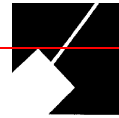


Maryland-National Capital Park and Planning Commission  
 Prince George's County Planning Department  
 Development Review Division  
 301-952-3470



Comment [COMMENT1]: WHEN INSERTING INFORMATION AT THE @ SIGN REMEMBER TO USE INDENT FOR SECOND LINE - NOT TAB. ALSO, IT WILL LOOK LIKE THE TEXT IS GOING WACKO, BUT DON'T WORRY - IT IS FINE.

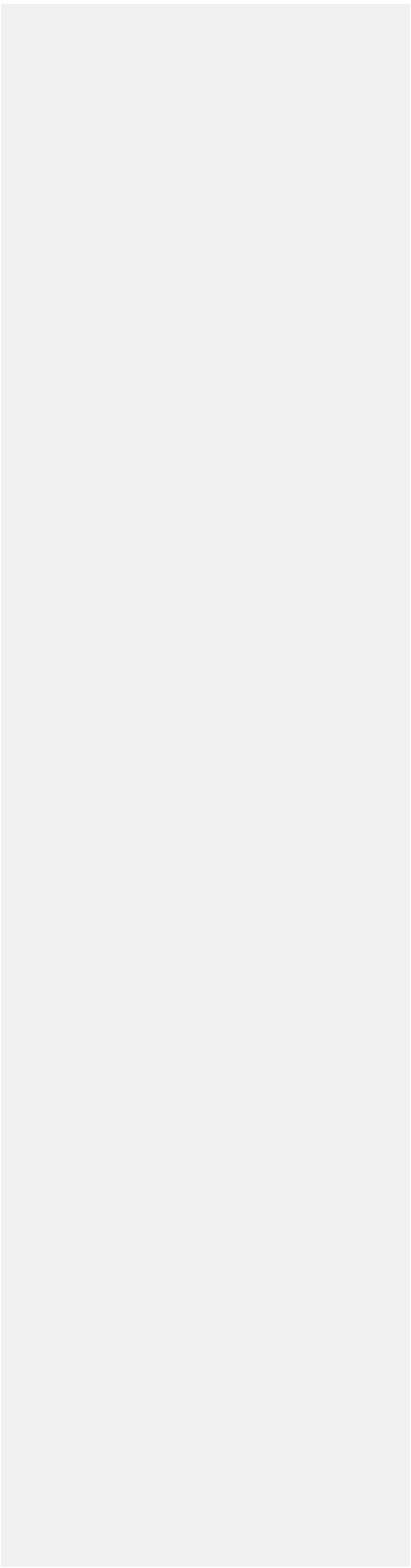
Special Exception Application No. SE-4347

Application	General Data
<b>Project Name:</b> Maryland Reclamation Rubble Fill  <b>Location:</b> East side of Brown Station Road, approximately 2,700 feet south of White House Road  <b>Applicant:</b> James A. Openshaw, Jr., Managing Member  <b>Correspondent:</b> Russell Shipley	Date Accepted: 4-14-99
	Planning Board Action Limit: N/A
	ZHE Hearing Date: Not Scheduled
	Plan Acreage: 131.5± Acres
	Zone: R-R
	Dwelling Units: N/A
	Square Feet: N/A
	Planning Area: 79
	Council District: 6
	Municipality: None
	200-Scale Base Map: 203SE 10R

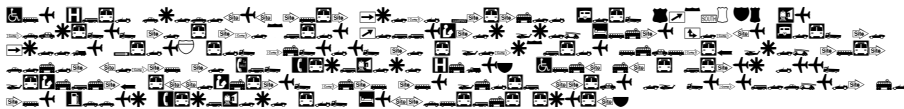
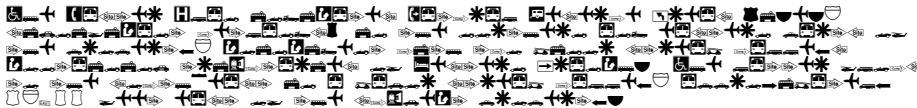
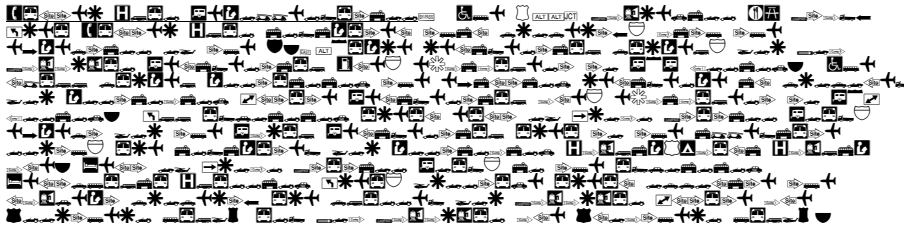
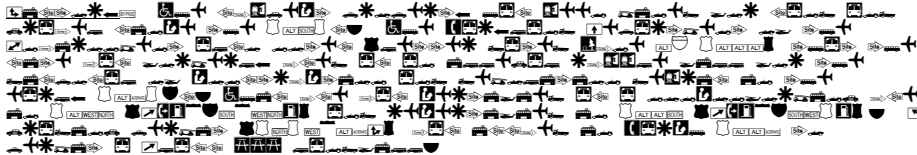
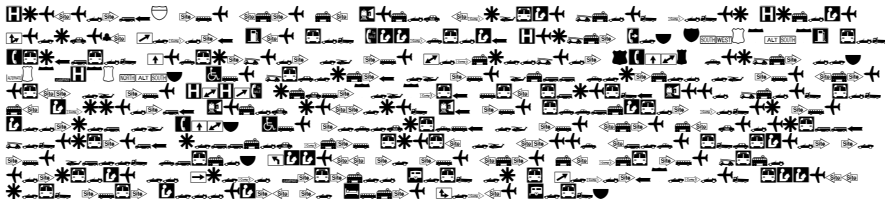
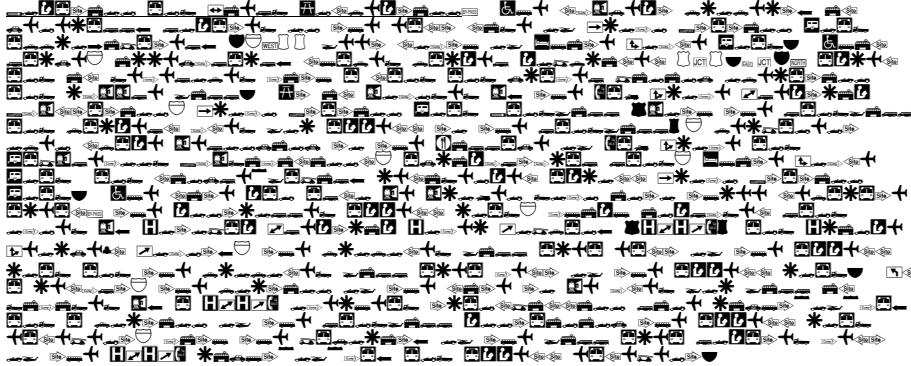
Purpose of Application	Notice Dates
Convert an approved sand and gravel mining operation and Class III fill to a rubble fill.	<b>Adjoining Property Owners:</b> 4-15-99 (CB-15-1998)
	<b>Previous Parties of Record:</b> None (CB-13-1997)
	<b>Sign(s) Posted on Site:</b>
	<b>Variance(s): Adjoining Property Owners:</b>

Staff Recommendation			Staff Reviewer: Jimi Jones
APPROVAL	APPROVAL WITH CONDITIONS	DISAPPROVAL	DISCUSSION

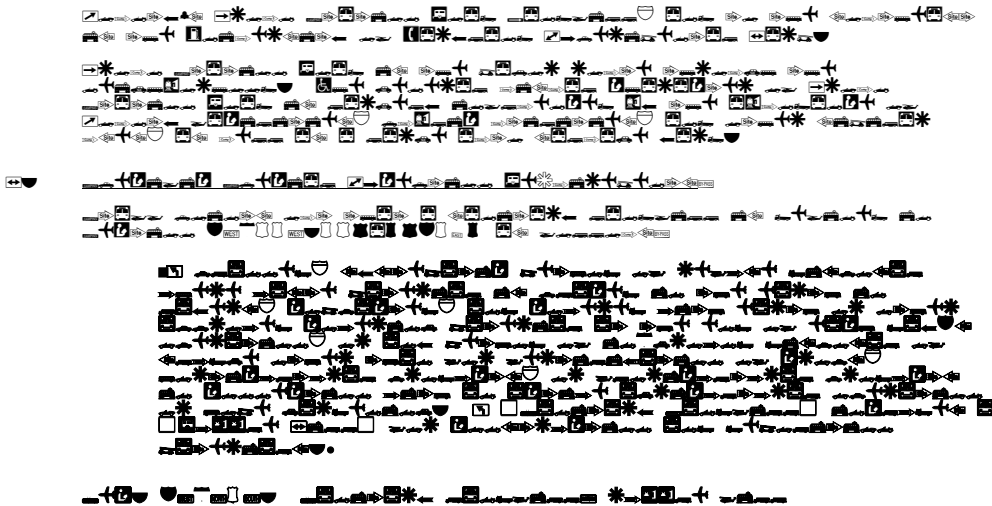
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- (1) A sanitary landfill or rubble fill may be permitted as a temporary Special Exception.
- (2) The District Council shall determine the period of time for which the Special Exception is valid.

Comment: The applicant acknowledges this requirement and requests that the District Council approve the proposed fill for 20 years.

- (3) 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.

Comment: The subject application area is not located within the R-E Zone.

- (4) 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.

Comment: This proposal does not include a rock crusher.

- (5) 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.

- (6) 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).

Comment: The Environmental Planning Section (M-NCPPC) prepared the required inventory, identified as Appendix 8 in the report entitled *Analysis of Rubble Landfills Capacity in Prince George's County, MD (1999-2014)* for SE-4347. The Landfills Capacity Report is currently in draft form and will be incorporated in the record of this case by the time of the Planning Board's review. A copy of the inventory is attached to this staff report. The inventory lists 57 sites comprised of 47 sand and gravel mines, 5 wash plants, 3 rubble fills and 2 sanitary landfills.

- (7) 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 15-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.
- (8) 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.

Comment: The Landfills Capacity Report addresses the need for another rubble fill in the County. It indicates that there are currently five active landfill operations which are accepting rubble materials. Four of them are located in Prince George's County and the fifth, known as PST is located in Anne Arundel County. By January 1, 2002 three of the existing operations, PST, Sandy Hill Landfill and Brandywine will cease operations leaving only Brown Station Landfill and Ritchie Rubble Fill.

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

Scenario A - herein also named Existing Facilities (Worse case for existing rubble landfill capacity)

1. Increase of 1% per year for out-of-County demand
2. Recycling remains constant at 25% at Brandywine and 15% at Ritchie
3. Dynamics/Interaction of existing landfills:
  - Sandy Hill to Ritchie in mid 2000
  - PST Reclamation to Ritchie in mid 2001
  - Brandywine to Ritchie upon exhausting the capacity, 2001
  - Ritchie remains unallocated

Note: Brown Station landfill is treated as a separate entity until the end of 2009 when it closes. Upon closure, the rubble demand of 27,522 cubic yards, needed between 2010 and 2014, is considered a part of the overall Countywide demand.

The following remaining capacity was available at the end of 1998 at individual existing facilities:

■ Sandy Hill	66,876 cubic yards
■ PST Reclamation	171,473 cubic yards
■ Brandywine	347,779 cubic yards
■ Brown Station	56,975 cubic yards
■ Ritchie	<u>1,450,588 cubic yards</u>
Total Countywide	2,093,691 cubic yards

Scenario B (this is best case for existing rubble landfill capacity)

This is identical to Scenario A, except that Sandy Hill materials go to Brown Station until the end of 2009.

Note: The demand capacity at Brown Station and Sandy Hill until the end of 2014 is estimated at 581,839 cubic yards. At the end of 2009 when Brown Station closes, 319,265 cubic yards of rubble materials need to be taken somewhere until the end of 2014.

Scenario C (Scenario A & Proposed MD Reclamation LLC Property Rubble Landfill)

- Scenario A, except that Ritchie and Brown Station are allocated to MD Reclamation L.L.C.
- MD Reclamation LLC Property Rubble fill (SE-4347) with a capacity of 5,814,316 cubic yards and starting when the Brandywine closes.



Scenario D (Scenario A & Proposed Processing Facility)

- Scenario A, except that Ritchie is allocated to MD Reclamation L.L.C.
- Proposed processing facility starts when the Brandywine closes.
- The facility processes 250,000 tons of rubble per year.
- Recycling about 50% or 125,000 tons/year
- Dispose 125,000 tons/year against the remaining capacity, most likely at Ritchie
- At Ritchie the conversion coefficient is: 1 ton = 0.61 in place cubic yards (125,000 tons = 76,250 in place cubic yards).

Scenario E (Scenario A & Proposed MD Reclamation LLC Property Rubble Landfill & Proposed Processing Facility)

- Scenario A, except that Ritchie and Brown Station are allocated to MD Reclamation L.L.C.
- MD Reclamation LLC Property Rubble fill
- Proposed Processing Facility

The main findings are briefly listed below:

1. Nine Counties in the State of Maryland have rubble landfills and two Counties have land clearing debris landfills.
2. During 1997, the State of Maryland accepted 2,048,695 tons of rubble and land clearing debris.
3. Harford County has three rubble landfills and Prince George's County has two rubble landfills.
4. 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. However, this will close in mid 2001.
5. 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.
6. According to the Maryland Department of the Environment 596,601 tons of rubble were disposed at the two major rubble fills in Prince George's County during 1997, the second highest amount in the State or about 29 percent.

7. During 1998, a total of 499,837 tons of rubble materials were disposed in five solid waste management facilities (four in Prince George's County and one in Anne Arundel County) as follows: Brandywine, 37.1 percent; Ritchie Land Reclamation, 51.9 percent; PST Reclamation (Anne Arundel County), 4.7 percent; Brown Station, 0.5 percent; and Sandy Hill, 5.8 percent.
8. About 271,181 tons, representing 54 percent of the total, were generated in Prince George's County during 1998. The Prince George's County 1998 Solid Waste Management Plan estimated 264,800 tons of rubble for the same year.
9. If operated independently and the out-of-County amounts 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 2009
10. If operated under the conditions specified in Scenario A, the Countywide deficit for the demand of in-County generated rubble materials will occur in 2010, while for the total rubble materials (which include the out-of-County component), the deficit will occur in 2005.
11. Under Scenario B, the Countywide deficit for the demand of in-County material will occur in 2011 while the deficit for total rubble materials will occur in 2006.
12. The proposed rubble landfill (SE-4347) (Scenario C) will add about 5,814,316 cubic yards of capacity, and will provide sufficient capacity during the 15-year planning period for the in-County rubble and for total demand (in- and out-of-County).
13. The processing facility located on Dower House Road (Scenario D) will increase the capacity for in-County material by two years (2012) and by one year (2006) for total materials when compared to Scenario A.
14. Scenario E which includes the existing facilities and the proposed MD Reclamation LLC property landfill and the Processing Facility, shows sufficient Countywide capacity for in-County demand and sufficient capacity for total demand beyond 2014.

#### Conclusions

1. Countywide capacity at the existing solid waste facilities (Scenarios A and B) will not be sufficient to meet the in-County demand as well as the total (in- and out-of-County) demand. The in-County demand will be sufficient until 2010-2011, while the total demand will be sufficient to 2005-2006.
2. The in-County as well as the total demand (in- and out-of-County) for a 15-year period can be satisfied by the Countywide rubble fill capacities under Scenarios C (Existing plus MD Reclamation LLC Property landfill) and Scenario E (Existing plus MD Reclamation LLC Property landfill and Processing Facility).
3. Scenario E also shows that the capacity for in-County rubble will be sufficient for about 18 years past the 15-year period, to about 2032; the capacity for total demand (in-County and out-of-County) will be sufficient for about 6 years past the 15-year period, to about 2020.

G. Parking Regulations: Parking spaces are not required since no structures are proposed.

H. Landscape Manual Requirements: The Urban Design Section, in a memo dated February 16, 2000, provides the following comments:

■The subject application is to convert an existing surface mining operation to a rubble fill. The *Landscape Manual* classifies surface mining as a high intensity use and rubble fill as a low intensity use. The rubble fill is considered a new use on the property and therefore, the proposal must comply with the requirements of Sections 4.2 (Commercial and Industrial Landscaped Strip Requirements) and 4.7 (Buffering Incompatible Uses) of the *Landscape Manual*.

**■For the 88.59-acre property**

**■Determination of Compliance with Section 4.2**

**■Along Brown Station Road**

Frontage: 2,800 linear feet (excluding driveways)

Required per Section 4.2: a minimum 10-foot-wide landscaped strip to be planted with a minimum of one (1) shade tree and 10 shrubs per 35 linear feet of frontage, excluding driveway openings

Required: Landscaped strip: 10' wide  
80 shade trees  
800 shrubs

Proposed: 138 eastern pine trees

■ Since two evergreen trees can be substituted for one shade tree, only 11 additional shade trees are required.

A 10-foot-wide landscaped strip planted with 11 additional shade trees and 800 shrubs is required along Brown Station Road.

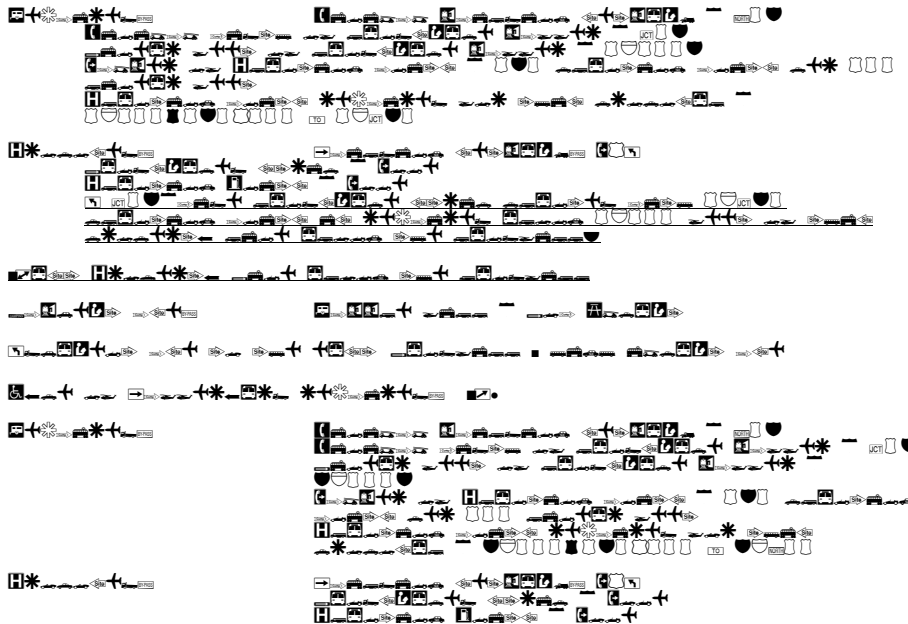
■ **Determination of Compliance with Section 4.7**

■ North Property Line along the Walker property and the Landfill property

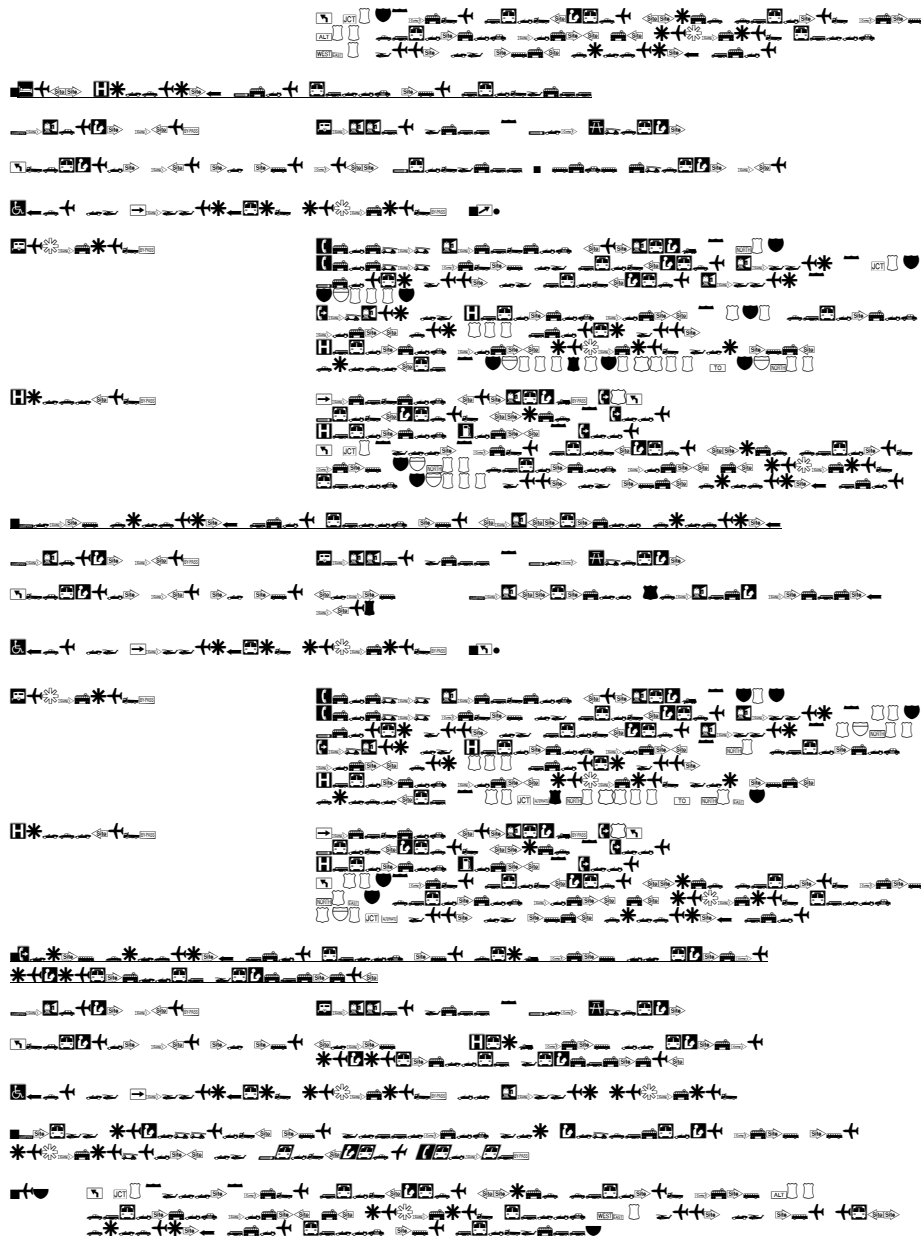
Subject use: Rubble fill - Low Impact

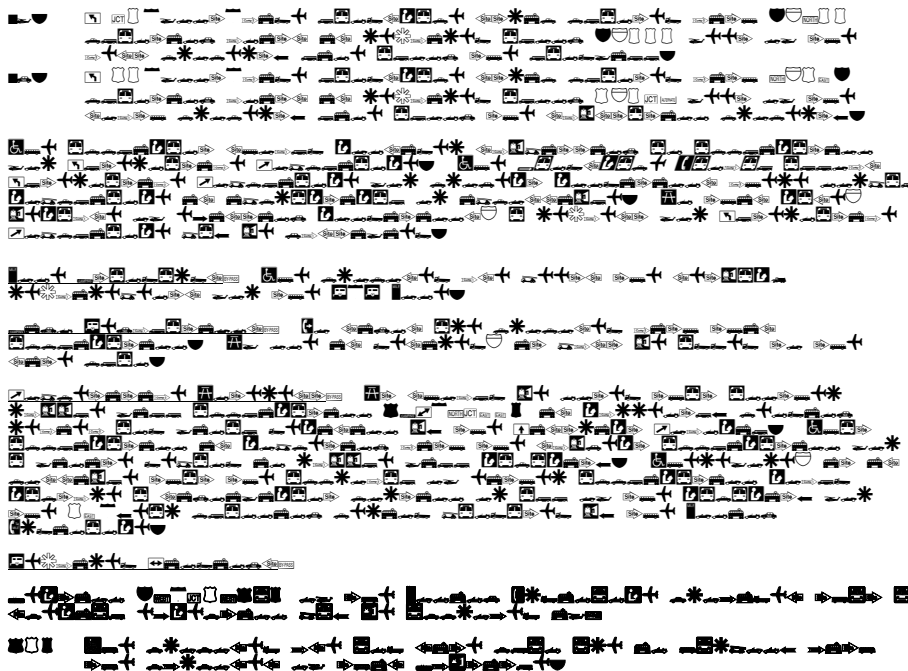
Adjacent use to the north Along the western 800 feet (Walker property) - agricultural  
- low impact use  
Along the eastern 1,100 feet - landfill - high impact use

Type of Bufferyard required: Along the Walker property - none  
Along the landfill - ■C•









The proposed use and site plan are generally in conformance with the 15 purposes listed in Section 27-102(a) of the Zoning Ordinance. These purposes generally seek to protect and promote the health, safety, morals, comfort, convenience, and welfare of the present and future inhabitants of the County. Rubble fills are a necessary part of the construction industry, and the orderly growth of housing, industry and business cannot be accomplished without adequate rubble fill capacity. The location of the proposed use is to be adjacent to and near other similar type uses (such as an electric substation and a sanitary landfill), minimizing the impact that the rubble fill will have on the surrounding area. Locating a rubble fill at this location, in which the proposed use will be partially encircled by the County's landfill, directly diminishes the potential for negative impact on properties in other areas of the County. Therefore, the proposal will guide the orderly growth and development of the County by not introducing the proposed use into an area not improved with similar type uses.

the most beneficial relationship between the uses of land and buildings and protects landowners from adverse impacts of adjoining development. This application will provide for the separation of truck traffic from the everyday traffic on the surrounding streets. Access to the proposed rubble fill site will be via the existing controlled access road that is used for the County's Brown Station Landfill. The ability to provide access from an existing controlled entrance and not from Brown Station Road is unique to this application. lessens the danger and congestion of traffic on streets, and it ensures the continued usefulness of all elements of the transportation system for their planned functions.





During 1998 this site was permitted by the Prince George's County Department of Environmental Resources as a Class 3 fill. The footprint of the permitted Class 3 fill is the same as the footprint for the rubble fill proposed by this application. The general appearance to the Class 3 fill and the proposed rubble fill will be similar although the materials placed in each of these operations would be different. The Grading Ordinance states:

**Sec. 4-271. Definitions.**

(11.) Class 3 fill. Common fills proposed for landscaping or other nonload bearing usage.

**Sec. 4-303. Fill - Materials.**

- (b) Class 3 fills may include the more difficult to compact soils, at other than optimum moisture content; rock and similar irreducible materials without limit as to size provided no detectable voids are formed, into which overlying soils may later be washed; and top soil, intermittently layered with nonorganic soil. In other than rock gardens, at least twelve (12) inches of soil must cover all rock, or irreducible materials with a maximum dimension greater than eight (8) inches.
- (d) The material must be free of contamination levels of any pollutant which is or may be considered to represent a possible health hazard to the public or may be detrimental to surface or ground water quality or which may cause damage to property or the drainage system. (Gen. Res. No. 19-1970; CB-87-1979; CB-46-1993)

Whereas a Class 3 fill is limited with respect to the types of material that may be disposed of, the rubble fill, which is a component of a Sanitary landfill is used for the disposal of *Construction and Demolition Debris (C&D)*. According to ■A Report on Maryland's Interstate Movement of Solid Waste, April 1998, Maryland Environment Service, ■C&D includes materials commonly found in a home or office, such as drywall, glass, carpet, chunks of mortar and concrete, shingles, empty paint cans, tree stumps and other leftover materials. ■ Some of these materials are organic and will decompose producing methane gas or giving off other polluting compounds. Therefore, beginning in July of 2001 all operating rubble fills shall be designed, permitted, constructed, and operated in accordance with the State of Maryland, Department of the Environment, Title 26, Subtitle 04 Regulation of Water Supply, Sewage Disposal and Solid Waste Regulation, Chapter 07 - Solid Waste Management. Note 27 of the amended Special Exception site plan indicates that this proposed rubble fill will satisfy these requirements. The minimum requirements for the State of Maryland review shall include a Phase II report which addresses such items as the geology of the site, hydrology, location of floodplains, streams, wetlands, forests, locations of structures and property lines. In addition, there are specific requirements with respect to rubble fill liners, rubble fill cap, the leachate collection system and the leachate removal system. Although this is not a complete listing of the requirements it gives a general overview of some of the information that the State of Maryland addresses during the review of an application.

Streams, wetlands and floodplain areas have been found to occur on this property. The streams and floodplain along with their respective buffers have been reflected on the amended site plan for SE-4347. The amended plans received by this office on February 3, 2000 do not reflect any impacts to the stream, stream buffer, 100-year floodplain or 100-year floodplain buffer. Although, it is not typical for the wetlands on a property with this type of topography to extend beyond the limits of the 50-foot floodplain buffer, there is that possibility and therefore, the limits of the wetlands must be addressed. This is particularly important since wetlands are to be protected to the greatest extent possible during the review of plans. The May 24, 1999 memo from this office requested that a Wetland Delineation Report including the field data sheets, a narrative, a plan showing the limits of the wetlands and the wetland buffers should be submitted to the Environmental Planning Section for review at least 30 days prior to the first scheduled hearing for this application. As of this date the requested information has not been received. However, the applicant did add a note to the plan which states ■All Non-Tidal wetlands on site are contained within the 100-year floodplain easement.●

Operations of this type, Class 3 fills, Sanitary landfill, Rubble fills, construction sites, etc. often generate noise levels that adversely impact adjacent residential areas. In order to evaluate potential noise impacts associated with this application the applicant has provided the M-NCPPC Environmental Planning Section with a list of the types of equipment that will be used on this site along with documentation of noise ratings for that equipment, the hours of operation and the time frame for the hours of the most intense operations. This information has been evaluated to determine what impacts may occur as a result of SE-4347. The Alban Tractor Co., Inc. on February 15, 2000 provided this office with documentation on the noise levels generated by the equipment to be used on this site during the proposed rubble fill operation. That information has been evaluated and an approximate noise level of 89.8 dBA will exist at a distance of 15 meters from the moving equipment. The intensity of the noise decreases as the distance from the source of the noise increases. The noise levels are directly affected by distance, wind direction, time of day and physical barriers and minimally affected by vegetation.

This site is located along a section of Brown Station Road opposite a subdivision known as Robshire Acres. Twelve of the residences in the Robshire Acres neighborhood front on Brown Station Road and are located within 200 feet of the top of the berm, approximately 20 feet high, constructed by the applicant along Brown Station Road. Based on the size of the berm, height and footprint, the distance from the residences to the fill site where the elevations are equal to or greater than the top of the berm will be approximately 300 feet. The berm will act as a noise attenuation measure and should effectively reduce the noise levels at the property lines of the residences in Robshire Acres to approximately 65 dBA.

In a February 7, 2000 letter from J. Michael Warring, Project Manager for Maryland Reclamation, L.L.C. this office was provided information addressing the proposed hours of operation. That letter states ■we would suggest that the normal hours of

operation will be from 6:30 a.m. to 6:00 p.m., Monday through Saturday. Under normal conditions, the operation will be closed on Sundays and national holidays. We would suggest that the peak hours of most intense operations would typically occur when loads of construction and demolition debris have to be spread by the dozer and the compactor throughout the day, however, one could assume that peak operational levels would probably occur from 8:00 a.m. through 5:00 p.m. Based on this information, the conclusion that noise will be adequately attenuated remains valid for the time frame from 7:00 a.m. to 6:00 p.m.. However, that period of operation before 7:00 a.m. will potentially result in adverse noise impacts to the neighborhood since the nighttime noise levels for residential areas should not exceed 55 dBA, and this proposed operation will possibly exceed that limit for at least part of each operational day. There are two (2) options that may be considered to resolve this potential adverse impact to the surrounding neighborhood. First, limit the hours of operation to after 7:00 a.m. or second, provide a detailed Noise Study addressing the nighttime noise impacts and the proposed noise attenuation measures which will be implemented to mitigate the noise impacts.

No Marlboro clays have been identified on this site. No Scenic or Historic Roads have been identified on or adjacent to this site. The property is located in Sewer and Water Service categories 3 and 3 respectively.

This rubble fill will be in close proximity to an existing stream and residences which may be adversely impacted from methane gas migration into the nearby residential neighborhood and/or leaching of hazardous materials into the ground water. The applicant shall be required to design, construct and operate this proposed rubble fill in accordance with the State of Maryland, Department of the Environment, Title 26, Subtitle 04 Regulation of Water Supply, Sewage Disposal and Solid Waste Regulation, Chapter 07 - Solid Waste Management which must address ground water contamination issues, leachate issues and pollution issues.

An issue that has been increasingly evident in the last several years is the impact a project may have on the viewshed of adjacent properties and the neighborhood in general. This has been an issue for monopolies, industrial sites and even a proposed rubble fill in a much less densely populated portion of southern Prince George's County. In order to evaluate the potential impacts that this application will have on the viewshed, the applicant arranged for a balloon to be raised to the ultimate elevation of the larger mound. On February 10, 2000 the applicants representative and staff drove through several of the nearby neighborhoods to determine if the proposed rubble fill would be visible from the neighborhoods or roads in the area. Based on the information gathered on that date, it was determined that most of the residences in Robshire Acres and some residences on several streets in the Oak Grove subdivision would have a direct line of sight of the rubble fill.

The amount of the ultimate rubble fill that will be visible from the various areas will range from an outline as viewed through the trees to a clear view of as much as 120 feet of the rubble fill from some areas of Robshire Acres. Since this analysis was

done from a vehicle on public roads there may be other locations which will have a direct line of sight, especially when considering viewing from the height of a vehicle as compared to viewing from a second floor window of a residence. Below is a list of the streets which will have some view of the proposed rubble fill as evaluated from the public road at ground level:

Brown Station Road	Brown Road
Pyles Drive	Norris Place
Kaine Place	Dorkin Run
Ronald Beall Road	Robert Bowie Drive
Cicily Court	Trotter Terrace
Markby Court	Robert Lewis Avenue

In each situation where there was a direct unobstructed view of the proposed rubble fill there was little or no potential for the applicant to provide mitigation. This is generally due to the distance of the viewing locations from the site and the angle of the line of sight. The only potential mitigation for reducing the viewshed impacts would be to lower the height of the proposed mound or the planting of additional vegetation near the viewing location. This could require extensive plantings on many properties located on the roadways noted above.



■ . . In an effort to demonstrate the traffic impact of the proposed facility, the applicant has prepared and submitted a traffic study, for staff's review.

#### *Traffic Study Overview*

The study identified the following intersections as the ones on which the proposed development will have the most impact:

Intersection	Existing	
	(LOS/CLV) AM	(LOS/CLV) PM
White House Road/MD 202	B/1103	A/791
White House Road / Landfill Access Road*	7.0	3.9

In order to determine the subject property's potential for traffic generation, a study involving data from other functioning rubble fills in the County was obtained through the Maryland

Department of the Environment (MDE). The analysis of these data project that the subject site could generate 350 truck loads of material per day during the average month. This would be the approximate equivalent of 700 vehicles per day. This projection is predicated on the assumption that two other rubble fills are closed and the subsequent traffic would be transferred to the subject property. For the purpose of determining the most conservative estimate, the traffic study identified the peak loads during the busiest month of the year and then applying such assumption across the board.

Based on those conservative estimates, the study concluded that a maximum of 635 vehicles per day would enter the site, with a similar number leaving. The total of 1,270 vehicles formed the basis of the traffic analyses for the two referenced intersections. Again, using historical records, it was determined that approximately 14% of the daily traffic is generated during the morning peak hour, while 5% is generated during the evening peak hour. The total future traffic volumes were then distributed accordingly and analyzed. The analysis yielded the following levels-of-service:

Intersection	Future	
	(LOS/CLV) AM	(LOS/CLV) PM
White House Road/MD 202	C/1166	A/823
White House Road / Landfill Access Road*	7.0	4.1

On the basis of the above analyses, the traffic study concluded that both intersections operated at acceptable levels-of-service, and the additional trips to be generated by the proposed operation will not adversely affect the levels-of-service in either of the peak periods.

