



*Note: Staff reports can be accessed at [www.mncppc.org/pgco/planning/plan.htm](http://www.mncppc.org/pgco/planning/plan.htm).*

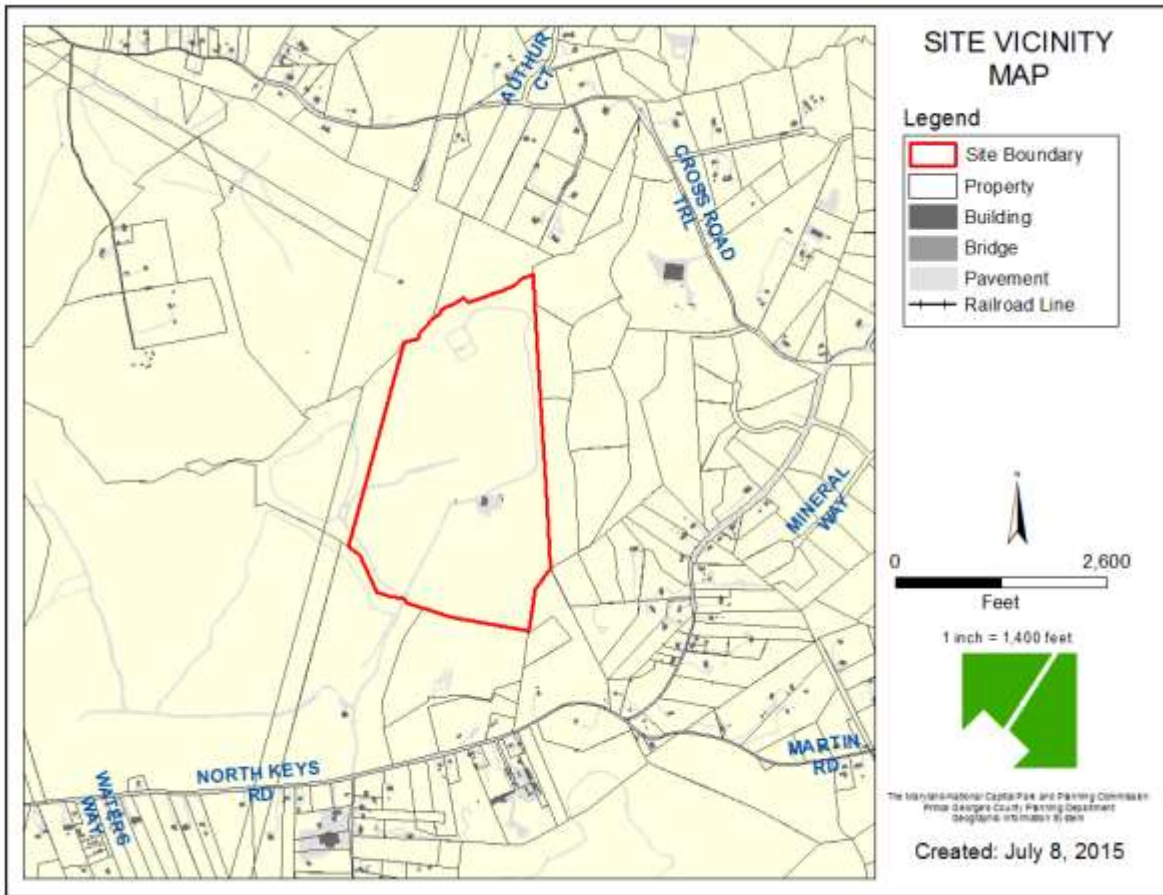
## Special Exception

**SE-4765**

| Application  | General Data                 |          |
|--|------------------------------|----------|
| <b>Project Name:</b><br>NRG MD Ash Management<br>aka (Brandywine Fly Ash Storage Site)<br><br><b>Location:</b><br>On the north side of North Keys Road<br>approximately, 2,200 feet north of Gibbons Church<br>Road.<br><br><b>Applicant/Address:</b><br>NRG MD Ash Management, LLC<br>c/o GENON Mid-Atlantic, LLC.<br>8301 Professional Place West<br>Landover, MD 20785<br><br><b>Property Owner:</b><br>Mirant MD Ash Management, LLC.<br>11710 North Keys Road<br>Brandywine, MD 20613 | Planning Board Hearing Date: | 07/07/16 |
|  | Staff Report Date:           | 06/22/16 |
|  | Date Accepted:               | 12/14/15 |
|  | Planning Board Action Limit: | N/A      |
|  | Plan Acreage:                | 178.78   |
|  | Zone:                        | O-S      |
|  | Gross Floor Area:            | N/A      |
|  | Lots:                        | N/A      |
|  | Parcels:                     | 1        |
|  | Planning Area:               | 86A      |
|  | Council District:            | 09       |
|  | Election District            | 11       |
|  | Municipality:                | N/A      |
|  | 200-Scale Base Map:          | 217SE10  |

| Purpose of Application  | Notice Dates           |          |
|---|------------------------|----------|
| Request for a ten-year extension to continue the existing fly ash rubble-fill disposal operation mounds in the O-S (Open Space) Zone. | Informational Mailing  | 01/30/15 |
|   | Acceptance Mailing:    | 11/18/15 |
|   | Sign Posting Deadline: | N/A      |

|                             |                                 |  |                   |
|-----------------------------|---------------------------------|--|-------------------|
| <b>Staff Recommendation</b> |                                 | <b>Staff Reviewer:</b> Taslima Alam<br><b>Phone Number:</b> 301-952-4976<br><b>E-mail:</b> Taslima.Alam@ppd.mncppc.org |                   |
| <b>APPROVAL</b>             | <b>APPROVAL WITH CONDITIONS</b> | <b>DISAPPROVAL</b>   | <b>DISCUSSION</b> |
|                             |                                 | X  |                   |



THE MARYLAND-NATIONAL CAPITAL  
PARK AND PLANNING COMMISSION

PRINCE GEORGE'S COUNTY PLANNING BOARD

**TECHNICAL STAFF REPORT:**

TO: The Prince George's County Planning Board  
The Prince George's County District Council

VIA: Jimi Jones, Supervisor, Zoning Review Section, Development Review Division

FROM: Taslima Alam, Senior Planner, Zoning Review Section, Development Review Division

SUBJECT: **Special Exception Application No. 4765**

REQUEST: Request for a ten-year extension to continue the existing fly ash rubble-fill disposal operation in the O-S (Open Space) Zone.

RECOMMENDATION: **DISAPPROVAL**

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NOTE:

The Planning Board has scheduled this application to be reviewed on the agenda date of July 7, 2016. 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 Board's decision.

You are encouraged to become a person of record in this application. The request must be made in writing and addressed to the Prince George's County Office of the Zoning Hearing Examiner, County Administration Building, Room 2184, 14741 Governor Oden Bowie Drive, Upper Marlboro, MD 20772. 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.

## FINDINGS

- A. **Location and Field Inspection:** The subject property is located on the north side of North Keys Road, approximately 2,200 feet north of its intersection with Gibbons Church Road, identified as 11710 North Keys Road in Brandywine, Maryland. Access to North Keys Road is via a 30-foot-wide private road easement, approximately 2,500 feet in length, that is shared by an adjoining sand and gravel mining and wet processing facility (wash plant). The north and west portion of the fly ash fill operation (78.2 acres, Phase I area) is currently filled, complete. The southeastern portion (42.8 acres, Phase II) fill operation is presently ongoing. The access road loops to the east where an office trailer, barn storage, construction trailer are located, along with an asphalt parking area. A gravel drive leads to a temporary contractor trailer and diesel fuel storage tank approximately 100 yards to the east. A truck wash area is on the access road approximately 50 yards from the facility manager's trailer.

### Site Description:

A review of the information available indicates that there are streams, wetlands and 100-year floodplain on the subject property. The on-site streams are not mapped as Tier II waterways, but the site is located within a Stronghold watershed, the Middle Patuxent. The site is not located in a Special Conservation Area. Areas of severe slopes, and areas of steep slopes with highly erodible soils are found to occur on the property. The site is partially wooded. The uses proposed on this site may be noise generating. The predominant soils found to occur according to the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) include Croom-Marr, Fallsington, Marr-Dodon, Udorthents, Westphalia and Dodon, Widewater and Issue oils, and Woodstown. Some of these soils generally have limitations with respect to impeded drainage and seasonally high water tables. Marlboro and Christiana clays are not found in the vicinity of this property. Based on information obtained from the Maryland Department of Natural Resources Natural Heritage Program, there are no rare, threatened or endangered species found to occur on this site. No Potential Forest Interior Dwelling Species (FIDS) Habitat is mapped on-site. The property is located in the Mattaponi Creek watershed of the Patuxent River basin. North Keys Road is classified as a rural collector, which are not generally regulated for transportation noise impacts. North Keys Road, which provides access to this property via a private access easement, is also designated a historic road.

The site is located within the Established Communities of the Growth Policy Map and Environmental Strategy Area 3 (formerly the Rural Tier) of the Regulated Environmental Protection Areas Map as designated by *Plan Prince George's 2035 Approved General Plan*. According to the 2005 *Approved Countywide Green Infrastructure Plan*, the site is located within the designated network of the Approved Green Infrastructure Plan and includes all three designations; Regulated, Evaluation, and Network Gap areas.

- B. **Development Data Summary:**

|         | <b>EXISTING</b>                          | <b>PROPOSED</b>                          |
|---------|--|--|
| Zone(s) | O-S (Open Space)                         | O-S                                      |
| Use(s)  | Sanitary Land fill (Fly Ash rubble fill) | Sanitary Land fill (Fly Ash rubble fill) |
| Acreage | 178.78                                   | 178.78                                   |
| Parcels | 1  | 1  |

- C. **History:** The property has been used for fly ash disposal since 1971, and has been used as a fly ash fill operation under four previous special exceptions (SE-2774, SE-63106, SE-4002, and SE-4520) approvals. In July 1971, Special Exception SE-2774 was approved for a portion of the subject property; however, that Special Exception application expired. Special Exception SE-3106 was approved in July 1978 for a 12-year period for approximately the same area. In January 1991, Special Exception SE-4002 was approved with conditions to continue the use of the property as a fly ash rubble fill site for a period of 12 years. At that time the maximum elevation for fill area was 260 feet. A Type II Tree Conservation Plan (TCP/II/105/90) was approved concurrently. On July 11, 2007, the District Council approved Special Exception SE-4520 to continue the use of the property as a fly ash rubble fill for a period of eight additional years. The current request seeks another extension of the special exception use for ten years for all property approved in SE-4520, more specifically, for the southeast area marked on the site plan as Phase II Fill Area (42.8) acres.

The applicant indicates in its Statement of Justification that the ash storage at Brandywine began in the 1960s when coal ash produced at the Chalk Point and Potomac River Generating Stations was brought there for storage on the “Robinson property,” an old family farm. At that time the property owner, E.L. Gardiner, was conducting gravel surface mining operations on the property as well. The original site design included filling gravel pits to original topography. The first land purchase by the Potomac Electric Power Company (PEPCO) was a 107-acre tract brought in 1970. It appears that no farming was taking place at this time. In 1973 and 1978, PEPCO purchased an additional 232 acres. There is no history of lining and filling operations prior to PEPCO ownership. The aerial photographic imagery from the M-NCPPC PGAtlas (Exhibits 1–3) indicates that in 1965, surface mining was taking place in certain portion of the property and had continued to expand, covering almost the entire site by 1977–1979. The Aerial imagery from 1980 (Exhibit 3) further confirms that the surface mining was still occurring in the southern tip of the present-day Phase I and much of Phase II. The following is a summarized chronology of the property’s site filling history:

- **1970–1974**—PEPCO purchased a 107-acre tract and began a four-phase cellular fill operation that was stabilized by vegetation in 1974. A fifth phase was filled between 1975–1978, followed by PEPCO’s acquisition and re-engineering of 232 acres between.
- **1977**—Aerial mapping indicates that the surface mining had expanded to cover most of the site (Exhibit 2) as well as expansion on surrounding properties.
- **1980** Ponds were constructed on the northern portion of the property. Surface mining was also being conducted on an adjacent property to the south.
- **1988**—Operations of the surface mining expanded its boundaries. At the time adjacent properties were substantially more disturbed by mining activities, including the area to the northwest.
- **1989**—Site was re-engineered to extend the life span of the facility for 13 and was site were elevated by additional 20 feet. Active fill areas were proposed for structural fills, with ash spread out to a one-foot thickness and compacted by a vibratory roller to reduced water infiltration into the fill. Benches or terraces were proposed as the elevation increases, with soil cover placed on the edge of the benches when then the next level of fill would begin. Based on the ash production rates at that time, the life-span of the facility was estimated to be approximately 13 years.

- **1991**—District Council approved Special Exception SE-4002 to allow another 12-year extension of fly ash fill use for approximately 213-acre site.
- **1998**—According to the PGAtlas Aerial map provided by the applicant, the Southernmost area of Phase I exceeded at its current fill elevation of approximately 280 feet AMSL (Exhibit 6 and 7). This elevation height had exceeded the approved elevation height by 20 feet within seven (7) years after approval of Special Exception SE-4002 as mentioned above.
- **2001–2006**—other areas of the phase one was filled and completed including central area of Phase I (Applicants Exhibits 8 and 9). The central fill area already appeared to be at its current height of 284 feet, 24 feet higher than approved per Drawing 88-407-F8; revised July 9, 1990.
- **2007**—The District Council approved Special Exception SE-4520 for the use of approximately 178.78-acre site (entire area of Phase I and II) as sanitary landfill for fly ash. The extension was for a period of eight (8) years with four conditions. At that time, according to prior staff report, Phase I fill operation was ongoing and Phase II fill remained to be filled.

The conditions are as follows:

- 1. Applicant shall complete the following, in accordance with the recommendations of the Department of Public Works and Transportation (DPW&T).**
  - a. Resurface North Keys Road from Brandywine Road (MD 381) to Gibbons Church Road with 12.5 mm PG 70-22 super pave asphalt.**
  - b. Dedicate all roadway improvements within the public right-of-way in accordance with the County Road Ordinance, DPW&T specifications and standards, and the American with Disabilities Act.**
  - c. Provide drainage along North Keys Road in accordance with DPW&T and Department of Environmental Resources (DER) requirements.**
  - d. Obtain from DPW&T renewal of the haul road permit to haul materials on North Keys Road.**
  - e. Obtain from DPW&T a standard street construction permit for all roadway improvements required.**
  - f. Install all necessary signing and pavement markings associated with North Keys Road.**
  - g. Install raised pavement markers on the centerline along the North Keys Road frontage.**
  - h. Install street lights at the driveway entrance and the access roads intersection County roadways.**
  - i. All future rubble mounds on the subject property shall be limited to a height of no more than 40 feet above the original grade, as measured from the**

**base of the original barn on the subject site. The Applicant shall maintain all existing mounds at or below their current heights.**

- 2. This special exception shall expire eight years after final District Council approval action, or upon reaching site capacity to accept fly ash rubble, whichever date occurs first. Applicant shall notify DER and the District Council in writing upon cessation of the use.**
- 3. The number of truck trips visiting the site on a daily basis shall not exceed 200.**
- 4. Applicant shall confer and cooperate with owners of the cemetery across North Keys Road from the site entrance, for the purpose of limiting truck trips during funeral ceremonies.”**

- D. **Master Plan Recommendation:** *Plan Prince George’s 2035 Approved General Plan* (Plan Prince George’s 2035), designates this property as Rural and Agricultural and Parks and Open Space. The plan description for the Rural and Agricultural Land Use is “Low-density residential uses with areas of agricultural and forestry production. Agricultural land (cropland, pasture, farm fields), forest, and very low-density residential with a density per acre of less than 0.5.”

The 2013 *Subregion 6 Approved Master Plan and Sectional Map Amendment* (Subregion 6 Master Plan SMA) retained the subject property in the O-S Zone. The master plan recommends rural land use. The County’s intent is for these areas to remain rural and to conserve these areas’ natural resources for future generations. New residential development is permitted at a maximum density of one dwelling unit per five acres.

- E. **Request:** The applicant requests permission to extend the life of the fly ash rubble fill operation by 10 years for Phase II Fill Area (approximately 42.80 acres). The active operation for Phase II Fill Area was approved for a maximum height of 260 feet above mean sea level (msl) in the most recently approved Special Exception, SE-4520.

The ash fill site in Brandywine area has been operating since 1972. The most recent Special Exception SE-4520 was approved on July 1, 2007 to continue the use of the approximately 178.78-acre property as a fill site for a period of eight (8) years with conditions. The applicant proposes same hours of operations: 7:00 a.m.–5:00 p.m., Monday through Friday, closed on weekends and public holidays.

- F. **Neighborhood and Surrounding Uses:** Staff however, agrees with the following neighborhood boundaries selected by the applicant and established by the Zoning Hearing Examiner in the last approval for the ash fill site (SE-4520):

- North: Mattaponi Creek
- East: MD 382 (Croom Road)
- South: North Keys Road
- West: Popes Creek Branch Railroad tracks

Surrounding uses are as follows:

- North–** Mataponi Creek and Potomac Electric Power Company (PEPCO) power transmission line corridor and substation. Beyond said features are mixed large acreage wooded parcels developed with single-family dwellings in the O-S Zone.
- East–** Partially adjoining the site is unnamed tributaries of the Mataponi Creek and two forested parcels (one of which containing a single-family home south of its shared boundary with the site) and a closed Class 3 landfill now owned by GENON Ash Management LLC in O-S Zone.
- South–** Adjoining the property to the is the M-NCPPC-owned Brandywine North Keys Community Park and a former sand and gravel mining operation and wet processing facility (SE-3561) in the O-S Zone.
- West–** PEPCO high-voltage power line right-of-way and other land owned by the applicant, previously used for fly ash disposal in the O-S Zone.

G. **Amendments of Approved Special Exceptions**

**Section 27-323. - Alterations, enlargements, extensions, and revisions.**

- (a) **All alterations, enlargements, extensions or revisions of Special Exception uses (including enlargements in land area and area of improvements, revisions of a site plan and in the configuration of land area, and extensions of time) shall require the filing and approval of a new application for the applicable Special Exception use, except as specifically provided for in this Subdivision.**

**Comment:** The applicant proposes to request a ten (10) year expansion to continue the existing fly ash rubble fill disposal operation. However, staff had determined from the submitted site plan review that the maximum ash filled mound for Phase I had exceeded the height limit of the fill mounds by 24 feet prior the last special exception approval (SE-4520). It is unexplained by applicant why a correct site plan drawing with increased height was not addressed as part of the last review. The ash fill mounds in Phase I was approved to be a maximum 260 feet and Phase II or no more than 40 feet above the original grade as measured from the base of the barn on the subject site per District Council's Condition 1(i). This condition is as follows:

1. **Applicant shall complete the following, in accordance with the recommendations of the Department of Public Works and Transportation (DPW&T).**
- i. **All future rubble mounds on the subject property shall be limited to a height of no more than 40 feet above the original grade, as measured from the base of the original barn on the subject site. The Applicant shall maintain all existing mounds at or below their current heights.**

**Comment:** The applicant fails to comply with the District Councils Condition 1(i) set forth in the previous approval in Special Exception SE-4520. When the ash fill operation was approved in 1991 (SE-4002), the height of the fly ash fill mounds was capped at 260 feet, as shown on the drawings 88-407-F-2, F-4, F-7 and F8, revised July 9, 1990. The same drawings were also used for the last approval in 2007, when SE- 4520 was approved by the District Council, granting the applicant eight (8) additional years to



complete the fill operation for the entire site. According to the submitted plan drawings at the time Phase I fill area elevations ranged from 204 to 260 feet mean sea level (MSL), with the topmost benched slope at approximately 250 feet. Phase II fill area elevations range from approximately 200 to 260 feet msl, with the top benched slope at 253 feet. The applicant neither provided nor requested a revised plan with correct height to validate the height increase for Phase I at the time of the last approval (SE-4520), in 2007.

The current site plan drawing (47.004-Z) shows that the ultimate maximum grading and capping at the completion of the fill mound once the site is vegetatively stabilized will reach 31 feet higher or a 291 feet in height for phase I and 265.5 feet for Phase II Fill Area. Phase I of the ash fill operation according to the plan is currently complete, soil capping and stabilization is ongoing. Phase II of the ash fill operation is currently ongoing. According to the drawing No. 51.007-Z, Cross Section A-A1, runs east to west across the site, from the PEPCO right-of-way, crossing the highest point of the Phase I fill area (currently 284 feet msl), crossing the active Phase II fill at the proposed highest elevation of 259 feet msl, and continuing approximately 2,000 horizontal feet to the east to the closest residential structure, which is located at a height of 210 feet msl.

The submitted site plan clearly demonstrates that the highest fill elevation in phase I fill area is currently 291 feet msl, with final grading and capping, which is 31 feet higher than shown on prior special exception site plans applications for this site. Furthermore, the historic topography indicates that the highest point in the Phase I fill area reached 275 feet msl in GIS layers prepared in 1993 that is based on aerial photography.

The staff repeatedly asked the applicant to provide an explanation for the height discrepancy, but no valid explanation was provided other than the fact that the Phase I fill operations had reached its current maximum elevation of 280 feet (msl) in 2001, well before last special exception hearing; therefore, this condition is met. Staff disagrees with the applicant because if the fill operation was completed prior to the last approval, then the height increase should have been validated at that time with a revised site plan. Staff notes that during the last two prior approvals, the height of the fill mound was 50 feet higher than the closest residential building, which is approximately one-half mile away. The current elevation of 291 feet, the fill mound is raised to be an additional 31 feet higher.

The current application proposes to maintain a maximum height of 260 feet above mean sea level within the 42.8-acre Phase II Fill Area. The maximum height has already been achieved directly adjacent to the Brandywine-North Keys Community Park. It is well designed to comply with the height limit set by the District Council in its last approval.

2. **This special exception shall expire eight years after final District Council approval action, or upon reaching site capacity to accept fly ash rubble, whichever date occurs first. Applicant shall notify DER and the District Council in writing upon cessation of the use.**

**Comment:** The eight year validation period ended on July 11, 2015, prior to completion of the fill operation. The current application is a request to allow continuation and completion of the fill operations on the remaining 42.8 acres of the site identified as the “Phase II Fill Area.”

**3. The number of truck trips visiting the site on a daily basis shall not exceed 200**

**Comment:** This condition is met. According to the traffic study, under Special Exception SE-4520, Mirant Mid-Atlantic, LLC was authorized to haul up to 100 truckloads of fly ash to the site on weekdays between 7:00 a.m.–5:00 p.m. The current truckloads of fly ash over the past eight years, the haulage activity has been seasonal. However, the applicant’s site records show that, on average, the daily haulage activity has been well below the 100 truckload cap that was approved. The current SE is for the extended use of the subject site as a fly ash rubble fill until 2025. The submitted traffic study indicates the proposed operation would also process up to 100 truckloads between 7:00 a.m.–5:00 p.m. during the weekdays.

**4. Applicant shall confer and cooperate with owners of the cemetery across North Keys Road from the site entrance, for the purpose of limiting truck trips during funeral ceremonies.”**

**Comment:** The operations have not interfered with funeral ceremonies.

**Section 27-326. – Extension of Time Limit**

- (b) In order to extend a time limit which is imposed as a condition of a Special Exception approval, a new special exception need not be filed. The extension may be approved in accordance with the requirements and procedures of Section 27-324(a)(1) (Major Changes).**

**Comment:** Because the time limit was imposed by condition in the last special exception approval, it can be extended through the major change provisions. Staff points out that this request is being processed as a new SE due to concerns over the increase in the height of the mound in Phase I. The process for a new SE is essentially the same process for a major change.

**H. Specific Special Exception Requirements:**

**Section 27-406.–Sanitary landfill; rubble fill.**

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

**Comment:** The applicant requests the special exception to extend the use for another 10 years. If approved in 2016, the SE will remain valid until 2025. If this time period is approved, this “temporary” use will have been in existence for a total of 53 years.

With regards to determining the validity period of the use, staff agrees that the requested extension is reasonable in view of existing operating condition as described in the applicant’s Rubblefill Needs Assessment—Ash Fill of NRGMD ash Management LLC prepared by Gershman, Brickner & Braton, LLC on October 22, 2016. This report thoroughly evaluates the generation and disposal of fly in the county from two contributing sources: The Clark

Points Power Station in Prince Georges County Maryland and the NRG's Morgantown Station in Newburg, Charles County, Maryland. The generation of disposable coal ash quantities generated in these power plants was assumed to continue according to the population growth in the County which also dictates the amount of power necessary to be produced to meet its future demand. With the current rate of use, the applicant anticipates reaching the ash fill capacity within ten (10) years or by end of 2025 for Phase II Fill Area. However, with three different scenarios evaluated under the need assessment, explained in detail in Section 406 (k) below clearly demonstrates that the proposed use as a rubble fill for fly ash is necessary to serve the generation of electricity to serve the growth in Prince Georges County can be the maximum of 15 years because it is the only fly ash fill site in the region.

- (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.**
- (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.**

**Comment:** Section (c) and (d) are not applicable to this application. The property is in the O-S Zone and a rock crusher is not proposed.

- (e) **The applicant shall provide a traffic study that is prepared in accordance with Planning Board Guidelines for Analysis of Traffic Impact of Development Proposals.**

**Comment:** In the Transportation Planning Section referral dated April 19, 2016, staff evaluated the applicant's traffic study for the current and ongoing operation of the rubble fill on the nearby and surrounding transportation system. The study identified the following intersections as the ones on which the proposed development would have the most impact:

| EXISTING CONDITIONS   |               |              |
|---|---------------|--------------|
| Intersection  | AM            | PM           |
|   | LOS/CLV/delay |              |
| MD 381 (Brandywine Road) @ US 301 (Signalized)  | D/1,409       | B/1,023      |
| MD 381 @ Missouri Avenue *  | 19.9 Seconds  | 55.8 Seconds |
| MD 381 @ North Keys Road *  | 17.3 Seconds  | 11.0 Seconds |
| North Keys Road @ Gibbons Church Road *   | 9.2 Seconds   | 9.1 Seconds  |
| MD 381 @ Gibbons Church Road *  | 23.8 Seconds  | 19.0 Seconds |
| MD 381 @ Cedarville Road *  | 12.3 Seconds  | 13.0 Seconds |
| MD 381 @ Baden Westwood Road *  | 16.3 Seconds  | 10.4 Seconds |
| MD 381 @ MD 382 (Croom Road) *  | 15.2 Seconds  | 21.6 Seconds |
| * 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 maximum delay of 50 seconds/car is deemed acceptable. For signalized intersections, a CLV of 1,600 or less is deemed acceptable as per the <i>Guidelines</i> . |               |              |

Based on information from a 2005 Traffic Study, the traffic consultant identified eight unbuilt developments whose impact would affect some or all of the study intersections. Additionally, the traffic study assumed an increase in through traffic of 1.05 percent along key roadways within the study area. A second analysis was done to evaluate the impact of the background developments on existing infrastructure. It is worth mentioning that this application represents a continuation of an existing. Consequently, the site-generation traffic is already included in the existing traffic data. The final analysis revealed the following results:

| <b>BACKGROUND/TOTAL CONDITIONS</b>  |                      |               |
|---|----------------------|---------------|
| <b>Intersection</b>   | <b>AM</b>            | <b>PM</b>     |
|   | <b>LOS/CLV/delay</b> |               |
| MD 381 (Brandywine Road) @ US 301 (Signalized)  | F/2,347              | F/2,351       |
| MD 381 @ Missouri Avenue *  | 25.6 Seconds         | 213.9 Seconds |
| MD 381 @ North Keys Road *  | 117.4 Seconds        | 10.5 Seconds  |
| North Keys Road @ Gibbons Church Road *   | 9.3 Seconds          | 9.2 Seconds   |
| MD 381 @ Gibbons Church Road *  | 31.6 Seconds         | 25.1 Seconds  |
| MD 381 @ Cedarville Road *  | 13.8 Seconds         | 17.1 Seconds  |
| MD 381 @ Baden Westwood Road *  | 50.9 Seconds         | 12.1 Seconds  |
| MD 381 @ MD 382 (Croom Road) *  | 17.5 Seconds         | 35.8 Seconds  |
| * 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 maximum delay of 50 seconds/car is deemed acceptable. For signalized intersections, a CLV of 1,600 or less is deemed acceptable as per the <i>Guidelines</i> . |                      |               |

In its conclusion, the traffic study stated that the proposed fly ash rubble fill operation would have a minimal or negligible traffic impact on the defined study area network.

In addition to the M-NCPPC Planning staff, the traffic engineering staff at the Maryland State Highway Administration (SHA) also reviewed the applicant's traffic study. In an April 6, 2016 letter, SHA identified a few technical errors in the applicant's traffic study. The applicant's traffic consultant did provide staff a response letter in which all of the concerns outlined in SHA's letter were addressed to the satisfaction of staff.

In closing, staff is in general agreement that the continued use of this existing facility will not have a negative impact from a transportation perspective. While some of the transportation facilities critical to the subject operation could see worsening levels of service, this is not attributable to rubble fill operation, but rather to other developments that are already approved. Many of the approved developments are approved with conditions to make commensurate improvements associated with their respective developments.

- (f) The applicant shall provide a visual analysis of any proposed mounds and should include cross sections and results from balloon tests.**

**Comment:** No balloon test was submitted, but photographs of the existing viewshed from the adjacent Brandywine-North Keys Community Park (Images 3 through 6) and from North Keys Road (Images 1 and 2) were submitted along with a Photo Exhibit Location Plan prepared by the applicant. All of these images show the appearance of the completed Phase II Fill Area at a maximum height of 260 feet msl. A Cross Section Location Exhibit was also submitted showing

three cross sections of the site. It should be noted that because of the nature of this facility, the mounds will be maintained as non-woody vegetation after final grading and capping, so further treed buffering on-site is not possible.

Section B-B1 runs southwest to northeast and represents the sight line from the entrance to the site on North Keys Road through the highest proposed elevation of the Phase II fill area, which is 260 feet msl. This height has been previously reached and along with a treed buffer maintained along the property line on park property, screens the view of the continuation of active fill located north of the completed fill area.

Section C-C1 run directly south to north from North Keys Road through Brandywine North Keys Community Park and through the highest proposed elevation in the Phase II fill area at 260 feet msl and the highest point in Phase I which is currently 84.5 feet msl. It is noted that future proposed capping and grading operations will raise the highest point in Phase I to 291.0 feet msl. As with Section B-B1, the maximum height of 260 feet msl previously reached and along with a treed buffer maintained along the property line on park property, screens the view of the continuation of active fill located north of the completed fill area.

Section A-A1 runs east to west across the site, from the PEPCO right-of-way, crossing the highest point of the Phase I fill area (currently 284 feet msl), crossing the active Phase II fill at the proposed highest elevation of 259 feet msl, and continuing approximately 2,000 horizontal feet to the east to the closest residential structure, which is located at a height of 210 feet msl.

This cross section demonstrates that the highest fill elevation in Fill Area 1 is currently 284 feet msl, which is 24 feet higher than shown on prior special exception site plans applications for this site. Further research of historic topography indicates that the highest point in the Phase I fill area was shown as 275 feet msl in GIS layers captured prepared in 1993, based on aerial photography.

The cross section demonstrates that the only screening between the closest residential structure and the highest point in the Phase I fill area is a buffer of existing trees approximately 100 feet in width located entirely on the homeowners own lot. The topography between the residential structure and the Phase I fill area is significantly lower and provides no screening, nor does the final elevation proposed for the Phase II fill area. It should be noted that the distance between these two points is greater than 2,800 horizontal feet (over one-half mile). The most effective screening alternative is the retention of existing trees in close proximity to the residence.

The submitted site plan drawing 47.004-Z and cross section plan drawing 51.006-Z, revised December 2014 further shows Phase I elevation range from 200 to 291 feet MSL including impermeable geomembrane (cap). Phase II elevations range from 180 to 265.5 feet MSL including impermeable geomembrane (cap). The plan also clearly indicates that the applicant has significantly overfilled the central portion of Phase I established by the conditions placed by the District Council on the approved site plan for Special Exception SE-4520. The height of the fill mound after capping will be exceeded by 31 feet. Although the vertical fill mound appears to be high, staff believes it does not have an appreciable adverse impact on the overall quality of the surrounding development. The height of the fill mounds for Phase I is set far back from adjacent residential community and street and is well hidden by combination of berms, existing topography and undisturbed woods. The height of the Phase II fill mound is also offset from adjoining properties and view from the adjoining Brandywine North Keys Community Park by the use of existing wood. Therefore, staff would have no problem supporting the existing 31 feet height limit for Phase I. If the existing height limit were to be reduced, it will have a great detrimental effect on the health, safety, and welfare of the community.

- (g) **The applicant shall address how odors emanating from fill materials will be mitigated.**

**Comment:** Fly ash is a very fine, light by-product created by the combustion of coal during production of electrical energy at coal-burning power stations. The fly ash is removed from the stack gases before it can pass into the atmosphere by pollution control devices called precipitators. A small amount of ash is heavy enough to fall to the bottom of the furnace, where it is collected as bottom ash. In general, about eight -to fourteen percent of weight of the coal burned is collected as ash and most of this fraction is fly ash.

The applicant indicates in the Statement of Justification (SOJ), that fly ash is a combustion by-product of coal-fired furnaces that operate at such an extremely high temperature that any compounds that might be associated with order are entirely burned off. Historically there has been no evidence of odors being emitted from ash fill materials.

- (h) **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.**
- (i) **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 list and locational map of known sand and gravel mines, wash plants, and sanitary landfills dated June 12, 2016. (see Staff's Attachment 1).

- (j) **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.**
- (k) **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, by applicant proof that without the proposed use the County's projected growth will be adversely affected. Proof of a future deficit in or absence of County-wide fill capacity does not by itself constitute proof that a proposed fill is necessary to serve the projected growth in the County.**

The Prince George's County District Council adopted the requirement for a Rubble Fill Needs Assessment on November 17, 1992 (CB-85-1992). A needs study was not submitted with Special Exception SE-4002 because the special exception application predated the requirement. Other Rubblefill Needs Assessments prepared by the Environmental Planning Section or consultant do not include the subject fly ash fill in an evaluation of capacity for Prince George's County, because of its specialized use only for fly ash from two local electrical generation plants. Although the technical staff is generally charged with the responsibility to prepare the needs study, with the prior Special Exception SE-4520, the applicant submitted a Rubblefill Needs Assessment – Ash Fill of MIRANT MD Ash Management LLC prepared by Gershman, Brickner & Bratton, Inc. (May 2005). The Environmental Planning Section staff reviewed the submitted report, and determined that:

“The report thoroughly evaluated the generation and disposal of fly ash as a specialized material related to only two contributing sources. The report further stated that during 2005 and beyond, the generation of disposable coal ash quantities generated in Prince George's County was assumed to continue to follow the fixed constraints of utility power plant sizing and coal-combustion capacity, versus the population and employment growth of the County. The County's continued population growth dictates that adequate, affordable electric power service be provided. In order to meet this future demand, it is necessary that an adequate disposal site for the ash by-project be maintained close to the existing power generating facilities. The submitted report demonstrates that the proposed use as a rubblefill for fly ash is necessary to serve the generation of electricity to serve the projected growth in Prince George's County, because it is the only fly ash fill site available in the region.”

The Rubblefill Needs Assessment was found to fulfill the requirements of Section 27-406(j) and Section 27-406(k) by demonstrating the need for such a use, and the Environmental Planning Section recommended that the Rubblefill Needs Assessment – Ash Fill of MIRANT MD Ash Management LLC, prepared by Gershman, Brickner & Bratton, Inc. (May 2005) for MIRANT MD Ash Management, LLC be incorporated into the Technical Staff Report for SE-4520.

Similarly to the prior special exception application, with Special Exception SE-4765 the applicant chose to submit a Rubblefill Needs Assessment – Ash Fill of NRG MD Ash Management LLC prepared by Gershman, Brickner & Bratton, Inc. (October 2015). The Environmental Planning Section staff reviewed the submitted assessment in order to provide a recommendation with regards to the requirements of Section 27-406(j), and determined the following:

The site is currently the only ash fill in the County and serves the needs of the coal-fired power plant located at Chalk Point in Prince George's County, as well as another NRG coal-fired plant located at Morgantown in Charles County. The 15-year Needs Assessment does not include the impact of out-of-county ash being brought into the County.

Three different scenarios were evaluated under the Needs Study. The ash fill was determined to have a short-term life under a Base Case Scenario (without SE-4725) which assumes no expansion of operational area, and no extensive reuse/recycling of fly ash materials.

Scenario 1, the facility would only provide capacity for in-County generated coal ash through CY2017. If no new in-County ash fill sites were to open, the capacity deficit is calculated to be short 585,000 tons per year.

Scenario 2 assumes the expansion of in-fill capacity under SE-4765, but no extensive reuse/recycling. This would extend the capacity of the site by adding almost 460, 900 tons of ash fill capacity. With this increase in fill capacity, the analysis demonstrates that the site will be able to provide capacity for the fly ash disposal tonnages of in-County and out-of-County non-recycled volumes through year 2027.

Scenario 3, with the additional in-fill capacity requested under SE-4765, the Needs Study also assumes the continuing extensive reuse/recycling use of the Stages Turbulent Air Reactor (STAR) Thermal Beneficiation plant at the NRG Morgantown plant, which also receives fly ash generated at the Chalk Point facility, and finds that the additional in-fill capacity is still critical to extend the ash fills needs of the in-County and nearby out-of County coal-fired power generating station over the 15-year Needs Assessment Period.

**Comment:** The Technical staff is charged with the responsibility to prepare a needs study. The Environmental Planning Section staff in a memo dated June 16, 2016 indicated that they reviewed the applicant's submitted needs assessment study entitled *Rubblefill Needs Assessment Ash fill of NRG Ash Management, LLC* prepared by Gershman, Brckner & Bratton, Inc. (October 22, 2015). Based on the review, staff determined that the subject site is currently the only ash fill in the County and serves the needs of the of coal-fired power plant located in Chalk Point in Prince Georges County, and NRG coal-fired plant located at Morgantown in Charles County. Based on the analysis of three different scenarios provided in the studies listed above, staff concluded that the generation and disposal of quantities of fly ash production is directly related to the amount of affordable electric power service to be generated in the Prince Georges County, versus the population and employment growth of the county. The counties continued population growth dictates that adequate, affordable electric power service be provided. In order to meet the future demand, it is necessary that an adequate disposal site for the ash by-product be maintained close to the existing power generating facilities. The submitted report thoroughly demonstrates that the proposed rubblefill use for fly ash disposal is necessary to serve the generation of electricity for the projected population growth in the Prince George's County over the 15-year assessment period because it is the only fly ash fill site available in the region.

Staff believes that the applicant October 22, 2016 need assessment fulfills the requirements of Section 27-406(j) and 27-406(k) by demonstrating the need for such a use. The report further demonstrates that the requested 10-year extension period for the special exception is supported by the maximum capacity of the site and amount of fly ash to be placed. The applicants submitted "Rubblefill Needs Assessment Ash fill of NRG Ash Management, LLC" prepared by Gershman, Brckner & Bratton, Inc. (October 22, 2015) be contained in this special exception (SE-4765) case file.

- G. **Parking Regulations:** Section 27-568 of the Zoning Ordinance requires applicant to provide one parking space for every 500 square feet of gross floor area (GFA). The site has an existing 500-square-foot office trailer, a 240-square-foot construction trailer and a 4,316-square-foot storage barn. According to the site plan 11 parking spaces are required for the combines GFA of



the existing buildings of 5,056-square-foot. The applicants parking schedule is consistent with this requirement.

- H. **2010 Prince George's County Landscape Manual Requirements:** This applicant is not subject to the 2010 *Prince George's County Landscape Manual* (Landscape Manual) because it does not involve a change of use, does not involve increasing the impervious surface and does not involve an increase in gross floor area on site. Additionally, the previous SE approvals on-site were not subject to the 1990 *Prince George's County Landscape Manual*, so no certificate of landscape maintenance is required.

**Tree Canopy Coverage:** This application is not subject to the Tree Canopy Coverage Ordinance (TCC) per Section 25-127(b)(1)(D) because it is located in the O-S Zone.

- I. **Zone Standards:** Section 27-441 (b) permits rubble fills through approval of a special exception. The proposal conforms to the requirements and standards for the O-S Zones (Section 27-442).
- J. **Sign Regulations:** No signage is shown on the site plan and no signs are proposed for the subject use. However, a field visit revealed that the applicant has attached a sign to the chain-link fence at the entrance of the facility on NRG Ash Management site. Any sign that will be placed on the property must be shown on the plan and shall meet all area, height and setback standards.
- K. **Other Issues:** Additional Findings  
The Environmental Planning Section (M-NCPPC), in its referral dated June 16,, 2016, evaluated this request and made the following additional findings (in relevant part):

**Coal Combustion Residuals (CCRs) and Associated Regulations**

Fly Ash is a very fine, light by-product created by the combustion of coal during production of electrical energy at coal-burning power stations. The fly ash is removed from the stack gases before it can pass into the atmosphere by pollution control devices called precipitators. A small amount of ash is heavy enough to fall to the bottom of the furnace, where it is collected as "bottom ash." In general, about eight to fourteen percent of the weight of the coal burned is collected as ash, and most of this fraction is fly ash.

Coal ash is composed of the non-combustible mineral matter present in coal and any residual unburned carbon. Its exact composition depends on the types of coal and combustion processes being used. Generally, eastern coals consist primarily of silica, aluminum, iron and calcium oxides and carbon, with lesser proportions of magnesium, sulfur, and trace concentrations of other elements including metals.

In 2009, the Maryland Department of the Environment (MDE) promulgated rules for disposal of CCRs that implemented tighter oversight of existing ash disposal areas and requirements for permitting of new fills similar to what was required for municipal landscape in the state. Additionally, on December 19, 2014, the EPS Administrator signed a final rule establishing a comprehensive set of requirements for the disposal of coal combustion residuals (CCRs) in landfills and surface impoundments. The regulations were designed to protect water, air and communities and contain provisions to help ensure that actions taken by companies to comply with this rule are transparent.

### **Grandfathering**

The application is not grandfathered with respect to the environmental regulations contained in Subtitles 24 and 27 that came into effect on September 1, 2010 and February 1, 2012 because the zoning application is considered new and has been assigned a new number.

The application is not subject to the environmental regulations contained in Subtitle 25, Division 2 that came into effect on September 1, 2010 and February 1, 2012 because the site has a previously approved and implemented Type II Tree Conservation Plan, TCP11-105-90 which is being revised with the current application. The woodland conservation requirements will be reviewed with the 1989 or 1993 Woodland Conservation Ordinance.

### **Site Description**

This 178.76-acre property in the O-S Zone is located on north side of North Keys Road, and straddles the PEPCO power lines. A review of the information available indicates that there are streams, wetlands and a 100-year floodplain on the subject property. The on-site streams are not mapped as Tier II waterways, but the site is located within a Stronghold watershed, the Middle Patuxent. The site is not located in a Special Conservation Area. Areas of severe slopes, and areas of steep slopes with highly erodible soils are found to occur on the property. The site is partially wooded. The uses proposed on this site may be noise generating. The predominant soils found to occur according to the US Department of Agriculture (USDA) Natural Resource Conservation Service (NRCS) Web Soil Survey (WSS) include Croom-Marr, Fallsington, Marr-Dodon, Udorthents, Westphalia and Dodon, Widewater and Issue oils, and Woodstown. Some of these soils generally have limitations with respect to impeded drainage and seasonally high water tables. Marlboro and Christiana clays are not found in the vicinity of this property. Based on information obtained from the Maryland Department of Natural Resources Natural Heritage Program, there are no rare, threatened or endangered species found to occur on this site. No Potential Forest Interior Dwelling Species (FIDS) Habitat is mapped on-site. The property is located in the Mattaponi Creek watershed of the Patuxent River basin. North Keys Road is classified as a rural collector, which are not generally regulated for transportation noise impacts. North Keys Road, which provides access to this property via a private access easement, is also designated a historic road.

The site is located within the Established Communities of the Growth Policy Map and Environmental Strategy Area 3 (formerly the Rural Tier) of the Regulated Environmental Protection Areas Map as designated by *Plan Prince George's 2035 Approved General Plan*. According to the 2005 *Approved Countywide Green Infrastructure Plan*, the site is located within the designated network of the Green Infrastructure Plan and includes all three designations; Regulated, Evaluation, and Network Gap areas.

### **General Plan Conformance**

At the time this site was last reviewed with Special Exception SE-4520, the 2002 *Prince George's County Approved General Plan* had placed this property in the Rural Tier. Rubblefill activity is an interim use of the land was not specifically addressed by the Rural Tier Development Patterns goals and policies. However, the reclamation and reuse of this site for recreation, forestry or agriculture activities would be consistent with Rural Tier goals and policies at that time.

In *Plan Prince George's 2035 Approved General Plan* (2014) the site is located within the Rural and Agricultural Areas, and the following Land Use Policies and Strategies Section are included:

- Policy 11**      **Preserve and protect the Rural and Agricultural Areas to conserve agricultural and forest resources.**
- LU11.3**      **Evaluate the impacts of extractive industries, such as sand and gravel mining on resource lands, rural character, economic development, and the post-reclamation requirements in the Rural and Agricultural Areas. Map remaining sand and gravel natural resources to locate potential future sand and gravel operations, update and revise development standards, and identify post-reclamation land uses, including residential development, agriculture and forestry. Propose comprehensive legislation to revise county codes and identify recommendations for the Zoning Ordinance update.**  
(Page 117)

This Land Use strategy was also include in the Zoning Ordinance Strategy Table (Page 317). The *sand and gravel extraction on this site has already occurred, prior to the fill operation. The fill operation is part of the reclamation activities on the site, but the reclamation activities will be subject to requirements identify within the Environmental Review section of this memorandum.* Because new recycling technologies have been identified for the cost-effective reuse of fly ash into a variety of products, there is potential that the fly ash placed on the site may be extracted in the future, and other land restoration options may be available consistent with strategies for Rural and Agricultural Lands.

#### **Master Plan Conformance**

The current Master Plan for this area is the 2013 Approved Subregion 6 Master Plan and Sectional Map Amendment ( Subregion 6 Master Plan SMA) used in conjunction with County Council Resolutions CR-82-2013 and CR-83-2013 (July 24, 2013). In the 2013 Approved Subregion Master Plan SMA, the Environmental Infrastructure Section contains goals, policies, and strategies. The following guidelines have been determined to be applicable to the current project. The text in **BOLD** is the text from the master plan and the plain text provides comments on the plan conformance.

**Policy 1: Protect, preserve, and restore the identified green infrastructure network and areas of local significance within Subregion 6 in order to protect critical resources and to guide development and mitigation activities**

#### **Strategies:**

1.      **Protect priority areas that will meet multiple protection objectives such as those related to green infrastructure, the priority preservation area, and the Patuxent River Rural Legacy Program.**
2.      **Protect primary corridors (Patuxent River, Charles Branch, Collington Branch, Piscataway Creek, Mattawoman Creek, and Swanson Creek) during the review of land development proposals to ensure the highest level of preservation and restoration possible, with limited impacts for essential development elements. Protect secondary corridors to restore and enhance environmental features, habitat, and important connections.**
3.      **Preserve and connect habitat areas to the fullest extent possible during the land development process.**

4. **Preserve or restore regulated areas designated in the green infrastructure network through the development review process for new land development proposals.**
5. **Protect portions of the green infrastructure network outside the primary and secondary corridors to restore and enhance environmental features, habitat, and important connections.**
6. **Evaluate land development proposals in the vicinity of SCAs to ensure that the SCAs are not negatively impacted and that green infrastructure connections are either maintained or restored.**

The site is not located in the Priority Preservation Area, or the Middle Patuxent Rural Legacy Area, but is located with a Stronghold watershed (Rock Creek). The Countywide Green Infrastructure Plan was not prepared until 2005, when a significant amount of mining, and mounding had already occurred on the site. There is potential for partial restoration of the site once the previously approved special exception activity is completed in accordance with the identified Regulated Areas, Evaluation Areas and Network Gaps. Enhancement of environmental features, habitat and important connections should be supported through preparation of a “site restoration” plan.

**Policy 2: Restore and enhance water quality in degraded areas and preserve water quality in areas not degraded.**

**Strategies**

1. **Protect and restore groundwater recharge areas such as wetlands and the headwaters areas of streams and watersheds.**

**Comment:** The site contains streams, 100-year floodplain, wetlands and wetland buffers which have been protected to the extent these features were regulated at the time of application approvals.

3. **Require retrofitting of locations without stormwater management or with poorly performing facilities as they are identified during the development review process.**
4. **Define and identify operations and activities that create stormwater management “hotspots” to adjust development and enforcement as necessary for pollution prevention.**
7. **Require environmentally-sensitive site design which includes limiting impervious surfaces and implementing best practices in on-site stormwater management to reduce the impact of development on important water resources.**

**Comment:** A Stormwater Management Concept Approval Letter and plan (#3965-2015-00) issued October 23, 2015, was submitted with this application, which expires on October 23, 2018. The associated conditions of approval require a restoration bond for the existing improvements with the public rights of way along the frontage of the site; and the removal of 1.9 acres of existing impervious surface to restore and stabilize the site area of 17.1 acres. Because the ultimate condition will decrease impervious area on the site, and will not increase the runoff, no environmental site design (ESD) measures are required on this site per the Department of Permitting, Inspections and Enforcement (DPIE).

## **2005 Approved Countywide Green Infrastructure Plan Conformance**

Portions of the overall 207.61-acres site are located within the designated network of the 2005 *Approved Countywide Green Infrastructure Plan* and includes all three designations; Regulated, Evaluation, and Network Gap areas. The previously approved limits of disturbance were approved and implemented with prior applications. Minor 21 additional impacts to the network are proposed with the current application. The Regulated and Evaluation Areas are the focus of preservation and afforestation efforts with this and previous applications as appropriate to be in conformance with the Green Infrastructure Plan.

### **Review of Previous Conditions of Approval**

The following text addresses previously approved environmental conditions related to the subject applications. The text in **BOLD** is the actual text from the previous cases or plans. The plain text provides staff's comments on the plan's conformance with the conditions.

### **Order Approving SE-4002 with Conditions**

An order was issued by the Office of the Zoning Hearing Examiner recommending approval of Special Exception SE-4002 subject to the several conditions, the following of which are environmental in nature:

3. **That a minimum 50 foot-wide wooded buffer be maintained along the north, east and south property lines**

A 50 foot-wide wooded buffer has been provided along the east and northern boundaries of the property. A 50 foot-wide wooded buffer has been provided along the southern side of the property, on property that was donated to M-NPPC for the Brandywine North Keys Community Park.

### **Revised Order Approving SE-4520 with Conditions**

A revised order affirming the Examiner decision and approving Special Exception SE-4520 for a sanitary landfill was approved subject to findings and conditions adopted by the District Council, with the addition of the following findings:

- A. **From the record, the District Council concludes that the existing and proposed ash mounds at the site are (or will be) unacceptably high, detracting from views of the site on nearby roads and properties.**
- B. **The District Council further concludes that the Applicant should be able to complete the waste disposal use of the property in eight years or less.**

Approval of the special exception was subject to the following conditions, which are environmental in nature:

1. **Applicant shall complete the following, in accordance with the recommendations of the Department of Public Works and Transportation:**
  - i. **All future rubble mounds on the subject property shall be limited to a height of no more than 40 feet above the original grade, as measured from the base of the original barn on the subject site. The applicant shall maintain all existing mounds at or below their current height.**

The current application proposes to maintain a maximum height of 260 feet above sea level within the 42.8-acre Phase II Fill Area. The maximum height has already been achieved directly adjacent to the Brandywine-North Keys Community Park. Higher elevations identified on other portions of the site will be addressed by the Zoning Section in their technical report.

The main environmental concerns associated with this proposal include impacts on the viewshed, noise, stormwater management, erosion and sediment control including slope stability, and conformance with the Woodland and Wildlife Habitat Conservation Ordinance. These issues are discussed throughout this report.

2. **The special exception shall expire eight years after final District Council approval action, or upon reading site capacity to accept fly ash rubble, whichever date occurs first. Applicant shall notify DER and the District Council, in writing, upon cessation of the use.**

Special Exception SE-4520 has expired prior to the completion of the fill operation. The current application is a request to allow continuation and completion of the fill operations on this site.

3. **The number of truck trips visiting the site on a daily basis shall not exceed 200.**

The number of truck trips visiting the site on a daily basis will be evaluated by the Transportation Planning Section during review of the current application

### **Natural Resources Inventory**

The site does not have a previously approved NRI because the last special exception for the site predates the Zoning Code requirements that became effective in September 2010 for new special exception application. NRI-142-2015 was approved October 16, 2015 for a gross tract area of 207.61 acres, containing 9.67 acres of 100-year floodplain, resulting in a net tract area of 197.91 acres. The existing woodland on the net tract is 64.79 acres, with 9.67 acres of woodlands location in the floodplain, for a total of 74.48 acres of woodland on the gross tract.

### **Stormwater Management**

A Stormwater Management Concept Approval Letter and plan (#3965-2015-00), issued October 23, 2015, was submitted with this application, which expires on October 23, 2018. The associated conditions of approval require a restoration bond for the existing improvements with the public rights-of-way along the frontage of the site; and the removal of 1.9 acres of existing impervious surface to restore and stabilize the site area of 17.1 acres. Because the ultimate condition will decrease impervious area on the site, and will not increase the runoff, no environmental site design (ESD) measures are required on this site.

### **Erosions and Sediment Control**

The county requires the approval of an Erosion and Sediment Control Plan. The Tree Conservation Plan must reflect the ultimate limits of disturbance not only for installation of permanent site infrastructure, but also for the installation of all temporary infrastructure including Erosion and Sediment Control measures. A copy of the Erosion and Sediment Control Technical Plan must be submitted so that the ultimate limits of disturbance for the project can be verified and shown on the TCP.

**Recommended Condition:** Prior to certification of the TCPPII, the Final Erosion and Sediment Control Plan shall be submitted.

**Urban Design**—The Urban Design Section (M-NCPPC), in its referral dated January 21, 2016, stated that this application is not subject to the Tree Canopy Coverage Ordinance (TCC) per Section 25-127(b)(1)(D) because it is located in the O-S Zone. A note should be added on the site plan regarding the applicable exemption from the tree Canopy coverage ordinance.

**Permit Review Section**—The Permit Review Section (M-NCPPC), in its referral dated December 29, 2015, stated that prior approved Special Exception Application’s SE-4520 and SE-4002 both included a condition requiring the operator of the fill to maintain a double sided, freestanding sign at the entrance to the haul road that is clearly visible from North Keys traffic and that is located perpendicular to that road. The sign was to provide the name of the operator, its mailing address and local phone number.

It appears that the double-sided sign may possibly be shown on the submitted Cross Section Location Plan, but if so, it is not labeled on that plan. Should the current application be approved and the sign condition carried forward, the Permit Review Section would recommend that the freestanding sign be shown and clearly identified on the special exception site plan.  
Comment: The sign condition was eliminated at the time of the SE-4520. Therefore this condition will not be carried over as part of SE-4765 approval.

**L. Required Findings:**

**Section 27-317 (a) 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 purpose of this Subtitle;**
- (2) The proposed use is in conformance with all the applicable requirements and regulations of this Subtitle;**

**Comment:** The purposes are contained in Section 27-102 of the Zoning Ordinance. They are many and varied, but all are predicated on protecting and promoting compatibility relationship between the various types of land uses. The proposed Phase II Fill Area does not have a detrimental effect on the adjacent or general neighborhood because the fly ash disposal facility is located in a rural area. It is located approximately one-half mile from nearest public road. The 50-foot vegetative buffer to be maintained around the facility will serve to mitigate some of the obvious adverse impact, such as: noise, dust and partially obstruct the view of the facility from surrounding area. However, with respect to the rubble fill as a whole, the height of the mound located in Phase II Fill Area does not appear to comply with the height restriction imposed as a condition of approval for SE-4520. Therefore, staff believes the site is not in conformance with all the applicable requirements and regulations of this subtitle.

- (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 Master Plan, the General Plan;**

**Comment:** This plan is in conformance with the Subregion 6 Master Plan and SMA recommendation. Details of master plan recommendation is provided in Section K above.

- (4) The proposed use will not adversely affect the health, safety, or welfare of residents or workers in the area;**
- (5) The proposed use will not be detrimental to the use or development of adjacent properties or the general neighborhood; and**

**Comment:** The site has been an actively operating for more than 44 years without apparent harmful effect on the surrounding neighborhood. The State of Maryland's regulation of rubble fills and ash fill has become much stricter through the years. Today's fills are subject to regulations including liners, and capping upon completion. As mentioned before, when the original approval was done for this site, the elevation established to be 260 feet per District Council for both Phase I and Phase II Fill Area. The applicants' site plan indicates a 31 feet elevation increase including new grading and capping for phase I fill area. At the time of the last SE-4520 approval process, applicant failed to mention and validate this significant existing height increase. The District Council raised concern at the time of the approval that "the existing and proposed ash mounds at the site are (or will be) unacceptably high, detracting from views of the site on nearby roads and properties". The current plan shows 31 feet existing illegal elevation increase for Phase I Fill Area (including new grading and capping), which is substantial. The height increase also caused steep slope and new grading to occur around Phase I. While the applicant is seeking to renew the life of the fly ash operation by ten years for phase II. Staff notes that the existing fill mound in Phase I has increased by 31 feet without any approval or revision to the site plan. The applicant needs to provide a valid explanation of why this elevation increase was not brought before the District Council for validation at the time of its previous application or as part of this application. Furthermore, the applicant has the burden to adequately prove how the substantial existing vertical expansion, steep slope and newly grading of Phase I will not have any detrimental environmental effect on the uses or development of adjacent properties or the general neighborhood (Section 27-317(a)(5)).

During the former special exception (SE-4520), the District Council found that the use generally met both the specific findings for rubble fills (Section 27-406) and the general and special exception findings shown above. The continuation of existing use of the fill site will eliminate the need for a new disposal site, thereby will preserve the scenic beauty of the other undeveloped areas of the southern part of the County.

As confirmed in the previous special exception approval, the applicant will continue the practice of covering and wetting truck load and washing trucks at the generating station. At the site, the gravel access road will be wetted and truck wheels will be washing to reduce the amount of airborne dust generation at the facility. The applicant will continue to monitor and cleanup dirt or must tracked on the public roadways, as enforced by the posting of performance bonds and by county's Department of Public Works and Transportation (DPW&T).

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

**Comment:** The current application is in general conformance with Type II Tree Conservation Plan TCP II-105-90, but the TCP II plan now requires revision because of additional clearing proposed, and the identification of 100-year floodplain on the site. The crediting of woodlands in the 100-year floodplain for the fulfillment of woodland conservation requirements has never been allowed under any Woodland Conservation Ordinance in Prince George's County.

This property was subject to the provisions of the Prince George's County Woodland Conservation Ordinance because the property was greater than 40,000 square feet gross tract area, there are more than 10,000 square feet of existing woodland, and more than 5,000 square feet of



woodland clearing is proposed. A Type II Tree Conservation Plan (TCPII-105-90) was first approved with Special Exception SE-4002, and accepted as consistent with requirements and needing no revision. This was because no 100-year floodplain was identified at time of application. Now that the 100-year floodplain is subtracted to determine the net tract area, and calculate the requirement of the site, woodlands within the floodplain can no longer be credited. The Woodland Conservation Threshold for this site is 106.00 (50% of the Net Tract), but the amount of 100-year floodplain was not subtracted from the gross tract area because no 100-year floodplain was previously identified. Because there were only 43.10 acres of existing woodlands on the net tract area, the woodland conservation threshold was reduced to 43.10 acres or 20.33% of the net tract. The amount of woodland conservation required, based on the amount of additional clearing currently proposed is 43.11 acres. The TCPII has proposed to meet the requirement with 42.22 acres of on-site preservation and 0.92 acres of on-site natural regeneration for a total of 43.14 acres of woodland conservation to be provided on-site.

The site of the proposed natural regeneration area is located in the middle of a steep slope, and is in an area where vegetation is unlikely to be retained due to the capping requirements of the fly ash facility, which will allow vegetation on the slopes of the fill, but will not allow woodland vegetation to be retained to prevent infiltration to the capping. The applicant shall revise the TCPII plan to indicate either provision of off-site woodland conservation or payment of a fee-in-lieu at \$0.30 per square foot to fulfill the total requirement. The plan also requires other technical revisions in order to fulfill the requirements of Subtitle 25, Division 2 prior to signature approval. These conditions are listed in the Recommendation section of the staff report.

**(7) The proposed site plan demonstrates the preservation and/or restoration of the regulated environmental features in a natural state to the fullest extent possible in accordance with the requirement of Subtitle 24-130(b)(5).**

**Comment:** This site contains regulated environmental features that are required to be preserved and/or restored to the fullest extent possible under Section 27-317(a)(7) of the Zoning Ordinance. The on-site regulated environmental features include streams, wetlands and 100-year floodplain on the subject property.

Section 27-296(c)(1)(L) of the Zoning Ordinance requires the submittal of: “A statement of justification describing how the proposed design preserves and restores the regulated environmental features to the fullest extent possible.” No letter of justification was submitted because no new impacts to regulated environmental features have been proposed. Minor encroachments into the regulated environmental features were approved with previous applications to allow for stormwater management and sediment control features. The regulated environmental features on the subject property have been preserved and/or restored to the fullest extent possible based on the limits of grading shown on the Special Exception Site Plan submitted for review.

**(b) In addition to the above required findings, in a Chesapeake Bay Critical Area Overlay Zone, a Special Exception shall not be granted:**

- (1) where the existing lot coverage in the CBCA exceeds that allowed by this Subtitle, or**
- (2) where granting the Special Exception would result in a net increase in the existing lot coverage in the CBCA.**

**Comment:** The subsection (b) is not applicable because the subject property is not located within the Chesapeake Bay Critical area overlay zone.

#### CONCLUSION:

The applicant seeks approval of a special exception in order to continue operation of a fly ash fill which is needed for the residents in Prince George's County, Maryland. Phase II (42.8-acre southeastern portion) is currently being filled and needs a ten-year extension to complete its fill mounds including and vegetative stabilization activity. The maximum height of the fill mounds should not exceed 260 feet above the existing grade level per previous Condition 1(i) set forth in Special Exception SE-4520. However, the maximum height limit for Phase II grading and capping appears to be 265.5 feet near the south side of Phase II identified in this Special Exception, SE-4765.

Unfortunately, the applicant has filed a site plan that does not comply with the height restriction imposed via an earlier special exception approval. Staff must therefore, find that the use does not meet all applicable requirements and regulations as required in Section 27-317(a)(2). The applicant has offered no explanation for the unauthorized height increase and has not requested to validate the new height as part of this review. If the applicant can provide a compelling justification for the height increase, staff would recommend the following conditions:

1. Prior to signature approval of Special Exception SE-4765 and Type II Tree Conservation Plan TCPH-190-90-01, shall be revised as follows:
  - a. Revise the EPS approval block on all plan sheets to indicate the associated DRD case, and the reason for the revision.
  - b. Remove Natural Regeneration from the legend on all plan sheets.
  - c. Add a woodland conservation sheet summary table to all sheets.
  - d. Label woodland conservation areas on all sheets by area and methodology.
  - e. Remove the following elements from Sheet 1 of 5:
    - (1) Remove the natural regeneration area table from the sheet.
    - (2) Remove the table in the lower left hand corner, which does not accurately described how the woodland conservation requirement was determined, and is inconsistent with the woodland conservation worksheet.
    - (3) Remove the NRA-1 from the cover sheet key map.
    - (4) Provide additional woodland conservation needed to fulfill the requirement, which is less than one acre in area, to be fulfilled either through fee-in-lieu or off-site woodland conservation.
    - (5) Add a disposition column to the Specimen Tree Table. No variances are required for the removal of specimen trees because the plan is grandfathered under the 1989 ordinance.
    - (6) After all revisions are made to the plan, revise the woodland conservation worksheet to reflect the woodland conservation requirement and its fulfillment.

- (a) Remove WRA-A from Sheet 3 of 5.
  - (b) Have the plan signed and dated by the Qualified Professional who prepared it.
- 2. Prior to certification of the TCPII, the Final Erosion and Sediment Control Plan shall be submitted.
- 3. Provide a note on the plan regarding the applicable exemption from the Tree Canopy Coverage Ordinance.
- 4. The special exception shall expire ten years after the final District Council approval action or upon reaching the site capacity whichever occurs first. The applicant shall notify Department of Environmental Resources in writing upon cessation of the use.
- 5. The maximum height of fill mounds for Phase I including capping and grading shall not exceed 291 feet and for Phase II 265.5 feet. Any increase in height in the near future shall require a new special exception approval by the District Council.

Continuation of the following conditions approved in the prior special exception (SE-4520):

- 3. The number of truck trips visiting the site on a daily basis shall not exceed 200.**
- 4. Applicant shall confer and cooperate with owners of the cemetery across North Keys Road from the site entrance, for the purpose of limiting truck trips during funeral ceremonies.**

However, absent of justification for failing to comply with the height restriction for the Phase I mound, staff is compelled to recommend DISAPPROVAL of Special Exception SE-4765.