



**Boucher & James, Inc.**  
CONSULTING ENGINEERS

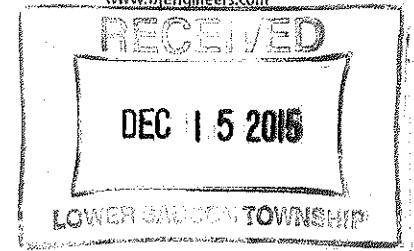
AN EMPLOYEE OWNED COMPANY

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December 15, 2015

Mr. Jack Cahalan, Township Manager  
Lower Saucon Township  
3700 Old Philadelphia Pike  
Bethlehem, PA 18015

**SUBJECT: IESI PA BETHLEHEM LANDFILL CORPORATION  
SOUTHEASTERN REALIGNMENT  
PRELIMINARY / FINAL LAND DEVELOPMENT  
PARCEL ID #P7-5, P8-1, N8-4  
TOWNSHIP #LD 01-15  
PROJECT NO. 1595227R**

Dear Mr. Cahalan:

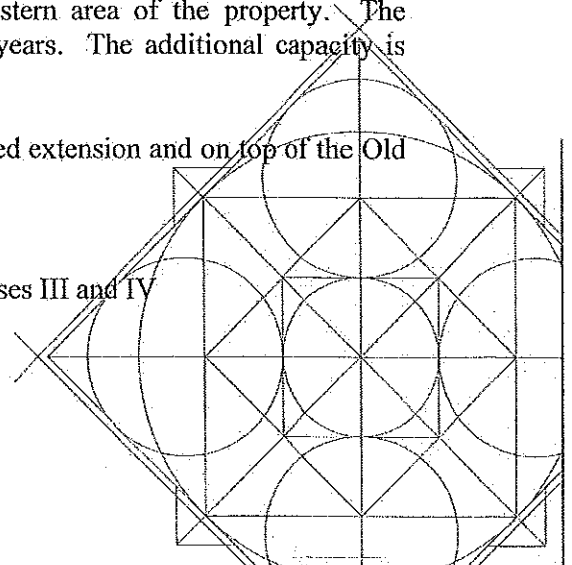
Please be advised that we have reviewed the Preliminary / Final Land Development Plan and Site Plan for the above referenced project, dated July, 2015, last revised October 12, 2015 prepared by Martin and Martin, Inc.

The property is located at 2335 Applebutter Road within the LI, Light Industrial Zoning District, LM Light Manufacturing District, and the RA Rural Agriculture District. The site is also partially located within the Carbonate Geology Areas as per the Lower Saucon Zoning Map. The property is the location of the IESI PA Bethlehem Landfill and contains approximately 224 acres.

The applicant is proposing to increase the capacity of the landfill to allow for a total of 2,678,808 tons of additional capacity across approximately 57.5 acres of the landfill. This includes an approximate 6 acre extension of the landfill in the southeastern area of the property. The additional capacity is proposed to have a longevity of 5.54 years. The additional capacity is proposed throughout the landfill as follows:

- S
- ROUTING
- Council
  - Manager
  - Asst. Mgr.
  - Zoning
  - Finance
  - Police
  - P. Works
  - P/C
  - P & R
  - EAC
  - Engineer
  - Solicitor
  - Planner
  - Landfill
  - EMC
  - Other

- 1. Eastern area of the property which includes the proposed extension and on top of the Old Fill Area, and Phases I and II
  - 1,972,168 tons
- 2. Western and central areas of the property on top of Phases III and IV
  - 706,640 tons



Additional site improvements include a relocated citizen drop-off area, a Mechanically Stabilized Earthen (MSE) Wall, and a 40 foot wide access road.

Background Information Summary:

Application Title: IESI PA Bethlehem Landfill Southeastern Realignment  
Plan Stage: Preliminary/Final Land Development  
Applicant: IESI Bethlehem Landfill Corporation  
Plan Date: July, 2015  
Revision Date: October 12, 2015  
Received Date: November 25, 2015 - Lower Saucon Township  
November 30, 2015 - Boucher & James, Inc.  
Location: 2335 Applebutter Road  
Total Site Area: 224.47 Acres  
Zoning District: LI, Light Industrial  
Representative: David Buzzell, Esq., Land, Air and Water Legal Solutions, LLC  
Maryanne Garber, Esq., Land, Air and Water Legal Solutions, LLC  
Richard Bodner, P.E., Martin and Martin, Inc.

We offer the following comments for your consideration.

1. Condition of Prior Approval

On April 6, 2005, Lower Saucon Township Council granted Amended Land Development Plan Approval for Relocated Maintenance Facility to IESI PA Bethlehem Landfill Corp., subject to several conditions. Condition #5, as noted in the letter of approval dated April 12, 2005, states "The applicant will enter into an Agreement not to expand their Landfill beyond the limits of the existing Department of Environmental Permit." The applicant signed a certification approving and accepting the conditions noted in the approval on April 18, 2005.

The Township should examine the relevant permits, documents, and plans referenced in this condition, as the condition may have a significant impact on the submitted application.

2. Use

a. ZO Section 180-80 pertains to special exception uses within the LI -Light Industrial District. The applicant is proposing an expansion of the existing facilities and an increase in the intensity of the land use. A special exception is required.

- b. ZO Section 180-102.C outlines application requirements for site plan review. The applicant shall address the following:
    - i. ZO Section 180-102.C(2)(o)[4] requires the number and job classification of employees to be included in the project narrative. The applicant stated that the required information was outlined in correspondence dated September 24, 2015 as provided to the Township. The applicant shall revise the project narrative to include the required information to demonstrate compliance.
    - ii. ZO Section 180-102.C(2)(q) requires the copy of all required permits and supporting documents required by federal, state and local government agencies to be included in the site plan. The applicant shall provide this information to the Township, once all permits have been obtained.
  - c. ZO Section 180-109.F(1)(b)[6] requires the submission of all Department of Environmental Protection and other applicable agencies' permit information, including but not limited to applications, review comments, and terms and conditions of permits. The applicant shall provide this information to the Township, once all permits have been obtained.
  - d. ZO Article XVII Additional Regulations for Certain Permitted, Conditional and Special Exception Use, ZO Section 180-109 Industrial Uses, Subsection F(2)(a)[1] pertains to additional regulations and standards for a landfill use. An earthen berm shall be placed no closer than 50 feet to all adjacent uses around the perimeter of a landfill. Note #4 in the Landscape and Screening Data table on Sheet 8 of 17 indicates that no earthen berm is proposed. The applicant has requested relief from this section, from Township Council. If relief is not granted, a variance would be required.
3. Environmental Protection Standards
- a. ZO Section 180-95.B(13) pertains to steep slope protection requirements. Steep slopes shall include areas of 3,000 square feet or greater where the slope exceeds 8%. Steep slopes exist within existing easements, however they have not been mapped or shown on the Existing Natural Resources Plan. The applicant shall revise the plans to show the existing steep slopes that are located within existing easements. Additionally, the Resource Protection calculations shall be revised accordingly to demonstrate compliance, or a variance would be required.

b. Woodlands:

- i. ZO Section 180-95.B(15) pertains to woodland protection requirements. The woodlands area shown in Exhibit 3 on Plan Sheet 7 of 17 and the area of woodlands noted in the calculations, also on Plan Sheet 7 of 17 are not correct, as they appear to exclude the area of the Environmentally Sensitive Woodlands. Woodlands shall include all areas of 3,000 square feet or greater which contain an average of one or more trees measuring six inches in caliper or greater, per 1,000 square feet. The applicant shall revise the plans and calculations to demonstrate compliance, or a variance would be required.

Additionally, the area of woodland and environmentally sensitive woodland impacts as shown in various places on Plan Sheet 7 of 17 and should be revised to include the area 15 feet beyond the proposed tree protection fencing, in order to more accurately delineate the impacted areas and areas to remain. Tree protection fencing is located a minimum of 15 feet from trees to be protected, in order to protect the root zone. Therefore, the "edge" of the woodlands to be protected would be minimum distance of 15 feet from the tree protection fencing. This should be revised throughout the plan set.

- ii. ZO Section 180-95.B(16) pertains to environmentally sensitive woodland protection requirements. The applicant shall address the following:
  - 1) ZO Section 180-95.B(16)(a) states environmentally sensitive woodlands shall include areas of woodlands which coexist with other protected natural resources. Several areas of woodlands, which are not labeled as environmentally sensitive woodlands, are shown coexisting with existing steep slopes on Plan Sheet 7 of 17 – the Existing Natural Resources Plan. The applicant shall revise the plans and calculations to demonstrate compliance, or a variance would be required.
  - 2) ZO Section 180-95.B(16)(d) requires a protection rate of 85% for environmentally sensitive woodlands. There appears to be more proposed disturbance of existing environmentally sensitive woodlands than is shown on Plan Sheet 7 of 17 – the Existing Natural Resources Plan. The applicant shall revise the plans and calculations to demonstrate compliance, or a variance would be required.

- iii. The proposed limits of woodland disturbance/woodland protection shall be clearly shown on the plans.
- c. ZO Section 180-95.C pertains to the required Site Capacity Calculations. The following items shall be addressed:
  - i. ZO Section 180-95.C(2)(b) pertains to the calculation for resource restrictions and resource protection lands within the base site area. There appear to be more steep slopes greater than 25% than noted in Exhibit 1 and in the Resource Protection calculation on Plan Sheet 7 of 17 – the Existing Natural Resources Plan. The applicant shall revise the plans and calculations to demonstrate compliance, or a variance would be required.
  - ii. ZO Section 180-95.C(2)(f) pertains to the site capacity calculation summary. The applicant shall revise the plans to show the required site capacity calculation summary to demonstrate compliance, or a variance would be required.

4. Buffer and Landscape Requirements

- a. ZO Section 180-97.B outlines planting screen requirements. An expansion of the existing landfill is proposed to encroach closer to the southern and eastern tract boundaries as part of the proposed southeastern realignment. A planting screen shall consist of a dense screen planting of trees, shrubs or other plant materials, extending the full length of the buffer yard, to serve as a barrier to visibility, glare and noise. The applicant proposes to use existing vegetation to partially meet these requirements. However, no existing vegetation exists in several areas of the required buffer yard as shown on the Existing Conditions Plans. We recommend the applicant address the following to demonstrate compliance, or a variance would be required:
  - i. Proposed buffer plantings shall be extended to the north to fully screen the Southeastern Realignment Area of Development.
  - ii. The applicant shall provide supplemental plantings along the proposed new woodland edge, for the length of the required buffer yard to create the new woodland edge and to supplement existing vegetation to meet the performance standard required. We recommend these supplemental plantings include a variety of native canopy trees, understory trees, evergreen trees, and evergreen shrubs, planted in naturalistic groupings.

- iii. The location, quantity, and species of each planting for the proposed buffer yard planting screen is not provided on the plans. The applicant shall revise the plans to include the proposed buffer plantings, and to include information regarding specific species, size, condition, and quantity of each species, to demonstrate compliance, or a waiver would be required.
  - iv. The Buffer Yard Planting Screen Landscape Scheme on Sheet 17 of 17 - Landscaping Notes & Details indicates a quantity of "approx. 99 trees" for each of the three types of proposed trees. However, the Detailed Grading & Landscape Plan appears to show less than this amount for each tree. The applicant shall revise the plans to correct this discrepancy, and to show each of the proposed plantings, as noted above.
- b. SALDO Section 145-52.B outlines requirements for street trees. Where no existing trees are retained along street rights-of-way, trees shall be planted at intervals of between 50 feet and 100 feet. The applicant shall revise the plans to show street trees along Applebutter Road and Skyline Drive, and provide calculations to demonstrate compliance. The applicant has requested a waiver from this requirement.
  - c. SALDO Section 145-52.C pertains to site landscaping requirements. All subdivisions and land developments shall provide plantings in addition to any required street trees or buffer yard planting screens. Plan Sheet 11 of 17 - Detailed Grading & Landscape Plan has been revised to show an area labeled as "61 Landscape Trees". However, there are no trees shown within the area labeled. The applicant shall revise the plans to include the proposed site landscaping, and to include information regarding specific species, size, condition, and quantity of each species, to demonstrate compliance, or a waiver would be required.
  - d. SWM Section 137-18.I requires landscaping be provided adjacent to a detention facility to provide a buffer between the facility and the adjacent development. The applicant shall revise the plans to provide the required buffer around proposed Basin 2 to demonstrate compliance, or a waiver would be required.
  - e. We recommend that the applicant utilize a Registered Landscape Architect to prepare a landscape plan to address the buffer and landscape requirements of the Zoning Ordinance, the Subdivision and Land Development Ordinance, and the Stormwater Management Ordinance.

5. General Comments

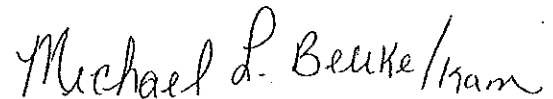
- a. The final cover system design, as shown in the Landfill Closure Plan, consists of a total of two (2) feet of common fill and topsoil. The applicant shall discuss the proposed final cover system for the areas encompassed in the proposed plans with the Township, as these areas are not part of the prior approved plans and a new cap is proposed. If it is determined that the final cover should include naturalized vegetation, two (2) feet of cover would not be an appropriate depth to support the growth of trees or shrubs.
- b. A detailed response letter addressing the above noted comments and any other changes to the plans should be included with future submissions.

If you have any questions or require additional information, please do not hesitate to contact me.

Sincerely,



Judith Stern Goldstein, ASLA, R.L.A.  
Managing Director



Michael L. Beuke, R.L.A.  
Planner/Landscape Architect

JSG/mlb/kam

cc: Planning Commission  
Township Council  
Township Zoning Clerk  
Chris Garges, Township Zoning Officer  
B. Lincoln Treadwell, Esq.  
Brien Kocher, P.E., Hanover Engineering  
Allen Schleyer, IESI Bethlehem Landfill Corporation  
Richard M. Bodner, P.E., Martin and Martin, Inc.  
David Buzzell, Esq., Land, Air Water Legal Solutions, LLC  
Maryann Garber, Esq., Land, Air Water Legal Solutions, LLC