located on the southern side of the first tributary and flows in a northeasterly direction from near the southwestern boundary of the application. The third tributary is also located on the southern side of the first tributary near the western boundary of the application. This stream is approximately 2,050 feet in length, flows from the west central part of the site in a northerly direction and has a drainage area of approximately 63 acres. The drainage area of this tributary is located almost entirely within the boundary of this application. The applicant previously stated that the 600 linear feet of this stream that flows downstream of the wetlands is an intermittent stream and that the drainage area is 17 acres. Staff visited the site in August 2000 and found that the stream was a well-defined, forested stream corridor and, using GIS, mapped a drainage area of 63.5 acres.
- ■The streams noted above are identified as *Areas of Critical County Concern* as part of the Patuxent River Primary Management Area (PMA). The Subregion VI master plan identifies the streams on and adjacent to the subject property as PMAs. This designation means that these streams are a priority for preservation.
- ■No Marlboro clays have been identified on this site. No scenic or historic roads have been identified on or adjacent to this site.

■Environmental Review

- ■1. The Forest Stand Delineation (FSD) submitted with this application has been reviewed and found to meet the requirements for an FSD as provided for in the *Woodland Conservation and Tree Preservation Technical Manual for Prince George & County, Maryland.*
- ■2. The Type I Tree Conservation Plan (TCPI/21/00) was reviewed and found to meet the requirements of the Prince George County Woodland Conservation Ordinance. The plan, as revised on December 20, 2000 has addressed the comments found in the June 20, 2000 memorandum from the Environmental Planning Section.
- ■TCPI/21/00 is recommended for approval subject to the conditions found in the Recommendation section of this memorandum. The subject property has a net tract area of 302.04 acres and a Woodland Conservation Threshold (WCT) of 50 percent, or 151.02 acres. The application proposes 100.14 acres of woodland clearing which is subject to the ♣:1, 2:1 and 1:1 replacement requirements. The total woodland conservation requirement for this application is 229.54 acres which is being satisfied by 80.25 acres of on-site preservation in priority retention areas adjacent to the stream systems. The 149.29-acre balance of the woodland conservation requirement will be satisfied by one of two options as identified on the TCP. The first option would provide 63.26 acres of on-site reforestation and 86.27 acres of off-site mitigation at a location yet to be determined. The second option

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would provide 149.53 acres of on-site reforestation. Two options have been identified because the various approval agencies have varying requirements with respect to reforestation plantings on 3:1 slopes and the second option can only be used if the Soil Conservation Service changes its policy with respect to reforestation on 3:1 slopes.

- ■The Type I TCP as submitted provides a basic framework for the timing of the reforestation activities which will be further refined on the Type II TCP.
- <u>Proposed Conditions</u>: Prior to the issuance of any permits, the applicant shall prepare a Type II Tree Conservation Plan for approval by the Environmental Planning Section which provides detailed information on the location of all off-site mitigation, planting schedules, planting plans, reforestation management plans, phasing of the plan implementation and other pertinent information as determined necessary by the Environmental Planning Section.
- ■The applicant shall post all appropriate reforestation bonds with the Department of Environmental Resources in accordance with the phasing of the activities for this application.
- ■3. The current application proposes seven impacts to the streams and their associated buffers which include three stream crossings and four stormwater management outfalls. The original submittal for this application proposed a total of seven impacts to the streams and their associated buffers. The impacts on the previous application included the elimination of approximately 1,800 linear feet of the westernmost or third tributary previously described. Those impacts would have allowed for the construction of a single large fill area west of the PEPCO transmission lines. While the direct impacts to the 1,800 linear feet of the westernmost tributary have been eliminated, there is still a concern regarding the long-term viability of the stream due to proposed changes in the water regime associated with the stream.
- ■The impacts proposed by the revised plan dated December 20, 2000 include three road crossings for internal circulation and have been revised to preserve the westernmost tributary. The stream impacts as proposed have been evaluated and are justified due to the necessary site access constraints and the required storm drainage outfalls. The impacts have been minimized as much as possible.
- ■The first road crossing was previously constructed in connection with a surface mining application. This application proposes rip-rapping the stream channel for stabilization both upstream and downstream of the existing crossing. During the review of the Technical Stormwater Management Plan and the Sediment and Erosion Control Plan the extent of the proposed rip-rap will be further evaluated and may be decreased or increased to ensure protection of the undisturbed portions of the stream.

The other two stream crossings have been located along the narrowest segments of the stream and its associated buffers in order to minimize the adverse impacts associated with the crossings. The other four impacts are associated with the stormwater management outfalls which convey stormwater from the ponds to the streams. Failure to provide outfalls such as those proposed would result in uncontrolled overland flow which would result in significant degradation of the streams and the flow path from the ponds to the streams.

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- <u>Proposed Conditions</u>: Prior to the issuance of any grading permits which impact streams, wetlands or wetland buffers the applicant shall provide the Environmental Planning Section with copies of all federal and/or state wetland permits.
- ■To minimize the adverse impacts to the westernmost stream within the limits of this application, the TCPII and the Sediment and Erosion Control plans shall include a phasing plan which reflects no more than 40 percent of the drainage area of the stream to be disturbed at any one time. •
- ■4. The operation of rubblefills are evaluated for the noise levels that may be generated by on-site activities. In order to evaluate potential noise impacts the applicant provided a report titled *Noise Evaluation and Attenuation Report for Cross Road Trail Rubble Landfill (Report # 5011) prepared by Polysonics Corporation on March 23, 2000. Only the noise generated by the on-site operation of this proposed rubblefill was evaluated. That report addressed the noise generated by equipment working on the proposed rubblefill site. •
- ■The on-site noise generated by this proposed activity will not adversely impact off-site residential properties. The noise will impact one existing residence which is part of the subject application property. The applicant stated that should this application be approved, this house would be razed prior to initiation of operations. Based on this information there would be no adverse impacts to residences in the neighborhood from on-site work associated with this application.
- ■<u>Proposed Condition</u>: The applicant shall provide the Environmental Planning Section with evidence that the existing house located on Parcel 145 has been razed prior to commencing activities on the first phase of the central fill area. ■
- 5. The property is located in Sewer and Water Service categories 6 and 6 respectively. It is reasonable to expect that the proposed office and/or maintenance building will have restroom facilities that will require the construction of a private sewage disposal system and a well.
- ■The plans as submitted have not included the location of the proposed septic tank(s), drain field or well. It is understood that the applicant will be required to go through the Preliminary Plan of Subdivision process for the portion of the property where the office and maintenance buildings will be located. The location of the well and septic facilities will need to be coordinated with the Prince George County Health Department, Environmental Health. At that time the applicant will be required to identify the location of the septic tank(s), drain field and well. If woodland conservation areas are impacted the applicant will be required to revise the TCPI accordingly.
- <u>Proposed Condition</u>: During the review of the Preliminary Plan of Subdivision for Parcel 52 the location of all existing and proposed wells, drain fields, and septic tanks within 200 feet of the subject parcel shall be identified. If these features are situated such that woodlands will be impacted the applicant shall revise TCPI/21/00 accordingly. ◆
- ■6. Although Prince George County has no direct legal responsibility for the review of hydrogeologic information during the review of rubblefill applications, conditions which affect the groundwater may also affect other aspects of the review that are regulated by the

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Prince George*s County Code. Staff has concerns regarding the proposed changes to groundwater flow and the potential impact of surface stream flows. The subject application proposes excavation of the site prior to the construction of a liner and acceptance of any rubble. At the request of staff, the applicant submitted a report titled *Summary of Preliminary Hydrogeologic Information Proposed Cross Road Trail Rubble Landfill Site,* dated August 2000. The purpose of this report was to provide staff with background information only and is not intended to provide the detailed information required by the Maryland Department of the Environment for review of a rubblefill permit application in accordance with State Code, Title 26, Subtitle 04 Regulation of Water Supply, Sewage Disposal and Solid Waste Regulation, Chapter 07 - Solid Waste Management.

- ■State of Maryland Regulations, Title 26.04.07.16.(C)(6)(a), require that all proposed rubblefill liners have a minimum of three (3) feet of separation from the groundwater. To address the issue of intercepting the groundwater, the applicant proposes to install a dewatering system which would intercept the shallow groundwater table and direct the flow to a location elsewhere on the site. This design will require a variance to the state regulations and justification by the applicant that the groundwater is not being adversely impacted. It is the applicant contention that the state would grant a variance for this site since excavating through the shallow groundwater, implementing dewatering procedures, and establishing the base of the rubblefill on a clay liner is the best way to secure long-term protection of the liner. •
- ■The report, which is based on 1990 and 1991 data, indicates that shallow groundwater levels range from 5 to 22 feet below the existing surface for the western portion of the property. The report further indicates that the recharge area for this shallow groundwater typically corresponds to the drainage area for the surface water which is \forall 99 percent within the boundary of this application. The report states that changing the character of the groundwater table on this site will not adversely impact the groundwater availability or quality within the adjacent neighborhood.

Staff is concerned about how the interception of groundwater will impact the viability of existing streams shown on the revised plan dated December 20, 2000, to be preserved.

<u>Proposed Condition</u>: The products of all groundwater dewatering devices, both during and after construction, shall be directed to a proper filtration area and then discharged into the receiving stream within the previously existing drainage area. ●

<u>Comment</u>: The recommended conditions of the Environmental Planning Section have been included in the condition section of this report. The issues of need and visual impacts, also included in the Environmental Planning Section referral reply, are addressed in previous sections of this report.

Additional Environmental Issues:

<u>Soil and Sediment Control Considerations:</u> The Prince George's Soil Conservation District provided the following comments on 7/12/00:

■a. All sediment control ponds meet permanent design standards (i.e.: MD-378).

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- **b**. Drainage easements are not required as the ponds outfall to defined streams or into the 100-year floodplain within the property.
- **c.** The grading of the slope benches have been modified and do not make sharp turns.
- The proposed tree conservation plan depicts reforestation of the slope benches. Due to vegetative stabilization, stability and maintenance requirements, this is unacceptable as proposed.
- **■e.** The slope benches and the pipe drainage system will require long-term maintenance (i.e., after the fill is completed).

<u>Comment</u>: The proposed reforestation issue referenced in comment d. above will be addressed during approval of the Phase II Tree Conservation Plan. As noted elsewhere, the Phase I TCP is recommended for approval with two options. It should be noted that staff has assumed the conservative approach and analyzed the impacts of the proposed mounds without the proposed reforestation.

Health Department: Comments from Paul Meyer of the Division of Environmental Health, Prince George's County Health Department were received on September 11, 2000 and February 9, 2001. The comments centered on concern over the lack of sufficient groundwater data to make an informed decision as to the viability of this site for a rubblefill. The detailed and up-to-date information on groundwater will, however, be required by the State prior to it's approval of a rubblefill permit, and State regulations require a referral to the local health department during this process. This issue will therefore be reviewed again in greater detail. Should the applicant fail to satisfy local or state concerns about the impacts on groundwater during the state permit process, the rubblefill could not operate as proposed, and would require major revisions.

Mr. Meyer recommended five conditions, should the application be approved:

- The applicant will ensure that any discharge from the operation of the Rubblefill have water quality parameters that adequately protect the receiving stream.
- The applicant will ensure that drinking water wells on neighboring properties will not be impacted by the operation of the Rubblefill and any deficiencies associated with the operation of the Rubblefill will be corrected by the applicant including, when deemed necessary, the drilling of a new well.
- 3. The applicant provides, at the time of preliminary plan submittal, a site plan located the sewage disposal area delineated by satisfactory percolation test. The site plan should also indicated all wells by type and septic systems within a radius of 200 feet of the site and all wells within a radius of one half mile from the site boundary.
- 4. •The applicant will assure that odors, vermin, dust, and noise do not create a nuisance for neighboring properties.
- 5. The applicant is considered financially liable for violation of any of these provisions.•

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<u>Comment</u>: Conditions 1 and 3 have been addressed by the environmental conditions found at the end of this report. Conditions 4 and 5 are addressed by state and local regulations. The state permitting process requires specific information from the applicant indicating how the various nuisance factors will be addressed (COMAR26.04.07.16 A.8.e). With regard to condition 2, information regarding wells within one-half mile will be required by the state. However, the remedy suggested by the Health Department, should a neighboring well fail or become unsafe, as an unexpected result of this operation, would be appropriate, so long as an independent determination could be made. We recommend that the Health Department determine the necessity of drilling a new well, should such a situation arise.

N. <u>Traffic Issues</u>: The proposal is expected to have a maximum of 325 truckloads a day on US 301. This equates to 650 truck <u>trips</u>, since a load involves both a trip in and a trip out. The site is 1.8 miles from the intersection of US 301 and Cherry Tree Crossing Road and 1.2 miles from the intersection of Cherry Tree Crossing Road and Cross Road Trail. The applicant prepared and submitted a traffic study for staff review. The study reviewed the unsignalized intersections of Cross Road Trail and Cherry Tree Crossing Road and Cherry Tree Road and US 301. The peak one hour of street traffic was 7:00 to 8:00 in the morning and 4:00 to 5:00 in the afternoon, except at the intersection with US 301, where the peak hour was determined to be 4:45 to 5:45 p.m.

The M-NCPPC Transportation Planning Section staff reviewed the applicant study and provided the following comments:

■The study identified the intersections of **Cross Road Trail-Cherry Tree Crossing Road** and **Cherry Tree Crossing-US 301** as the ones on which the proposed development will have the most impact. Based on a turning movement count taken in November 1999, the traffic data were analyzed and the following results were determined:

	Existing	
Intersection**	Delay (Seconds) AM	Delay (Seconds) PM
**Cross Road Trail/Cherry Tree Crossing Rd.	9.9	9.7
**Cherry Tree Crossing Road/US 301	28	74.6

Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service and the intersection delay measured in seconds/vehicle. A delay of 50 seconds or less is deemed acceptable. For signalized intersections, a CLV of 1450 or less is deemed acceptable as per the *Guidelines*

In order to determine the subject property-s potential for traffic generation, a 1996 study involving data from other functioning rubble fills in the state of Maryland was obtained by the applicant-s traffic consultant. The analysis of these data indicated that the subject site could generate a range of 300 to 400 truck loads of material per day. This would be the approximate equivalent of 600 to 800 vehicles per day. Taking the more conservative estimate in the analysis, the study evaluated the data and concluded the following:

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Total Traffic (400 loads/day + Background)			
Unsignalized Intersection	Delay (Seconds) AM	Delay (Seconds) PM	
Cross Road Trail/Cherry Tree Crossing Rd.	10.6	10.1	
Cherry Tree Crossing Road/US 301.	57.1	104.6	

^{*} Unsignalized intersections are analyzed using the Highway Capacity Software. The results show the level-of-service and the intersection delay measured in seconds/vehicle. A delay of 50 seconds or less is deemed acceptable. For signalized intersections, a CLV of 1450 or less is deemed acceptable as per the *Guidelines*.

- ■Typically, when unsignalized intersections fail to operate within acceptable limits, staff generally recommends that a signal warrant study be done to see if the need for signalization is justified. Under the proposed usage of 400 loads per day, if the intersection at Cross Road Trail and US 301 were signalized, the levels-of-service would be LOS B during both peak periods. The traffic consultant has indicated a willingness of the applicant to fund the installation of a traffic signal if deemed necessary.
- Because the proposed development will impact a State Highway Administration (SHA) maintained roadway and a County maintained roadway, the traffic study was reviewed by both the SHA as well as the Department or Public Works and Transportation (DPW&T). Regarding the installation of a traffic light, the SHA has stated in a June 30, 2000 letter to staff (McDonald to Stouten) that signalization was not warranted. Staff has therefore concluded, that the SHA would not grant a permit to install a signal. Instead, the SHA and DPW&T both suggested improvements to the existing intersection. Specifically, both agencies have requested that southbound left turn lane (on US 301) be extended, while a similar extension be provided to the westbound right turn lane on the Cherry Tree Crossing Road.
- ■In addition to the two intersections that were analyzed, the traffic also evaluated three roadway links that could potentially be impacted by the proposed development.

Those links are:

- Cherry Tree Crossing; between US 301 and Cross Road Trail
- Cross Road Trail; between Cherry Tree Crossing and Lange Lane
- Cross Road Trail; between Lange Lane and the Site access
- ■Using the Highway Capacity software, the traffic study analyzed the three links using existing and background traffic volumes. The study concluded that all links operated with acceptable levels-of-service under present conditions, and will continue to do so under future conditions.
- In closing staff concludes that the health, safety and welfare of the community will not be negatively impacted by the approval of this application, if the application is approved with following conditions:

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■The applicant shall provide the following improvements to the US 301/Cherry Tree Crossing intersection prior to the issuance of any permit:

- 1. Provide 300 feet of sight distance on both directions at the site access points.
- 2. Extend the existing short right turn lane along Cherry Tree Crossing Road for an additional 200 feet to provide for two approach lanes.
- Extend the southbound left turn on US 301 to a length deemed acceptable to the SHA.
- 4. Provide an acceleration lane on US 301, north of the intersection for right-turning vehicles from westbound Cherry Tree Crossing Road. The length of the acceleration shall be determined by the SHA.•

The Department of Public Works also reviewed the application and determined that the roadway capacity for the proposed use will be adequate if Cross Road Trail is resurfaced from US Route 301 to the entrance to the Brandywine fill near Lange Lane and, if the roadway from that point east is improved to a section, 24 feet in width, plus 2-foot wide paved shoulders and a one-foot sodded/gravel shoulder up to the swale.

They recommend the following conditions:

- Applicant shall show at the time of Preliminary Plan of subdivision, the 40-foot wide right-of-way dedication from the established centerline, toward the property line.
- 2. Prior to issuance of building permit for the subject property, the following improvements shall be included on site and/or grading plans and/or bonded by the applicant for construction. The improvements shall be completed prior to the commencement of operations.
 - a. Widen and resurface with HMA Superpave 19mm PG 76-22 the existing Cross Road Trail, from the Brandywine Enterprise Company*s entrance to the eastern end of the Cross Road Trail, Inc. property line. The road widening shall include a total of 28-foot wide roadway paving, two 12-foot wide travel lanes, a 2-foot wide paved shoulder on each side, and a 1-foot sodded/gravel shoulder up to the swale
 - b. Resurface Cross Road Trail, from Cherry Tree Crossing Road to the Brandywine Enterprise Company*s entrance, using HMA Superpave 19mm PG76-22; to add a 2-inch pavement overlay on the roadway.
 - Applicant to provide a 12-foot wide and 100-foot long acceleration and deceleration lanes at the entrances.
 - At time of final roadway design, a minimum of 375 feet of sight distance shall be provided in both directions at the site entrances.

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- e. Improvements to all existing pipe culverts along Cross Road Trail, from Cherry Tree Crossing Road to the eastern end of the property line of Cross Road Trail, Inc., to be shown on the roadway improvement / storm drain and paving plans. Any rusted corroded and damaged pipes shall be removed and replaced with new pipes and end sections.
- f. Applicant shall extend the existing short right turn lane to northbound US Route 301 for an additional 200 feet to provide for a two-lane approach along Cherry Tree Crossing Road at US Route 301. The existing shoulder should be paved to traffic bearing conditions in order to provide this extension. The applicant will not be required to purchase additional right-of-way from the property owners along Cherry Tree Crossing Road. The applicant should perform the required roadway improvements within the existing public right-of-way for the subject road.
- g. Resurface with HMA Superpave 19 mm PG 76-22 the existing Cherry Tree Crossing Road, from US Route 301 to Cross Road Trail to add 3• pavement overlay on the roadway. The resurfacing of the roadway within the limits of the railroad right-of-way would need to be coordinated with the railroad company. If the roadway improvements within the railroad right-of-way are not feasible, the improvements shall be extended up to the railroad right-of-way as determined by DPW&T.
- h. Improvements to all existing pipe culverts along Cherry Tree Crossing Road, from US Route 301 to Cross Road Trail to be shown on roadway improvement / storm drain and pavement plans. Any rusted, corroded and damaged pipes shall be removed and replaced with new pipes and end sections.

<u>Comment:</u> With the recommended improvements to Cross Road Trail and to the intersection of Route 301 and Cherry Tree Crossing Road, the proposed haul route will have the necessary capacity to handle the proposed traffic. At the time of the previous denials of rubble fill operations on the subject site (SE 4029) and on the site west of the Brandywine fill (SE 4114), testimony in the record indicated that portions of Cross Road Trail were only 20 feet wide. The Department of Public Works has determined based upon recent field checks, that Cross Road Trail from Lange Lane to Route 301 has a pavement width of approximately 24 feet, and can handle the proposed traffic, assuming it is resurfaced as recommended.

O. <u>Truck Traffic:</u>

The District Council has twice denied an application for a rubblefill in this neighborhood, based in part upon the cumulative effects of truck traffic on the surrounding population. In both cases, the Brandywine Rubblefill south of Cross Road Trail was still in operation. Although no truck trip maximum was set for this operation, the size of the fill (about 3.5 MCY of fill) and it is length of operation, indicate that it generated about 175 truckloads, or 350 total truck trips per day. The addition of a possible 400 trips (200 truckloads) per day was determined to have significant harmful adverse impacts due to size, dust, noise, stacking and other characteristics associated with large trucks. (It is noteworthy, that by the time of the denial of the latter application [SE 4114], sand and

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gravel mining operations impacting truck traffic on Cross Road Trail had already ceased. See the Zoning Hearing Examiner decision in SE 4114.)

The proposed operation is expected to generate about 650 total truck trips per day, a number approaching the cumulative number (around 750), previously determined to be detrimental. The staff recommends that this application be approved subject to a truck trip restriction of 400 trips (200 truckloads) per day. This would bring the operation into conformance with previously approved trip numbers, and would not adversely affect the surrounding area in a uniquely detrimental way.

P. <u>Competitive Interest</u>: It should also be borne in mind that two other requests for rubblefills are currently pending. Those applications are competing with the subject application for a finite demand. Should either of those special exceptions be approved, a corresponding change in the need for this facility will occur, and the need for this facility will require reevaluation.

Q. Required Findings:

<u>Section 27-317(a)</u> of the Zoning Ordinance provides that a special exception may be approved if:

(1) The proposed use and site plan are in harmony with the purposes of this Subtitle.

The purposes of the Zoning Ordinance are contained in Section 27-102. They are many and varied, but all are predicated on protecting and promoting the health, safety, morals, comfort, convenience and welfare of the present and future inhabitants of the county. The proposed use and site plan, with the conditions recommended, are in harmony with the purpose of the Ordinance.

The subject site can provide a safe location for the disposal of rubble without serious detriment to the surrounding neighbors, if the proposed project is significantly reduced in size and scope. As proposed, this application will result in a rubble fill operation which by itself, will be larger, create as much truck traffic and operate far longer, than the combined effects of the recently closed Brandywine Rubblefill and either of the two rubblefill applications previously denied by the District Council. It will also extend the impacts of large unnatural land forms on the surrounding area.

The staff proposed recommendations will permit the operation of a rubble fill on the site for a maximum of 15 years. It will limit the truck traffic to an amount less than that previously experienced when the past rubble fill and mining operations were operating in the area simultaneously. Cross Road Trail has been widened to 24 feet between US 301 and the Brandywine fill entrance. The applicant will be required to widen the balance of the roadway and resurface it completely, thereby meeting the standards for safe operation of trucks on public roadways.

Growth and development within the County invariably entail construction activities, which consequently generate construction demolition material. Within Prince George*s County and the State of Maryland, it has been determined that the proper method of disposing of this demolition material is in a rubble fill, constructed and operated pursuant to requirements set forth within the Prince George*s County Code and through state law. With the staff recommended condition limiting the size of the fill to 5 million cubic yards, the fill will serve the needs of the County and provide for out-of-county needs for a period of 15 years, but will not provide needs identified beyond that 15-year period.

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The Applicant proposes to retain a significant amount of wooded buffer, and will supplement the landscaping as required by the Prince George*s County Landscape Manual. However, the cumulative effects of additional grass covered mounds, which could nevertheless be viewed from surrounding roadways, would be a significant intrusion into the community. A condition is, therefore, recommended to eliminate significant mounding on the site in order to protect the community from adverse visual impacts of adjoining development.

(2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle.

As proposed, this rubblefill is not in conformance with all applicable requirements and regulations of the Zoning Ordinance. The proposed fill's capacity is four times the capacity needed to address the projected demand both inside and out of the county for the next 15 years. There is an even wider gap between the applicant's proposal and the in-county needs over the next 15 years. It is therefore not in conformance with Section 27-406 (h) which requires a determination that the proposed use be necessary to serve the projected growth in Prince George's County based upon growth projections over a 15-year period.

In addition, the overall impacts of the proposed size of the mounds on the landscape and horizon in this neighborhood, which is already adversely impacted by mounds of rubble, results in an unusual adverse impact which is not in conformance with Section 27-317(a)(5). However, with the staff recommended limitations on capacity and final topography, the proposed use is in conformance with all applicable requirements and regulations.

(3) The proposed use will not substantially impair the integrity of any validly approved Master Plan or Functional Master Plan, or in the absence of a Master Plan or Functional Map Plan, the General Plan.

The 1993 Subregion VI Area Master Plan recommends Private Open Space for the area west of the PEPCO right-of-way (R-O-W). Low Rural Residential uses are recommended for the area east of the PEPCO ROW line, part of a very extensive area planned for this continuing use in southeast Prince George County. The Environmental Envelope and Sand & Gravel Resources chapters of the approved Master Plan include a series of development guidelines. Those which directly relate to rubblefills are as follows:

- ■All existing and proposed rubblefills should be encouraged to establish recycling programs to reduce the need for new rubble landfills. •
- ■Additional rubble landfills should be sited only where a need has been demonstrated through the Prince George S County Ten-Year Waste Management Plan. •

As proposed, this rubblefill is not consistent with the master plan guideline regarding need. The proposed fill far exceeds the identified need for a rubblefill for the 15-year planning period. Construction of the proposed rubblefill for approximately 20 MCY of fill, has the potential to substantially impair the integrity of the master plan. The difference in order of magnitude between the proposal and what is actually needed, cannot be overstated. As discussed in the Visual Impacts section of this report, the visual impacts of the proposed facility will be substantially at odds with the prevailing characteristics of the landscape in this area. This difference is so substantial as to impact directly on the recommendations of the plan for low rural residential development in the area.

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The staff proposed recommendation, in contrast, is tied to the identified need for the next fifteen years, and is therefore generally consistent with this master plan guideline. Moreover, the ultimate contours of the facility as conditioned in this report will be compatible with the characteristics of the surrounding rural area, thereby avoiding substantial impairment to the recommendations of the master plan for this area.

(4) The proposed use will not adversely affect the health, safety or welfare of residents or workers in the area.

With the conditions recommended by staff, the proposed use will not adversely affect the health, safety or welfare of residents or workers in the area. There are always negative impacts associated with a rubblefill, including increased traffic, noise, dust, significant visual changes, and potential environmental degradation. Therefore, this application has received intensive scrutiny and will continue to be scrutinized by the Maryland Department of the Environment as well as other public agencies, should it be approved. This site has geologic features such as a natural clay formation, which, with the addition of the required liner, will provide a secure barrier between the rubblefill and surrounding soils and streams. The drainage patterns around this site will naturally tend to keep any impacts to groundwater from affecting other properties. In addition, this project will require approval of detailed studies required by the Maryland Department of the Environment prior to approval of a rubblefill permit. Environmental Planning staff has raised concerns about how the proposed interception of groundwater will impact the viability of existing streams. However, these issues will be reviewed in greater detail at the state level and an appropriate filtration system will be approved at that time.

The noise impacts of the machinery on-site were addressed by the applicants in a noise study and staff agreed with their determination that on-site noise would not exceed state permitted maximums or detrimentally affect surrounding properties. It is likely that there would be an increase in noise generated by truck traffic on the surrounding roadways, if the full number of proposed truck trips were allowed. However, there are no state noise regulations concerning noise generated by vehicles on public roads, and therefore there are no objective standards to regulate this issue. Nevertheless, the staff recommended truck trip limit of 400 trips per day will, at least, ensure that this site will generate no more truck traffic than prior sand and gravel and rubblefill activity, which has now ceased. The applicant is requested 650 trips per day represents a significant increase in truck traffic; similar, in fact, to the cumulative impacts of two smaller rubblefills previously denied.

Staff finds that the applicant request for a rubblefill of 19.7 million cubic yards of fill, to be operated over a period of 30 years, with up to 650 truck trips per day will have negative impacts above and beyond those commonly associated with such uses and beyond the cumulative impacts of smaller rubblefills previously denied. With the recommended conditions, severely limiting the size and scope of this operation, and given the level of environmental scrutiny currently required, staff finds that the impacts of the reduced operation are not adverse to the surrounding area, in a manner different from those impacts commonly associated with such uses.

(5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood.

The use or development of properties in the surrounding neighborhood is most likely to be affected by the visual impacts of the proposed mounds as well as the more temporary effects of the operation,

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such as increased truck traffic and noise. The rubble mounds as proposed, for this application are larger and taller than those currently existing south of Cross Road Trail. Staff has recommended a detailed study of these mounds and possible screening techniques to minimize the visual impacts associated with these large unnatural land features. However, it is recognized that simply screening the base of the mounds or providing additional screening from specific, more distant observation points, will not alter the overall impact of the proliferation of mounds of rubble in this neighborhood. Only a significant reduction in the height of these mounds will fully ensure compatibility with the natural surroundings. We therefore recommend that this rubblefill be limited to restoring the disturbed land as closely as possible to elevations and land forms consistent with the immediately surrounding properties.

(6) The proposed site plan is in conformance with an approved Tree Conservation Plan.

A Tree Conservation Plan (TCP/21/00) has been recommended for approval by the Environmental Planning Section. This plan will satisfy the woodland conservation requirements through one of two options, depending on whether or not some proposed reforestation plantings are permitted by the Soil Conservation District. A final determination of which option is selected will be made at the time of approval of the TCP II.

CONCLUSION:

In reviewing this application, the District Council will ultimately decide whether or not this use at this location has adverse impacts upon adjoining and surrounding properties, unique and different in kind or degree, from those inherently associated with such uses regardless of location within the O-S Zone. During the past ten years, the District Council has twice decided that a rubblefill proposal in this neighborhood would have an adverse impact on the health, safety and welfare of the surrounding community. In each case, those decisions were affirmed by the Court of Special Appeals.

In deciding whether or not this application should be approved, the District Council must consider the impacts of <u>this</u> proposal on the current situation. In so doing, it is helpful to determine to what degree this proposal is different from those previously considered. The prior cases were decided while the Brandywine fill was still in operation. As a result, the cumulative impacts of two rubblefills were considered.

The proposed rubblefill differs from the earlier requests in several ways, both positive and negative. First, the site is unusually suited to this kind of use, due to drainage patterns and soil conditions. Second, the applicant has taken significant steps to address issues of views of the proposed rubble mounds from residences in the area. Another factor is that Cross Road Trail, though once recommended for designation as a scenic road, was ultimately not designated as such. Finally, the existing rubblefill in the area, has shut down operations, thereby removing one of the major concerns about the simultaneous operation of two rubblefills.

On the negative side, the proposed use is far larger and is proposed to operate far longer than any other rubble fill operation proposed to date in the county. This tends to negate any positive benefits from the end of operations of the Brandywine fill. Also, the remaining impacts of the Brandywine fill, namely the visual impacts of the mounds, will be added to by the proposed mounds on the subject site.

The staff recommendation to scale down the operation to a size which is actually documented to be needed, will eliminate the need to create sizeable mounds at this location. A time limitation of 15 years, will eliminate

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some of the cumulative effects over time on this community. Finally, a limitation to 400 truck trips (200 truck loads) daily will be similar to the traffic impacts of the prior approved operations and will not permit a situation that would be similar to the cumulative impacts which were previously found to be uniquely adverse.

The proposed use would be conditioned upon several significant road improvements to Cross Road Trail and the intersection of US 301 and Cherry Tree Crossing Road. Public Works has determined that the roadway west of the Brandywine Rubblefill is sufficiently wide to accommodate the proposed traffic. Cross Road Trail east of the Brandywine entrance will require widening, however. One problem related to this road widening, is it so possible effect on the trees which currently provide some buffering of the Brandywine rubble mounds from the homes on the north side of Cross Road Trail. The applicant should demonstrate that the road can be widened at this location in accordance with the requirements of Public Works, without compromising the buffering of the Brandywine fill from the views of the properties to the north.

Staff therefore recommends approval of Special Exception Application No. 4383 and TCPI/21/00 subject to the following conditions:

- 1. The capacity of the rubble fill shall be limited to 5 million cubic yards of fill.
- The rubble fill shall be permitted to operate for a period of 15 years from the time that fill materials are first accepted at the site.
- 3. Truck trips shall be limited to 400 trips (200 truck loads) per day.
- 4. The proposed rubblefill shall be redesigned by the applicant prior to final approval of this special exception. The redesigned plan shall be submitted to the M-NCPPC Environmental Planning Section, to review for conformance with the following criteria.
 - The post-development elevations of the site shall not exceed 250 feet above sea level and shall mimic the topography of surrounding areas.
 - b. Final grades on the site shall not exceed 20 percent of 5:1 slopes, unless a lesser slope is required to achieve a safety factor of 1.5 as determined by the Department of Environmental Resources. The slope limitation shall apply to 90 percent of the area disturbed for disposal of rubble and shall not apply to accessory areas where construction and demolition debris is not being disposed.
 - c. A maximum of 10 percent of the fill area may include slopes between 20 percent and 33 percent unless a lesser slope is required by the Department of Environmental Resources for safety reasons. Those areas shall be distributed around the site so that there is no area with a rise of more than 25 feet or a run of more than 75 feet. These areas must be further distributed so that no two areas are within 250 of each other.
 - The final grade shall include topographic undulations as are found on nonengineered lands such as forest, pastures and farm fields in this portion of Prince George's County.

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- e. The post-development drainage area for each watershed impacted by this application shall be designed to replicate the acreage of each pre-development drainage area o within 2.5 percent of the pre-development acreage.
- In order to alleviate response time inadequacies of fire suppression equipment, all
 commercial structures, more specifically, the office and maintenance buildings, shall be fully
 sprinkled in accordance with NFPA standard 13 and all applicable Prince George
 County
 laws.
- 6. Prior to the issuance of any permits, the applicant shall prepare a Type II Tree Conservation Plan for approval by the Environmental Planning Section. The plan shall provide detailed information on the location of all off-site mitigation, planting schedules, planting plans, reforestation management plans, phasing of the plan implementation and other pertinent information as determined necessary by the Environmental Planning Section.
- The applicant shall post all appropriate reforestation bonds with the Department of Environmental Resources in accordance with the phasing of the activities for this application.
- 8. Prior to the issuance of any grading permits which impact streams, wetlands or wetland buffers, the applicant shall provide the Environmental Planning Section with copies of all federal and/or state wetland permits.
- 9. To minimize the adverse impacts to the westernmost stream within the limits of this application, the TCPII and the Sediment and Erosion Control plans shall include a phasing plan which reflects approximately 40 percent of the drainage area of the stream to be disturbed at any one time.
- 10. The applicant shall provide the Environmental Planning Section with evidence that the existing house location on parcel 145 has been razed prior to commencing disturbance within 600 feet of the dwelling. Otherwise, the special exception site plan shall be revised to reflect a noise berm constructed on the subject property to alleviate the noise issues for this parcel.
- 11. During the review of the Preliminary Plan of Subdivision for Parcel 52, the location of all existing and proposed wells, drain fields, and septic tanks within 200 feet of the subject parcel shall be identified. If these features are situated such that woodlands will be impacted the applicant shall revise TCPI/21/00 accordingly.
- 12. Prior to the issuance of any permits, the stormwater management technical design plan shall demonstrate to the M-NCPPC Environmental Planning Section that, the products of all groundwater dewatering devices, both during and after construction, shall be directed to a proper filtration area and then discharged into the receiving stream within the previously existing drainage area.

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- 13. The applicant will ensure that drinking water wells on neighboring properties will not be impacted by the operation of the rubblefill. Any deficiencies associated with the operation of the rubblefill, which cause operational or water safety impacts on neighboring wells, will be corrected by the applicant; including when deemed necessary by the Prince George*s County Health Department, the drilling of a new well.
- 14. Applicant shall show at the time of Preliminary Plan of subdivision, the 40-foot-wide right-of-way dedication from the established centerline, toward the property line.
- 15. The site plan shall show that any free standing sign will be located at least ten feet behind the proposed right-of-way for Cross Road Trail.
- 16. Prior to the final approval of this special exception, the applicant shall show that the section of Cross Road Trail between the Brandywine Rubblefill and the entrance to the subject site, can be widened per the requirements of Public Works without compromising the wooded buffer of the Brandywine fill from the views of the properties to the north.
- 17. Prior to issuance of building permit for the subject property, the following improvements shall be included on site and/or grading plans and/or bonded by the applicant for construction.. The improvements shall be completed prior to the commencement of operations.
 - a. Widen and resurface with HMA Superpave 19mm PG 76-22 the existing Cross Road Trail, from the Brandywine Enterprise Company*s entrance to the eastern end of the Cross Road Trail, Inc., property line. The road widening shall include a total of 28-foot- wide roadway paving, two 12-foot-wide travel lanes, a 2-foot-wide paved shoulder on each side, and a 1-foot sodded/gravel shoulder up to the swale
 - Resurface Cross Road Trail, from Cherry Tree Crossing Road to the Brandywine Enterprise Company sentrance, using HMA Superpave 19mm PG76-22; to add a 2-inch pavement overlay on the roadway.
 - Applicant to provide a 12-foot-wide and 100-foot-long acceleration and deceleration lanes at the entrances.
 - d. At time of final roadway design, a minimum of 375 feet of sight distance shall be provided in both directions at the site entrances.
 - e. Improvements to all existing pipe culverts along Cross Road Trail, from Cherry Tree Crossing Road to the eastern end of the property line of Cross Road Trail, Inc., to be shown on the roadway improvement / storm drain and paving plans. Any rusted corroded and damaged pipes shall be removed and replaced with new pipes and end sections.
 - f. Applicant shall extend the existing short, right-turn lane to northbound US 301 for an additional 200 feet to provide for a two-lane approach along Cherry Tree Crossing Road at US 301. The existing shoulder should be paved to traffic bearing conditions in order to provide this extension. The applicant will not be required to

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- purchase additional right-of-way from the property owners along Cherry Tree Crossing Road. The applicant should perform the required roadway improvements within the existing public right-of-way for the subject road.
- g. Resurface with HMA Superpave 19 mm PG 76-22 the existing Cherry Tree Crossing Road, from US 301 to Cross Road Trail to add 3• pavement overlay on the roadway. The resurfacing of the roadway within the limits of the railroad right-ofway would need to be coordinated with the railroad company. If the roadway improvements within the railroad right-of-way are not feasible, the improvements shall be extended to the railroad right-of-way as determined by DPW&T.
- h. Improvements to all existing pipe culverts along Cherry Tree Crossing Road, from US 301 to Cross Road Trail to be shown on roadway improvement / storm drain and pavement plans. Any rusted, corroded and damaged pipes shall be removed and replaced with new pipes and end sections.

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