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February 23, 2023

VIA HAND DELIVERY

Lower Saucon Township Attn: Mark Hudson, Township Manager 3700 Old Philadelphia Pike Bethlehem, PA 18015

RE:

Bethlehem Landfill Company

Phase V Expansion – Conditional Use Application

(Revised)

Our file: b/1162.6/b

Dear Mr. Hudson:

On behalf of Bethlehem Landfill Company ("BLC"), enclosed please find fifteen (15) copies of a revised Project Narrative associated with the Phase V Conditional Use Application initially submitted on January 6, 2023. The attached Project Narrative and Exhibit A to the Project Narrative replace the same in their entirety the previously submitted. Revisions to the Project Narrative and Exhibit A to the Project Narrative are in response to a Hanover Engineering review letter dated January 24, 2023.

Also attached hereto is a letter from our office dated February 23, 2023 responding to and outlining those revisions made to the Project Narrative and Exhibit A to the Project Narrative in response to the Hanover Engineering letter referenced above.

Lastly, attached are two (2) thumb drives containing electronic copies of all documents contained in this submission for your use. We are providing electronic copies of this submittal as a courtesy to Brien Kocher with Hanover Engineering and the Township Solicitor via email.

Should you have any questions concerning this correspondence, please don't hesitate to contact this office at your convenience.

Very truly yours,

MARTIN AND MARTIN, INCORPORATED

Joseph M. McDowell, P.E.

Attachments

cc: Maryanne Garber, Esq.
 David Panucci, BLC
 Brien Kocher, PE - HEI via Email
 B. Lincoln Treadwell, Jr., Esq. via Email

EXHIBIT

BLC 16



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February 23, 2023

Lower Saucon Township Attn: Mr. Mark Hudson, Manager 3700 Old Philadelphia Pike Bethlehem, PA 18015-5426

> RE: Bethlehem Landfill Company (BLC)

Phase V Expansion

Conditional Use Application

Response Letter

LST Project #CU 01-23

Our file: b/1162.6/RL01242023

Dear Mr. Hudson:

Please accept the following responses to the Township Engineer, Hanover Engineering, comment letter dated January 24, 2023 on behalf of Bethlehem Landfill Company regarding the above referenced plan. Following are BLC's responses which are highlighted in **bold** for ease of reference.

A. **ZONING ORDINANCE - CHAPTER 180**

1. <u>Sections 180-12.1.C and D</u> – The governing body shall grant a conditional use only if it finds adequate evidence that any proposed development submitted will meet all the general requirements of Section 180-12.1.C, as well as any specific requirements and standards in Section 180-12.1.D for the proposed use. The Project Narrative in the Conditional Use Application states the Phase V Expansion as proposed meets the requirements and standards of Sections 180-12.1.C and D, and the Applicant will provide testimony on all these points at the Conditional Use Hearing.

BLC will provide testimony at the Conditional Use Hearing. No revision made or required to the Conditional Use Application.

- 2. <u>Section 180-16</u> – The following comments regarding the zoning district boundaries shall be satisfactorily addressed
 - The LI and RA zoning district boundaries at the southeast corner of the site and around the Pichel property along Applebutter Road shown on the Plans shall be checked and revised accordingly, as the zoning district boundaries

MUNICIPAL ● URBAN ● REGIONAL ● LAND DEVELOPMENT AND ENVIRONMENTAL PLANNERS

shown are not consistent with the Zoning Map amendments of Ordinance No. 2022-02.

Plan Sheets 1, 2 and 10 on Exhibit A of the Project Narrative have been revised to correctly delineate the zoning boundary to include the Pichel Property located in the LI District and the two (2) triangular parcels at the southeast corner of the project as located in the RA District.

In addition, please note that the to be consolidated Lot has been revised to exclude the two (2) triangular parcels fronting Applebutter Road which are zoned RA. As such, the to be consolidated Lot acreage has been revised to 503.4595 acres as shown on the updated Plan Sheets within Exhibit A of the Project Narrative.

b. The LI/RA zoning district boundary along the Bull Run shall be clearly labeled/identified in the plan view on the Conditional Use Development Plan, Sheet 10 of 12.

Plan Sheet 10 on Exhibit A of the Project Narrative has been revised to more clearly depict the zoning boundary along Bull Run.

3. <u>Section 180-23</u> – The building setback lines within the RA zoned portion of the site (northerly portion) shall be identified on the Plans.

The entire RA zoned area north of Bull Run will be subject to a proposed conservation easement. The conservation easement as proposed will prohibit any development, including buildings and structures, within these areas. Because the conservation easement is more restrictive than the building setback required by the Ordinance, only the conservation easement is depicted on the plans.

4. <u>Section 180-79.1.B</u> – Landfills and Waste Disposal Facilities may be permitted when authorized as a conditional use by the Township Council.

Acknowledged. No revision to the application required in response to this comment.

5. Section 180-83.B – Special side or rear yards shall be required for any LI zoned property abutting any residentially zoned land. These yards shall be a minimum of 75 feet. This yard shall contain a planting screen, as specified in Section 180-97.A and B. These special side and rear yards shall be shown in the plan views.

Plan Sheets 2 and 10 on Exhibit A of the Project Narrative have been revised to identify the 75' special side and rear yards. BLC proposes to utilize existing undisturbed vegetation for the planting screen within the special rear and side yards. In the areas of the proposed conservation easement, the 75' special side and rear yards are not depicted on the plan since the conservation

easement as proposed will prohibit any development including buildings and structures in these areas.

6. Section 180-92.A – Where a street has a required right-of-way greater than that existing, the required front yard of a lot shall be measured from the required right-of-way line. The required right-of-way line and front yard setback along Riverside Drive shall be clearly identified on the Plans.

Plan Sheets 2, 3, 7, 8, 9 and 10 on Exhibit A of the Project Narrative have been revised to expand the reserved dedicated right-of-way for Riverside Drive from 25 feet to 30 feet, in response to communications with the Township Engineer in which he determined Riverside Drive to be a Collector Street. This revision to the right-of-way required revision to the Environmental Protection Analysis detailed on Plan Sheet 7.

7. <u>Section 180-93</u> – Under the Maximum Height of the Site Data on Sheet 10 of 12, it states "No Building Proposed;" however, the plan view specifies alternate scale house and truck wash locations. Clarification is requested.

Exhibit A Plan Sheet 10 of the Project Narrative has been revised to remove the reference to "No Proposed Buildings." A notation has been added stating the alternate scale house and truck wash facility will not exceed the maximum building height of 50' as per the zoning ordinance.

8. Sections 180-94 and 180-109.C.(1) — The Applicant shall indicate whether additional water and/or sanitary sewer service is required for the proposed expansion. If applicable, the Applicant shall identify the additional flows needed and document adequate service can be provided from the applicable utilities.

The Phase V Expansion proposes no increase in water demand for the site. Water is provided to the site from Lower Saucon Authority. No new employees or water usage facilities are proposed for the Phase V Expansion thus, no new or additional water supply is required. It is anticipated the Phase V Expansion will increase sewage (leachate) flows from the site to the sewage system serving the Landfill for conveyance to the City of Bethlehem POTW. Upon full design of the expansion, any increased flows will be evaluated and, if necessary, an updated agreement with the City of Bethlehem will be entered into. We acknowledge as a condition of any approvals, BLC will be required to provide the Township evidence to document there is adequate sanitary sewer service for the Phase V Expansion.

- 9. <u>Sections 180-95.B.(5) and (6)</u> The following comments regarding the existing wetlands and streams shall be satisfactorily addressed
 - a. The area of Wetland J listed in the plan view on Sheet 7 of 12 shall be checked and revised accordingly, as we measure a smaller area.

Exhibit A Plan Sheet 7 has been revised to identify the area of Wetland J depicted on Plan Sheet 7. This area as shown on Plan Sheet 7 is less than the delineated area of Wetland J due to existing rights-of-way as part of the site capacity calculations. Subsequently, the chart for calculating the allowable buildable area has been revised as well on Sheet 7 for the total Wetland area to be protected.

b. As noted in Riparian Corridor Buffer, Wetlands Floodplain Note 2 on the Cover Sheet, the USACE shall review and confirm the wetland delineation of Wetlands D through J. Additionally, the Applicant shall meet any DEP requirements regarding the proposed stream and wetland impacts.

Acknowledged. As noted, the Wetlands and Waterways subject to proposed development will be reviewed with PADEP and USACE to confirm their delineation and any jurisdictional requirements with each regulatory agency. No revision to the application required.

10. Section 185-19.B.(17)(b)[3] – The northern portion of the site is located within the Carbonate Geology Area of the Township, and the Applicant shall meet the requirements of this Section. We note the Plan identifies the approximate limits of carbonate geology and states the limits are to be confirmed by a site specific study and analysis.

Acknowledged. No revision to the application required.

11. Section 180-95.C.(2)(b) – The Woodlands and Steep Slopes >25% Required Reservation percentages listed in the Resource Protection calculation on Sheet 7 of 12 shall be revised to 80% and 85%, respectively, and the Required Resource Protection Area calculation shall be revised accordingly.

Plan Sheet 7 of Exhibit A to the Project Narrative has been revised to correctly utilize the required protection rates for Woodlands and Steep Slopes >25% of 80% and 85% respectively. This resulted in a change to the allowable buildable area outlined on the table on Sheet 7 and, therefore, required revision to the excess utilization acreage calculated under site capacity on Plan Sheet 7.

12. <u>Section 180-96.D</u> – We note the noise level measurements listed in Table #1 on Sheet 12 of 12 were taken in January 2001.

Noise level measurements were performed on February 15, 2023 at the Bethlehem Landfill consistent with the parameters outlined in the previous study performed in 2001. We have revised Plan Sheet 12 on Exhibit A of the Project Narrative to include the data collected. The data collected is generally consistent with the 2001 analysis.

13. Section 180-98.A.(2) – A traffic impact study shall be required for all uses which will generate 250 trips per day or more. (Ingress is one trip and egress is one trip). The Applicant states the landfill average daily volume (ADV), maximum daily volume (MDV) and days/hours of operation will not change with the Phase V Expansion and the vehicle trips to and from the site related to the Phase V Expansion will be substantially similar to those generated by current operations.

BLC will provide a Traffic Study and Testimony at the Conditional Use Hearing. No revisions to the application required.

14. <u>Section 180-98.B</u> – The Applicant shall submit the proposed Phase V Expansion Plans to PennDOT to determine whether the existing PennDOT Highway Occupancy Permit (HOP) for the existing site driveway to Applebutter Road is sufficient for the proposed expansion.

BLC has communicated with PennDOT regarding the existing PennDOT HOP for the existing site driveway as to its adequacy for the Phase V Expansion. We are awaiting a response from PennDOT and acknowledge providing the Township evidence as to the adequacy of the existing access a condition of any approval.

15. Section 180-98.C.(1) – A required and existing/proposed off-street parking tabulation for the existing and proposed uses shall be provided on the Plans. A note on Sheet 10 of 12 states no proposed parking areas or modifications to existing parking areas are proposed.

The Phase V expansion proposes no new off-street parking areas or modification to any existing off-street parking areas. Sheet 10 of Exhibit A to the Project Narrative has been revised to include language to show compliance with the ordinance relating to required parking spaces per employees both for the Recycled Natural Gas operations and Landfill operations within the to be consolidated lot.

- 16. <u>Sections 180-109.B and 180-109.F.(2)(a)</u> The following information shall be included in the project narrative.
 - a. The contact person for the development and operation phases of the facility shall be identified.

The application Project Narrative has been revised to include a contact person for the development and operation of the Phase V Expansion. Exhibit A Plan Sheet 1 has also been revised to include a contact name and phone number under Owner/Applicant for Bethlehem Landfill Company.

b. Procedures for emergencies, hazards and accidents shall be provided.

Mr. Mark Hudson February 23, 2023

The Project Narrative of the application has been revised to include the current PPC Plan for the facility as Exhibit B to the Project Narrative.

c. The estimated length of economic life of the facility shall be identified.

The estimated life of the Phase V expansion has been included within the revised Project Narrative of the Application being 20-30 years of life based upon current permitted average and maximum waste disposal volumes.

d. A status of the permitting process with other agencies, state and federal, shall be provided.

The Project Narrative has been revised within the Application to note the multiple permits that will be required from various agencies including PADEP, US Army Corps of Engineers, Lehigh Valley Planning Commission (Stormwater) and others, and that these permits will be applied for after the requested conditional use approval has been obtained.

e. The ultimate use and ownership of the site after completion of disposal shall be provided.

The Project Narrative has been revised in the Application to provide reference to a Closure Plan as required by PADEP as part of the PADEP Solid Waste Permit Application. The Closure Plan will identify any use and ground cover in detail upon closure or cessation of waste acceptance.

f. The restoration ground cover shall be identified.

The Project Narrative has been revised in the Application to provide reference to a Closure Plan as required by PADEP as part of the PADEP Solid Waste Permit Application. The Closure Plan will identify any use and ground cover in detail upon closure or cessation of waste acceptance.

17. <u>Section 180-109.D.(3)</u> – Site Data notes state no building are proposed; however, alternate scale house and truck wash locations are shown on the Plans. Clarification is requested.

The reference to No Buildings proposed on Plan Sheet 10 of Exhibit A of the Project Narrative has been removed and the alternate scale house and truck wash facility identified as possible buildings proposed as part of the Phase V Expansion. These alternate locations would replace the existing scale house and truck wash facility.

- 18. Section 180-109.D.(4) The Site Data lists a proposed impervious area of 6.75 acres. Due to the small scale of the Plan and lack of detail of proposed improvements, we could not verify the proposed and total impervious area.
 - The Phase V Expansion proposes limited impervious area (rooftop and roads) totaling 6.75 acres. Further detailed analysis will be performed as part of the required Land Development Application, which will include a full Stormwater Management Plan for the Project. No revision to the Application required.
- 19. Sections 180-109.F.(3)(a) and 180-109.C.(2) An earthen berm shall be placed no closer than 50 feet to all adjacent uses around the perimeter of a landfill or waste disposal facility and buffer yards and screening shall be provided. The Applicant requests that Township Council determine that the existing features serve as an acceptable substitute for the required berms, screening, and buffers. Supplemental plantings may be required as a condition of the Conditional Use approval.
 - BLC seeks relief of the earthen berm requirements outlined in the Zoning Ordinance as noted in the Project Narrative and Plans. No Application revision required.
- 20. <u>Section 180-109.F.(3)(a)</u> No landfill or waste disposal facility activities shall be conducted less than 100 feet from a property boundary line. This required setback shall be clearly identified on the Plans.
 - The 100 foot landfill activity setback is identified on Plan Sheet 10 within Exhibit A to the Project Narrative. In the areas where a conservation easement is proposed, the more restrictive conservation easement is identified since the conservation easement is 125 feet to the property at its closest point and the proposed conservation easement will prohibit landfill activity.
- 21. Section 180-109.F.(3)(a) No landfill or waste disposal facility activities shall be conducted within 100 feet of the bank of any stream. Two (2) existing streams are located within the Phase V Expansion limit of disposal. Please note easements are proposed for these streams on Sheet 2.
 - Two (2) waterways with drainage areas less than 100 acres have been identified within the proposed disposal footprint. These waterways are segmental and disconnected from Bull Run and the Lehigh River. Given this disconnection and the limited drainage area to both stream segments, we believe the subject waterways are not jurisdictional or waters regulated by the Commonwealth. However, a first step as noted on Plan Sheet #1 of Exhibit A to the project narrative, BLC proposes to formally file for a jurisdictional determination with both USACE and PADEP. If either regulatory agency takes jurisdiction, then appropriate permits will be obtained to allow for the removal of the waterways. If no agency takes jurisdiction, then no permit for removal is required.

In either event, jurisdictional or non-jurisdictional, the waterways will be removed to allow for development of the Phase V disposal footprint as depicted on the plans.

BLC acknowledges any approval would be conditioned upon providing the Township evidence of a permit for removal of the waterway.

- 22. <u>Section 180-109.G</u> The following comments regarding the proposed Natural Resource Mitigation Alternative shall be satisfactorily addressed:
 - a. The Applicant requests that Lower Saucon Township provide written approval for Bethlehem Landfill Company to exceed the net buildable site area permitted by Section 180-95.C.(2)(c) ("Permitted Net Buildable Site Area"), utilizing a greater area of natural resource protection land than would be otherwise permitted by the Resource Protection Standards contained in Section 180-95 ("Excess Resource Utilization").

Noted, no revision to the application required.

b. We note the Proposed Buildable Site Area listed on the Plans is the total proposed limit of disposal and does not include the existing and proposed landfill improvements located outside the limit of disposal. The Proposed Buildable Site Area shall be further discussed and clarified with the Township as the Applicant finalizes the landfill expansion design and during the land development plan review process.

Based upon conversations with the Township engineer, Plan Sheet 7 of Exhibit A to the Project Narrative has been revised to recalculate the excess resource utilization to include the total area of development (180.50 acres) associated with Phase V Expansion on the new parcels.

c. The Applicant shall dedicate to the Township for preservation an amount of land equal to the Excess Resource Utilization. In the event that the Applicant demonstrates to the satisfaction of the Township Council, that it was unable to obtain any or enough property for dedication pursuant to this Section, the Applicant may meet the requirements of this Section by submitting a fee-in-lieu of dedication in accordance with the calculations in the Lower Saucon Township Subdivision and Land Development Ordinance, Section 145-51.E. The Applicant shall demonstrate and make the required dedication and/or fee-in-lieu of dedication payment prior to final land development approved by the Township Council.

Noted, no revision to the application required.

B. <u>GENERAL COMMENTS</u>

1. As referenced in Notes 1 and 2 on Sheet 2 of 12, the site contains an existing "Woodlands Protection Easement" and "Scenic and Conservation Easements" which prohibit landfill activities. The Applicant is requesting Lower Saucon Township to release/terminate these easements.

BLC proposes that said release/termination be a condition of the requested Conditional Use Approval. No revisions to application required.

- 2. The following items pertaining to the development and operation of the site shall be identified during the land development plan review process:
 - a. The final grading by contours, in two-foot intervals, shall be specified on the Plans.
 - b. The methods of disposing of drainage and excess water accumulated during the course of operation shall be specified on the Plans.
 - c. All proposed landscaping, buffering, embankment height, methods of drainage and erosion control shall be specified on the Plans.
 - d. A copy of all Department of Environmental Protection and other applicable agencies' permit information, including but not limited to applications, review comments, terms, and conditions of permits, shall be provided.
 - e. All proposals for groundwater monitoring, testing and environmental protection shall be specified.

BLC acknowledges the requirement for items outlined in comments 2.a-e to be incorporated within a future Land Development Plan Application to be filed with Lower Saucon Township or provided in conjunction with said Application.

In the event any questions arise concerning this correspondence or project in general, please don't hesitate to contact this office at your convenience.

Very truly yours,
MARTIN AND MARTIN, INCORPORATED

Joseph M. M'Dowell, P.E.

BETHLEHEM LANDFILL COMPANY (BLC)

PHASE V EXPANSION CONDITIONAL USE APPLICATION

ATTACHMENT 3 – PROJECT NARRATIVE

BLC is seeking to continue landfill operations at the Bethlehem Landfill (Pennsylvania Solid Waste Permit No. 100020) by adding disposal capacity through both lateral and overlay expansions of the existing facility. The proposed expansion will have an estimated life of 20-30 years at the currently permitted waste acceptance limits. This project is referenced herein as the Phase V Expansion. The land upon which the Phase V Expansion is located is zoned LI, a district in which landfills are permitted as a Conditional Use. Therefore, BLC seeks Conditional Use Approval of the Phase V Expansion from Lower Saucon Township Council. Future additional approvals that will be required for the Phase V Expansion include Land Development Approval from Lower Saucon Township Council and a Major Modification to the landfill's PADEP Solid Waste Permit from PADEP. As such, per Section 180-109(F)(1) of the Lower Saucon Township Zoning Ordinance ("Zoning Ordinance"), the Phase V Expansion is not subject to the Zoning Ordinance's site plan approval process and requirements.

The Phase V Expansion proposes 117.4 acres of lateral expansion (new disposal footprint/newly lined area) and 26.74 acres atop previously permitted lined disposal area. The total Phase V development area, which includes the proposed disposal area as well as associated new or alternative landfill support activities and structures, is 189.0 acres, all to be located within what will ultimately be a consolidated 503.4595 acre parcel (said consolidation to be sought as part of the future land development approval process). Refer to attached Exhibit A – Conditional Use Application Plans, which depicts and describes the Phase V Expansion proposed as well as the contact person for the development and operation phases of the facility listed as the Owner/Applicant being Bethlehem Landfill Company, Mr. David Pannucci. The Plans provided in Exhibit A also generally identify the ultimate use and ground cover within the to be consolidated landfill lot. The ultimate ground cover will be fully detailed within a Closure Plan required as part of a PADEP Solid Waste Application.

The Phase V Expansion proposes additional capacity, as well as new disposal area and related activities, beyond the current PADEP Solid Waste Permit Boundary for Bethlehem Landfill. As such, a Major Modification to the landfill's PADEP Solid Waste Permit will be required prior to development of the Phase V Expansion. A proposed new PADEP Solid Waste Permit Boundary is delineated on Exhibit A. That proposed permit boundary is subject to approval by PADEP and may be modified as part of that PADEP review process. However, the permit boundary as currently shown represents the maximum additional permit area sought by BLC as part of the Phase V Expansion. No Solid Waste Permit Applications have been filed with PADEP since zoning approval sought with this application is required to make a complete application with PADEP.

A proposed expanded disposal footprint (within the proposed PADEP Solid Waste Permit Boundary) is also delineated on Exhibit A. Like the PADEP Solid Waste Permit Boundary, that proposed disposal footprint is subject to modification resulting from further Geologic

Investigations and PADEP's review of the Major Permit Modification. However, that proposed disposal area represents the maximum disposal footprint being sought by BLC.

The Phase V Expansion includes alternative locations for certain existing facilities (internal access drives, the truck wash facility, and the scales and scale house), to provide for the potential relocation of these existing facilities.

The landfill's existing operations will not change with the Phase V Expansion. The type and amount of waste it is permitted to receive will remain the same. The landfill's current permitted average daily volume (ADV) is 1,375 tons/day and its current permitted maximum daily volume (MDV) is 1,800 tons/day. The landfill is open to receive waste between 7 AM and 4 PM Monday through Saturday with operating hours being 6 AM to 6 PM. The landfill has operated pursuant to these same ADV/MDV permit limits and days/hours of operation for nearly two decades. The ADV/MDV and days/hours of operation will not change with the Phase V Expansion. By maintaining these existing conditions, the vehicle trips to and from the site related to the Phase V Expansion will be substantially similar to those generated by current operations. Furthermore, the existing PADEP-approved designated haul route that trucks must use to get to the site, as well as access to the site from Applebutter Road, will remain the same.

Further, by maintaining existing operations, the procedures for emergencies, hazards and accidents shall be in accordance with the currently approved Preparedness, Prevention and Contingency Plan for the facility. A copy of said Plan is attached hereto as Exhibit B. This Plan shall be updated upon full completion of the Phase V Expansion design and will be made part of the Land Development Plans and DEP Solid Waste Application.

BLC is proposing to develop the Phase V Expansion in accordance with Section 180-109(G) of the Lower Saucon Township Zoning Ordinance (Natural Resource Mitigation Alternative) and has provided the information and calculations required by that Section on Sheet 7 of the Exhibit A. BLC requests, as part of this Conditional Use Application, that Lower Saucon Township Council provide written approval for BLC to exceed the net buildable site area permitted by Section 180-95(C)(2)(c)("Permitted Net Buildable Site Area"), utilizing a greater area of natural resource protection land than would otherwise be permitted by the Resource Protection Standards contained in Section 180-95 ("Excess Resource Utilization"), as is proposed on Sheets 7 of Exhibit A. Per Section 180-109(G)(8) of the Zoning Ordinance, BLC will demonstrate and make the required dedication and/or fee-in-lieu of dedication payment prior to final land development approval.

The Phase V Expansion Excess Resources Utilization includes impacts to waterways and wetlands. These impacts will be mitigated through the filing of a Joint Permit Application with PADEP and USACE. This filing will be made after the requested Conditional Use approval has been obtained.

The Phase V Expansion as proposed (as demonstrated in this Application package and as will be presented at the Conditional Use Hearing) meets the general requirements and standards applicable to Conditional Uses set forth in Section 180-12.1(C) of the Zoning Ordinance.

• The project is in accordance with the Lower Saucon-Hellertown Joint Comprehensive Plan ("Joint Plan") and is consistent with the spirit, purposes, and the intent of the Zoning

Ordinance. The Joint Plan, which was updated in 2022, did not change any recommendations for the area surrounding the existing landfill upon which the Phase V Expansion is proposed. The Joint Plan designates the current landfill and almost all lands proposed for the landfill expansion to the east and northeast as "Industrial." The Industrial category in the Joint Plan includes certain lands up to Riverside Drive and property to the east which, prior the recent rezoning to LI, were zoned RA but for decades housed a pre-existing legal non-conforming industrial use. The Industrial category in the Joint Plan is intended to provide for "generally larger-scale local and/or industrially-oriented industrial, industrial-office and/or services uses." The land along the Bull Run Creek is designated by the Joint Plan as "Open Space" because it is part of the Bull Run National Heritage Area. As depicted on Exhibit A, the Phase V Expansion will be set back significantly to the south from Bull Run Creek and therefore is in accordance with the Joint Plan in that respect. Furthermore, BLC has proposed to dedicate to the Township significant acreage in the vicinity of the Phase V Expansion and the existing landfill which will limit future expansion of the landfill to the west and northwest, conserve natural resources, and connect to existing Conservations Easements held by the Township

- In providing for a logical expansion of a long-standing highly-regulated business to continue to operate in a safe and environmentally compliant manner in the Township, which will provide substantial financial benefits to the Township as well as an important service to the surrounding community and region, the project is in the best interests of the municipality, the convenience of the community, and the public welfare, and will be a substantial improvement to the property in the immediate vicinity.
- The project is suitable for the property in question, and designed, constructed, operated, and maintained so as to be in harmony with and appropriate in appearance to the existing or intended character of the general vicinity. The project is an expansion of an existing use which is subject to comprehensive regulations that utilize state-of-the-art operational methods to ensure that good stewardship and harmony with adjacent properties and the surrounding community is achieved.
- The project is in conformance with all applicable requirements of the Zoning Ordinance and all municipal ordinances.
- The Phase V Expansion is suitable in terms of effects on highway traffic and safety, with adequate access arrangements to protect streets from undue congestion and hazard.
- The project is in accordance with sound standards of subdivision and land development practice where applicable.

BLC will provide testimony on all of these points at the Conditional Use Hearing.

The Phase V Expansion as proposed (as demonstrated in this Application package and as will be presented at the Conditional Use Hearing) also meets the specific requirements and standards applicable to Conditional Uses set forth in Section 180-12.1(D) of the Zoning Ordinance.

- The proposal provides for adequate access to public roads without creating hazardous conditions. There are no changes proposed as part of the Phase V Expansion that will change or impair existing access, which has safely served the site for decades. There are no changes to permitted ADV/MDV, days/hours of operation, or truck routes.
- The Phase V Expansion will not adversely alter the character of stable neighborhoods, and the project as proposed is protective of adjoining residents given the nature of the surrounding area, and the setbacks, buffers, landscaping, and conservation easements that are proposed. The project is an expansion of an existing use that is subject to comprehensive regulations that utilize state-of-the-art operational methods to ensure that good stewardship and harmony between adjoining properties and the surrounding community is achieved.

BLC will provide testimony on these points at the Conditional Use Hearing.

Finally, in conjunction with Conditional Use Approval, BLC is seeking relief that Council is empowered to grant relating to a perimeter earthen berm. Section 109(F)(3)(a) of the Lower Saucon Township Zoning Ordinance requires a perimeter earthen berm along property lines where new disposal area is proposed. The earthen berm is unnecessary and would affect an unreasonable and excessive burden and expense on BLC and deprive BLC of the reasonable use and value of the property. As part of this Conditional Use Application, BLC requests that Lower Saucon Township Council make a determination, pursuant to Section 180109.F(3)(a)[4], that existing features serve as an acceptable substitute for this berm requirement. Council has made this determination with past expansions of the landfill, including the Northern Realignment, the Southeastern Realignment, and the Phase IV Expansion.

BETHLEHEM LANDFILL PHASE V EXPANSION CONDITIONAL USE APPLICATION PLAN Bethlehem Landfill Company "Exhibit A"

PLAN PURPOSE:

THE PURPOSE OF THIS PLAN IS TO SERVE AS AN EXHIBIT (EXHIBIT A) TO THE CONDITIONAL USE APPLICATION FOR THE PHASE V EXPANSION AT THE BETHLEHEM LANDFILL. THE PHASE V EXPANSION ENCOMPASSES THE FOLLOWING:

117.4 ACRES OF LATERAL EXPANSION (NEW DISPOSAL FOOTPRINT / NEWLY LINED AREA) AND 26.74 ACRES ATOP PREVIOUSLY PERMITTED LINED DISPOSAL AREA. THE TOTAL PHASE V DEVELOPMENT AREA, WHICH INCLUDES THE PROPOSED DISPOSAL AREA AS WELL AS ASSOCIATED NEW OR ALTERNATIVE LANDFILL SUPPORT ACTIVITIES AND STRUCTURES, IS 189.0 ACRES, ALL TO BE LOCATED WITHIN WHAT WILL ULTIMATELY BE A CONSOLIDATED 503.4595 ACRE PARCEL (SAID CONSOLIDATION TO BE SOUGHT AS PART OF THE FUTURE LAND DEVELOPMENT APPROVAL PROCESS).

ZONING APPROVAL:

IN 1993, 2001, 2016, AND 2020 THE LOWER SAUCON TOWNSHIP ZONING HEARING BOARD GRANTED SPECIAL EXCEPTION APPROVAL TO UTILIZE 206 ACRES OF THE SUBJECT PARCEL FOR LANDFILL USE.

THE PHASE V EXPANSION EXTENDS BEYOND THE 206 ACRE LANDFILL USE PREVIOUSLY GRANTED. THE LOWER SAUCON TOWNSHIP ZONING ORDINANCE HAS BEEN AMENDED TO INCLUDE WASTE DISPOSAL FACILITIES AS CONDITIONAL USES WITHIN THE LIGHT INDUSTRIAL ZONING DISTRICT. THUS BETHLEHEM LANDFILL CORPORATION IS SEEKING CONDITIONAL USE APPROVAL FOR THE PHASE V EXPANSION DEPICTED HEREIN.

GENERAL NOTES:

- 1. DEVELOPMENT PROPOSED HEREIN IS WITHIN A TO BE CONSOLIDATED 503.4595 ACRE TRACT COMPRISED OF SEVEN (7) TRACTS. A LOT CONSOLIDATION AND SUBDIVISION PLAN SHALL BE FILED WITH LOWER SAUCON TOWNSHIP TO CREATE THE SUBJECT PARCEL.
- 2. THE PHASE V EXPANSION INCLUDES ADDITIONAL DISPOSAL CAPACITY AND PROPOSES LANDFILL OPERATIONS BEYOND THE EXISTING PADEP PERMIT BOUNDARY FOR BETHLEHEM LANDFILL. AS SUCH, A PADEP SOLID WASTE PERMIT MAJOR MODIFICATION IS REQUIRED PRIOR TO COMMENCEMENT OF DEVELOPMENT.
- 3. UTILITY LOCATIONS SHOWN ON ALL PLAN SHEETS SHALL BE FIELD VERIFIED IN ACCORDANCE WITH PA ACT 187 PRIOR TO ANY
- 4. NO DEVELOPMENT IS PROPOSED WITHIN OR DIRECTLY ADJACENT TO PUBLIC RIGHTS OF WAY OF SKYLINE DRIVE, RIVERSIDE DRIVE AND APPLEBUTTER ROAD.
- 5. SOME SITE INFORMATION FOR THESE PLANS HAS BEEN COMPILED FROM DRAWINGS FURNISHED BY GANNETT FLEMING, INC. OF HARRISBURG, PENNSYLVANIA AND AMERICAN RESOURCE CONSULTANTS, INC. OF DOYLESTOWN, PENNSYLVANIA.
- 6. BASE MAPPING CREATED BY COMPILING TOPOGRAPHY FROM LOCKWOOD MAPPING CO. DATED 2-2-99 & TVGA ENGINEERING, SURVEYING, P.C. DATED APRIL 1998. MAPPING HAS BEEN FIELD VERIFIED. DISPOSAL AREA INFORMATION TAKEN FROM PHASE III PERMIT DWGS. BY GANNETT FLEMING. DATED NOV. 9, 1993. EXISTING PROPERTY LINE DATA TAKEN FROM PLAN BY KEYSTONE CONSULTING ENGINEERS, INC. REVISED THRU 12-13-00 AND A BOUNDARY SURVEY BY BYERS AND RUNYON SURVEYING, CHAMBERSBURG, PA.
- 7. "EXISTING CONDITIONS" AS DEPICTED HEREIN CONSIST OF EITHER ACTUAL FIELD CONDITIONS TAKEN FROM THE REFERENCED AERIAL PHOTOGRAPHY OR THOSE PREVIOUSLY APPROVED CONDITIONS AS OUTLINED WITHIN THE SOUTHEASTERN REALIGNMENT, RNG FACILITY, AND THE NORTHERN REALIGNMENT LAND DEVELOPMENT PLANS.

UTILITY CONTACTS:

WATER / SEWER:
LOWER SAUCON AUTHORITY
3706 OLD PHILADELPHIA PIKE
BETHLEHEM, PENNSYLVANIA 18015
PH: (610) 317-3212
EMAIL: administrator@lowersauconauthority.org

CALPINE ENERGY CENTER
2254 APPLEBUTTER ROAD
BETHLEHEM, PENNSYLVANIA 18015
PH: (601) 861-6130

UGI UTILITIES, INC
P.O. BOX 13009
READING, PA 19612
PH: (800) 276-2722
EMAIL: customerservice@ugi.com

STORM SEWER:
LOWER SAUCON TOWNSHIP - PUBLIC WORKS
CONTACT: ROGER RASICH
3700 OLD PHILADELPHIA PIKE
BETHLEHEM, PENNSYLVANIA 18015
PH: (610) 865-3291
EMAIL: dirpw@lowersaucontownship.org
SANITARY SEWER:
WASTE CONNECTIONS
CONTACT: DAVID PANNUCCI

2335 APPLEBUTTER ROAD

PH: (610) 317-3200

BETHLEHEM, PENNSYLVANIA 18015

david.pannucci@wasteconnections.com

827 HAUSMAN ROAD

PH: (888) 220-9991

ALLENTOWN, PA 18104

NEIGHBORHOOD PROTECTION:

BETHLEHEM LANDFILL COMPANY SHALL COMPLY WITH THE REQUIREMENTS OF ZONING ORDINANCE SECTION 180-96 OF THE LOWER SAUCON TOWNSHIP ZONING ORDINANCE AS IT PERTAINS TO GENERAL PERFORMANCE STANDARDS REGARDING NEIGHBORHOOD PROTECTION IN SO FAR AS THESE STANDARDS ARE WITHIN THE LIMITATIONS OF NORMAL LANDFILL OPERATIONS AND PROCEDURES.

PENNDOT OCCUPANCY PERMITS:

1) DRIVEWAY ACCESS IMPROVEMENTS TO A STATE HIGHWAY SHALL BE AUTHORIZED ONLY BY HIGHWAY OCCUPANCY PERMIT ISSUED BY THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION, AS REQUIRED PURSUANT TO SECTION 420 OF THE ACT OF JUNE 1, 1945, P.L. 1242, NO. 428, KNOWN AS THE "STATE HIGHWAY LAW" (36 P.S. 670-420).

2) BUILDING PERMITS SHALL NOT BE ISSUED UNTIL OR AFTER SAID HIGHWAY OCCUPANCY PERMIT HAS BEEN ISSUED.

3) APPROVAL OF THIS PLAN DOES NOT REPRESENT ANY GUARANTY OR ASSURANCE BY LOWER SAUCON TOWNSHIP THAT A HIGHWAY OCCUPANCY WILL BE ISSUED BY THE PENNSYLVANIA DEPARTMENT OF TRANSPORTATION.

4) NO MODIFICATIONS ARE PROPOSED TO THE EXISTING LANDFILL ACCESS FROM APPLEBUTTER ROAD.

5) ALL CURRENT AND FUTURE OWNERS ARE HEREBY NOTIFIED OF THE REQUIREMENT THAT THEY INSTALL, AT THEIR SOLE COST AND EXPENSE, CURBING IN ACCORDANCE WITH TOWNSHIP SPECIFICATIONS IF AND WHEN LOWER SAUCON TOWNSHIP OR PENNDOT INSTALLS CURBING ALONG APPLEBUTTER ROAD.

RIPARIAN CORRIDOR BUFFER, WETLANDS, FLOODPLAIN:

1) THE RIPARIAN CORRIDOR BUFFERS AS ILLUSTRATED HEREIN ARE SUBJECT TO THE RESTRICTIONS OUTLINED IN SECTION 180-95(F) OF THE LOWER SAUCON TOWNSHIP CODE. THE RIPARIAN BUFFERS DEPICTED WERE TAKEN FROM PHASE IV, SOUTHEASTERN REALIGNMENT AND NORTHERN REALIGNMENT LAND DEVELOPMENT PLANS PREPARED BY MARTIN AND MARTIN.

2 TEN (10) WETLANDS HAVE BEEN DELINEATED WITHIN THE SUBJECT PROPERTY. THESE WETLANDS ARE IDENTIFIED AS WETLANDS A THRU J. WETLANDS A AND B WERE ARE TAKEN FROM THE PHASE III CITY OF BETHLEHEM LANDFILL PADER PERMIT APPLICATION. WETLANDS A AND B WERE REVIEWED AND CONFIRMED BY THE USACE AS PART OF THE PHASE IV BETHLEHEM LANDFILL EXPANSION. WETLAND C DELINEATED BY ROEMER ECOLOGICAL SERVICES AS SHOWN HEREIN WAS REVIEWED AND CONFIRMED BY THE USACE IN 2014 AS PART OF THE SOUTHEASTERN REALIGNMENT. WETLANDS D THRU J WERE DELINEATED BY TRIAD ENGINEERING INC, HAGERSTOWN, MD. IN 2020 AND HAVE NOT BEEN REVIEWED OR CONFIRMED BY USACE. USACE REVIEW AND CONFIRMATION WILL BE MADE IN CONJUCTION WITH THE PHASE V EXPANSION PADEP SOLID WASTE PERMIT APPLICATION.

3) BASED UPON AN EXAMINATION OF THE LOWER SAUCON TOWNSHIP FLOOD INSURANCE RATE MAPPING AS PREPARED BY FEMA, THERE IS IDENTIFIED FLOOD PLAIN ASSOCIATED WITH THE SUBJECT PROPERTY WHICH LIES ENTIRELY IN ZONE X. SAID FLOODPLAIN IS IDENTIFIED ON THESE PLANS BEING LOCATED ON THE FORMER REDDINGTON PARCEL. NO DEVELOPMENT IS PROPOSED WITHIN THE FLOODPLAIN.

4) THE GRANT OF A PERMIT OR APPROVAL OF A SUBDIVISION AND/OR LAND DEVELOPMENT PLAN IN OR NEAR FLOODPLAIN AREAS SHALL NOT CONSTITUTE A REPRESENTATION, GUARANTY OR WARRANTY OF ANY KIND BY THE TOWNSHIP OR AN OFFICIAL, CONSULTANT OR EMPLOYEE THEREOF OF THE PRACTICABILITY OR SAFETY OF THE PROPOSED USE, AND THE OWNERS HEREBY AGREE AND ACKNOWLEDGE THAT SUCH PERMITS OR APPROVALS SHALL NOT CREATE ANY LIABILITY UPON THE TOWNSHIP, ITS OFFICIAL, EMPLOYEES OR CONSULTANTS.

JANUARY 6, 2023

LOWER SAUCON TWP.

OWNER / APPLICANT

BETHLEHEM LANDFILL COMPANY 2335 APPLEBUTTER ROAD BETHLEHEM, PA 18015 MR. DAVID PANUCCI PHONE: (610) 317-3200

OWNER / APPLICANT

DENNIS M. AND CHRISTINE HAHN 2396 RIVERSIDE DRIVE BETHLEHEM, PA 18015

PREPARED BY:



phone: (717) 37 South Main Street · Suite A 264-6759 Chambersburg, Pennsylvania 17201

THEM Bayers Schools To Steel City Nazareth, PA Quad Nazareth, PA Quad LOCATION MAP SCALE: 1" = 2,000'

REV. FEBRUARY 23, 2023

NORTHAMPTON COUNTY

TABLE OF CONTENTS

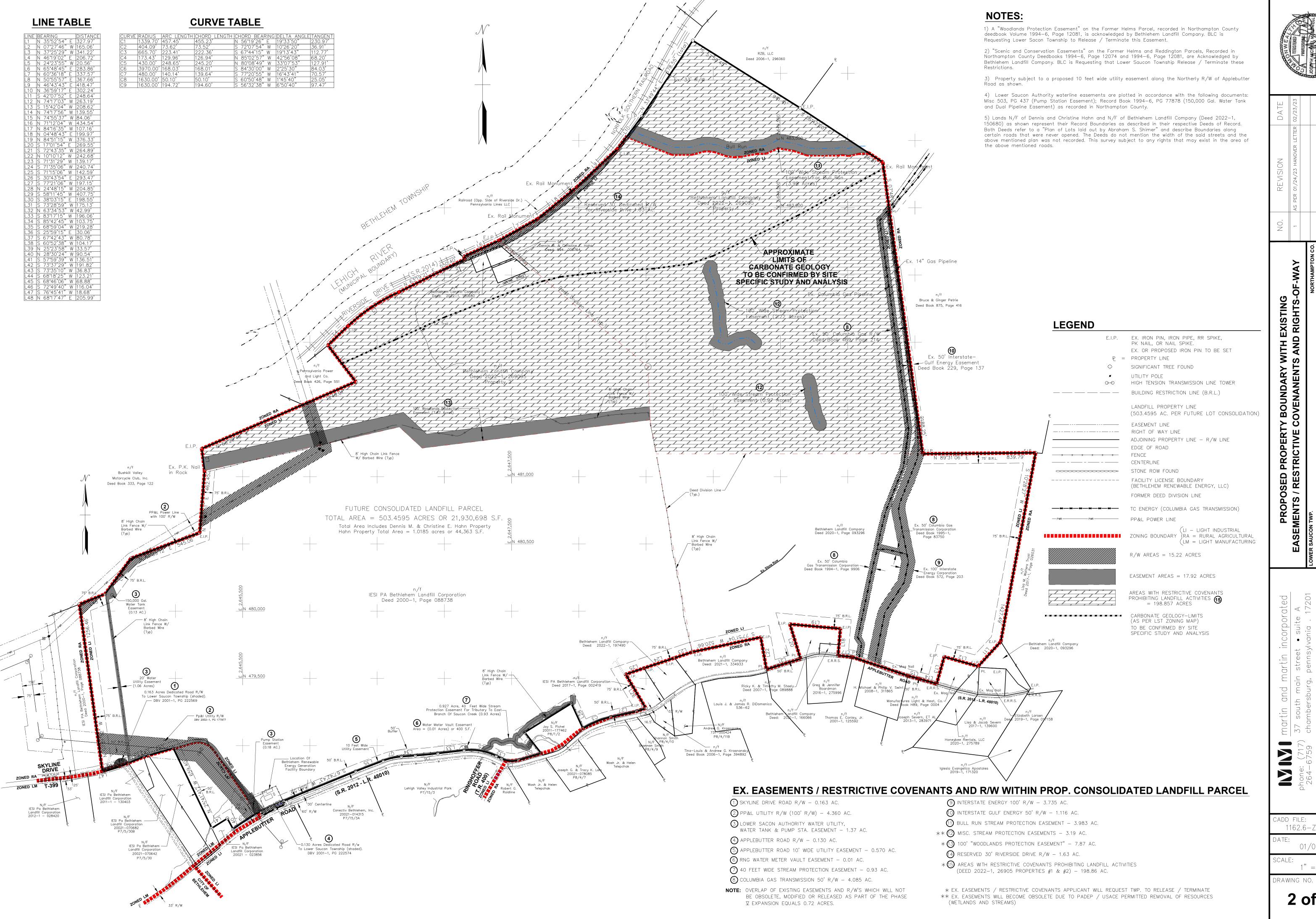
SHEET	NAME
1	COVER SHEET
2	PROPOSED PROPERTY BOUNDARY WITH EXISTING EASEMENTS / RESTRICTIVE COVENANTS AND RIGHTS-OF-WAY
3	OVERALL EXISTING CONDITIONS / APPROVED DEVELOPMENT PLANS
4	EXISTING CONDITIONS - APPLEBUTTER ROAD / SKYLINE DRIVE
5	EXISTING CONDITIONS - APPLEBUTTER ROAD

6 EXISTING CONDITIONS - APPLEBUTTER ROAD
7 EXISTING NATURAL RESOURCES PLAN
8 WOODLAND NATURAL RESOURCES PLAN
9 STEEP SLOPE NATURAL RESOURCES PLAN

9 STEEP SLOPE NATURAL RESOURCES PLAN
10 CONDITIONAL USE DEVELOPMENT PLAN
11 ACCESS ROAD DETAILS

2 NEIGHBORHOOD PROTECTION ANALYSIS

FILE: 1162.6—(Phase 5 Zoning Plan) 1162.6—ZP—01



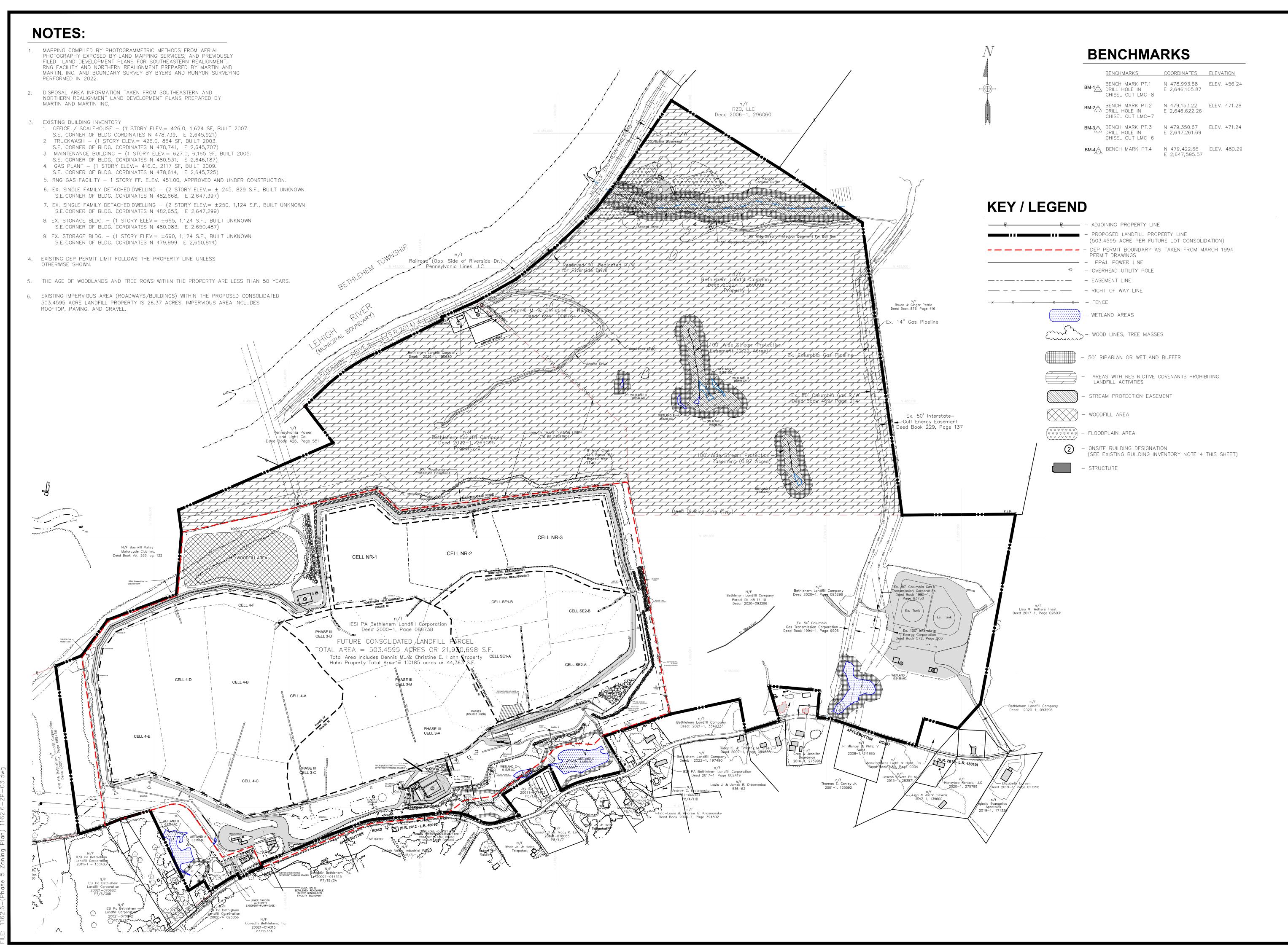
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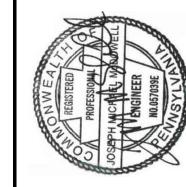
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1" = 300'





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MPTON CO.				

NERALL EXISTING CONDITIONS / APPROVED DEVELOPMENT PLANS

INDITION TO NORTHAMPTON CO.

BETHLEHEM LANDFILL PHASE V EXPANSION CONDITIONAL USE APPLICATION PLAN

BETHLEHEM LANDFILL PHASE V EXPANSION CONDITIONAL USE APPLICATION PLAN

BETHLEHEM LANDFILL PHASE V EXPANSION CONDITIONAL USE APPLICATION PLAN

Bethlehem Landfill Company

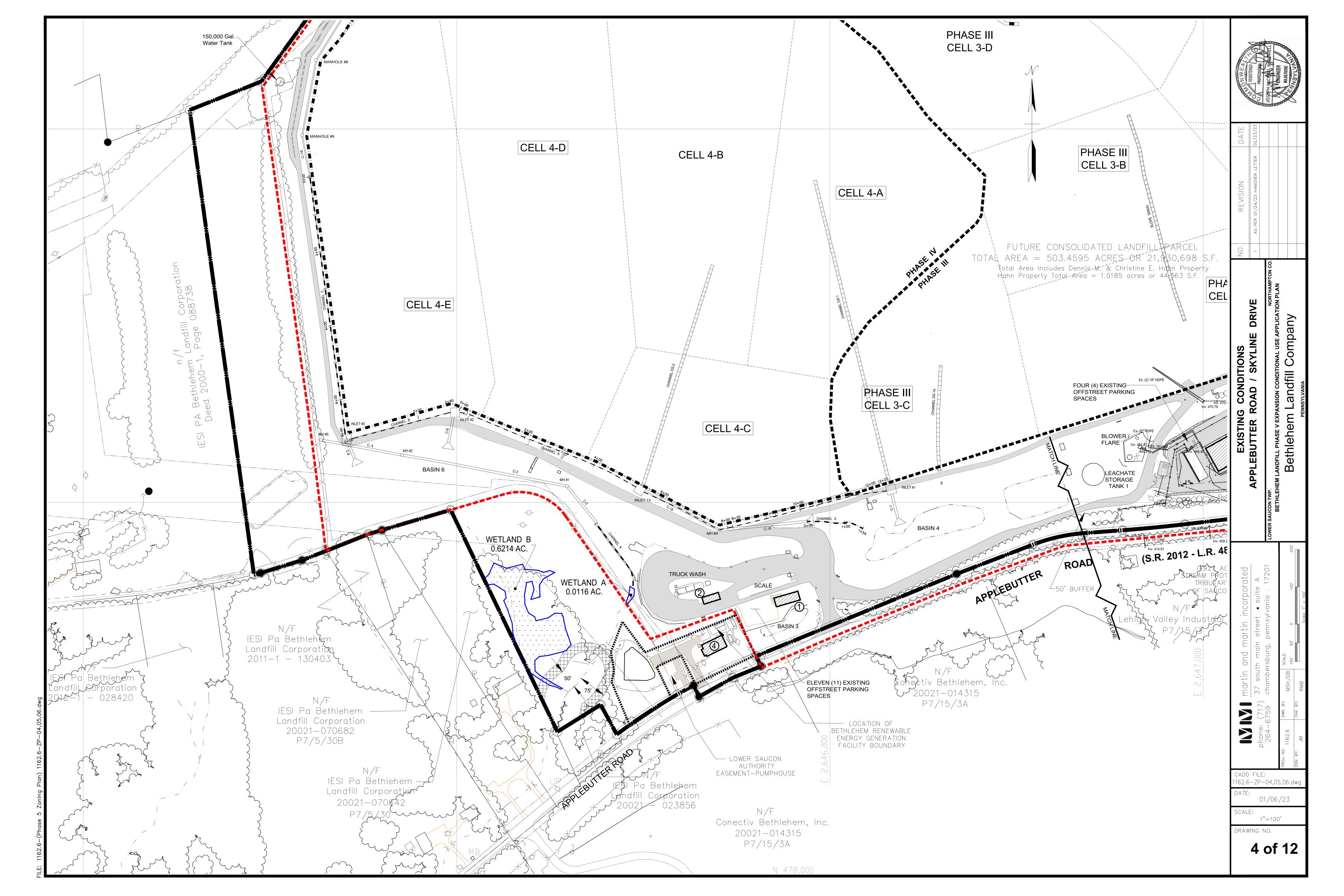
martin and martin incorporate (717) 37 south main street • suite A (717) chambersburg, pennsylvania . 17

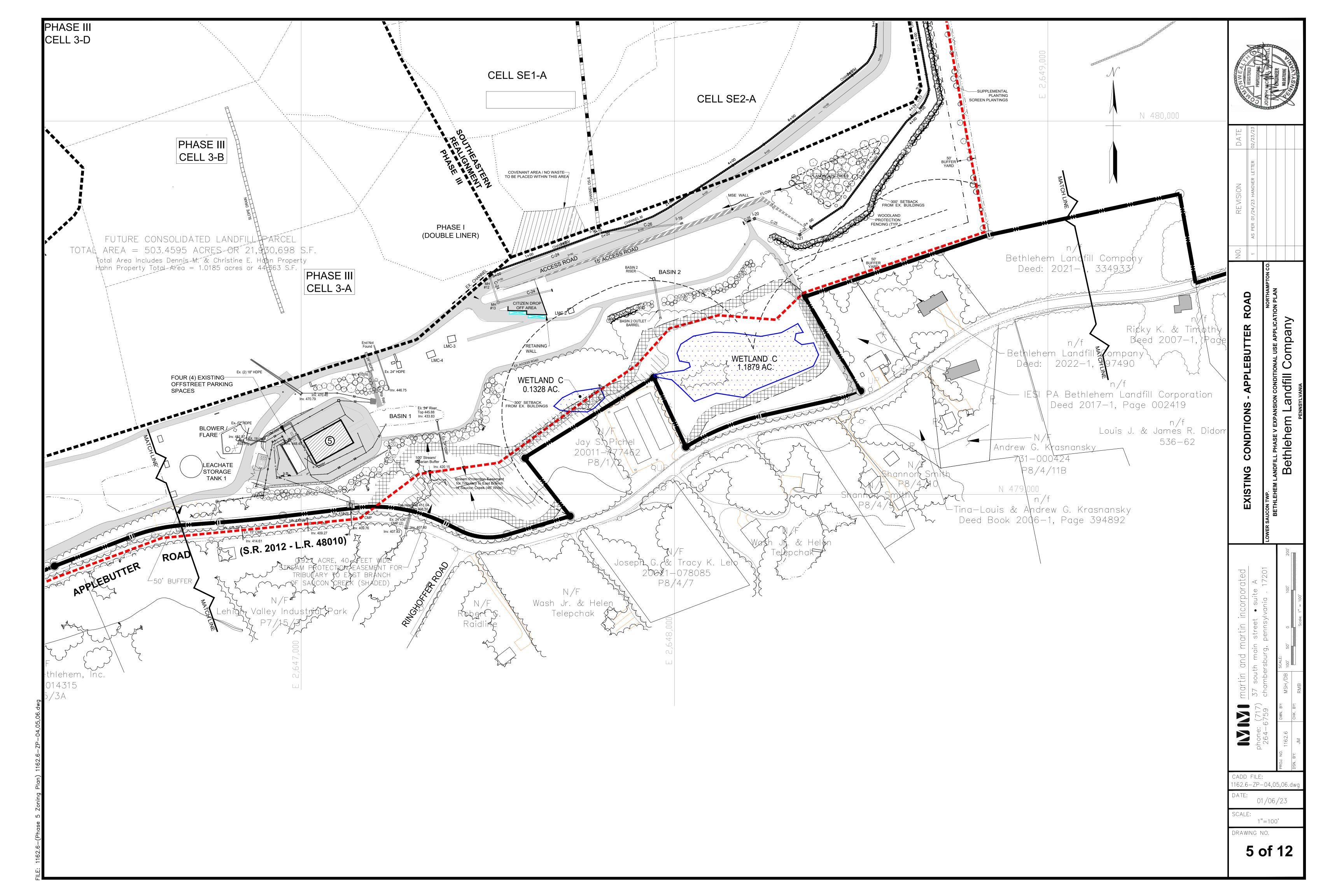
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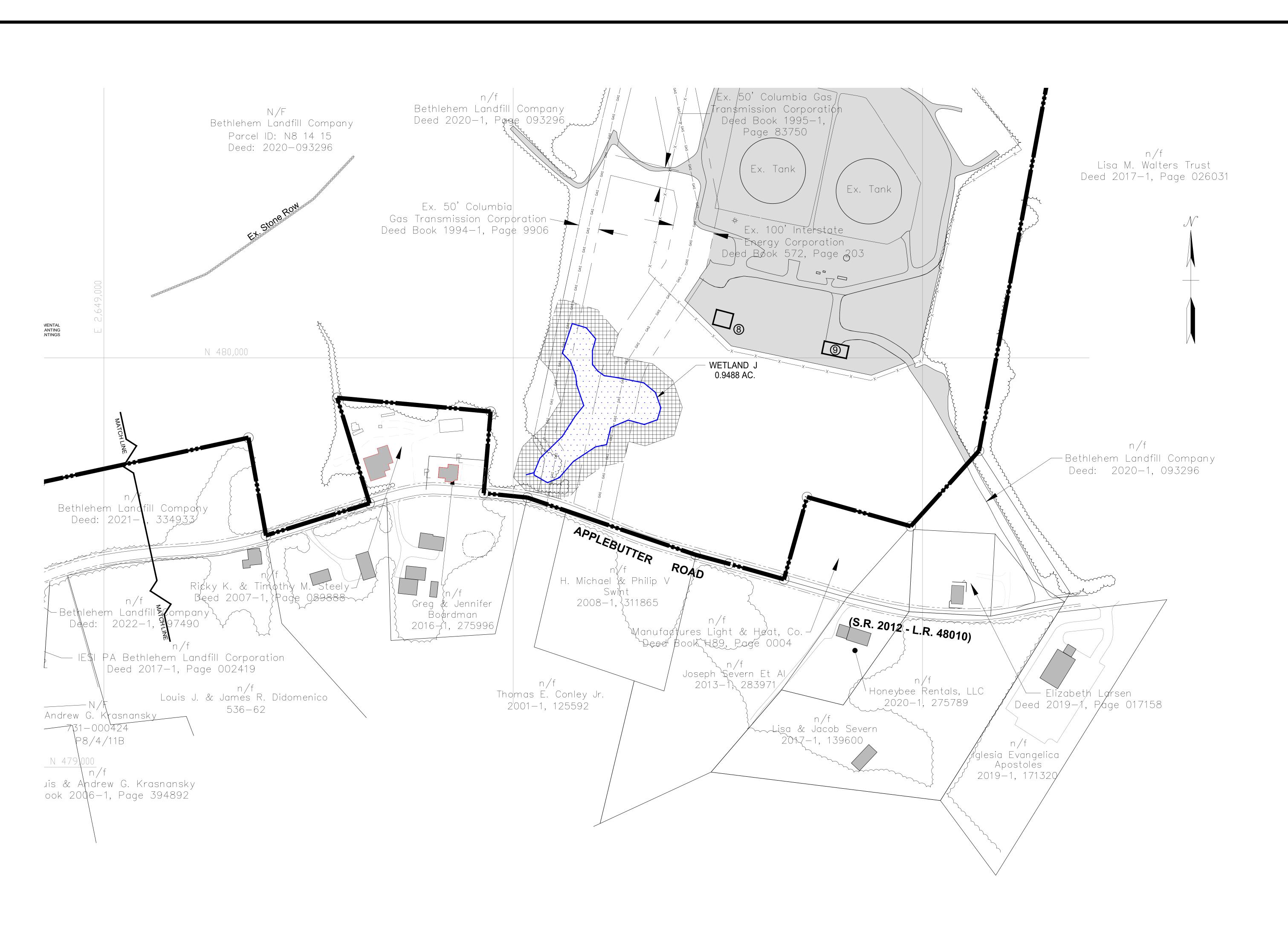
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SCALE: 1"=100'

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GENERAL NOTES:

The Bethlehem Landfill site is an existing permitted landfill proposing a Phase V Expansion on a to be consolidated parcel containing 503.4595 acres. As shown on the Natural Resources Delineation Plan and per discussions with Township staff and consultants, the site capacity/buildable area analysis and environmental resource protection analysis following includes only those new properties to be added to the existing Landfill lot which have a gross area of 286.00 acres

BLC is proposing to develop the Phase V Expansion in accordance with Section 180-109(G) of the Lower Saucon Township Zoning Ordinance (Natural Resource Mitigation Alternative) and has provided the information and calculations required by that section on this Sheet 7 of 12. BLC requests, as part of this Conditional Use Application, that Lower Saucon Township Council provide written approval for BLC to exceed the net buildable site area permitted by Section 180-95(C)(2)(c)("Permitted Net Buildable Site Area"), utilizing a greater area of natural resource protection land than would otherwise be permitted by the Resource Protection Standards contained in Section 180-95 ("Excess Resource Utilization"), as is proposed on this Sheet 7 of 12. Per Section 180-109(G) of the Lower Saucon Township Zoning Ordinance, BLC will demonstrate and make the required dedication and/or fee-in-lieu of dedication payment prior to final land

BASE SITE AREA

development approval.

In accordance with the Zoning Ordinance, the base site area (excluding the existing Landfill lot) is calculated by taking the gross property area from survey minus those rights-of-way and easements within the properties analyzed as shown on plan Sheet 2 of 12. Where easements or rights-of-way overlap, only one easement or right-of-way is subtracted from the gross area. The easements/restrictive covenants and rights-of-way that are included within this calculation are only those existing easements/restrictive covenants and rights-of-way that will not either become obsolete as a result of PADEP/USACE permitted removal of the corresponding resource or be released/terminated by Lower Saucon Township in conjunction with the Phase V project. The calculation is as follows:

Existing Rights-of-Way: (11.32 ac.) (2(0.75ac.),8,9,10 & 14 See Sheet 2 of 12 (3.98 ac.) (11See Sheet 2 of 12) Easement & Rights-of-Way Overlap: 0.02 ac. Base Site Area:

RESOURCE PROTECTION

As calculated above, the Base Site Area is 270.72 acres. Within this base site area the resources described in the table below have been delineated along with the required resource protection area for each. As required where two (2) or more resources overlan. the one with the highest reservation was delineated hereon (Exhibit #1).

RESOURCE	REQUIRED RESERVATION	LAND IN RESOURCE	RESOURCE PROTECTION = LAND
Floodplains	100%	2.26 ac.	2.26 ac.
Wetlands	100%	0.75 ac.	0.75 ac.
Waters of the Commonwealth*	100%	10.85 ac.	10.85 ac.
Env. Sensitive Woodlands	85%	213.61 ac.	181.57 ac.
Steep Slopes >25%	85%	0.10 ac.	0.09 ac.
Woodlands	80%	21.83 ac.	17.46 ac.
Steep Slopes (15% to 25%)	70%	0.58 ac.	0.41 ac.
Steep Slopes (8% to 15%)	60%	0.26 ac.	0.16 ac.
	TOTALS	250.24 ac.	213.55 ac.

* Waters of the Commonwealth include wetland buffers, riparian buffers and existing stream easements to be removed as a result of PADEP/USACE Permits.

BUILDABLE AREA

Utilizing the base site area and the total resource protected land on those new parcels to be consolidated with the exiting landfill lot, the net buildable area within the new parcels (excluding the existing landfill lot) is calculated as

Upon development of the Phase V Expansion, the total area of development on the parcels to be consolidated with the existing Landfill lot will be 180.50 acres, which is 123.33 acres more than the calculated Buildable Site Area of 57.17 acres. Thus, Bethlehem Landfill proposes to utilize 123.33 acres more of protected land than permitted under Section 180-95 for the Phase V Expansion.

Per Section 180-109(G)(8) of the Zoning Ordinance, prior to receiving final land development approval for the Phase V Expansion, BLC will be required to dedicate 123.33 acres to the Township for preservation or, if it demonstrates to the satisfaction of the Township Council, that it was unable to obtain any or enough property for said dedication, pay a fee in lieu of dedication on that

MAXIMUM IMPERVIOUS AREA

Calculation of the maximum impervious area is determined by multiplying the calculated buildable site area times the maximum permitted impervious surfaces ratio. The properties analyzed for site capacity are located in two (2) zoning districts. Those districts are Light Industrial (LI) and Rural Agricultural (RA). The LI district has an allowable impervious ratio of 60% while the RA district maximum impervious ratio is 20%.

Given the entire area of development on the new properties is entirely in the LI District, the 60% impervious ratio was used to calculate the maximum allowable impervious surface for this analysis to document compliance with the ordinance. The maximum allowable impervious surface on the parcels to be consolidated to the existing Landfill lot is calculated as follows:

Buildable Site Area (57.17 ac.) $\times 0.60 = 34.30$ ac.

The proposed impervious area on the new or to be consolidated parcels, upon development of the Phase V Expansion, is 11.77 acres. This includes all proposed paved or gravel surfaces on the 286.0 acre gross site area. Thus, the maximum allowable impervious surface area is not exceeded with the proposed Phase V

SITE CAPACITY CALCULATION SUMMARY

Base Site Area = 270.72 ac.

Allowable Buildable Site Area = 57.17 ac.

Pro. Buildable Site Area = 180.50 ac. Max. Permitted Number of DU's = N/A

Max. Permitted Impervious Surfaces = 34.30 ac.

Pro. Impervious Surfaces = 11.77 ac.

As outlined above, Bethlehem Landfill proposes to utilize more protected lands than permitted by Section 180.95. In accordance with 180-109(G) of the LST Zoning Ordinance, the excess resource utilized is the difference between the allowable buildable site area and the proposed buildable site area, which is 123.33

Thus, per Section 180-109(G)(8) of the Zoning Ordinance, prior to receiving final land development approval for the Phase V Expansion, BLC will be required to dedicate 123.33 acres to the Township for preservation or, if it demonstrates to the satisfaction of the Township Council, that it was unable to obtain any or enough property for said dedication, pay a fee in lieu of dedication on that

WETLANDS AND WETLAND BUFFERS

Based upon wetland determination and study performed onsite, seven (7) wetlands (d thru J) exist within the parcels to be consolidated with the existing Landfill Lot having a total acreage of 1.22 acres. Wetlands will be impacted as a result of the Phase V Expansion. Wetlands D thru I are proposed to be removed and mitigated by benefit of a PADEP/USACE Permit. The Ordinance requires a 100% protection rate for wetlands. Thus, Bethlehem proposes to utilize more protected land (wetlands) than permitted as outlined below.

Wetland buffers are defined by the Ordinance as 50 feet beyond the wetland boundary. Wetland buffers exist within the new parcels to be consolidated to the Landfill Lot. Wetland buffers have a protection rate of 85%. The Phase V Expansion proposes utilization of the wetland buffers. As outlined, Bethlehem Landfill proposes to utilize more protected land (wetland Buffers) than permitted.

Resource	Resource Total Area	Utilized Area	Req. Protection Rate	Pro. Protection Rate
Wetland	1.22 ac.	0.27 ac.	100%	78%
Wetland Buffer	4.09 ac.	2.57 ac.	85%	37%

LAKES AND PONDS

No lakes or ponds exist within the consolidated property of the Landfill. The Phase V Expansion proposes no impacts to lakes or ponds or lake and pond buffers onsite, thus meeting the 100% protection rate for lakes and ponds and the 85% protection rate for buffers as prescribed by the Ordinance. For this analysis, consistent with previous determinations by the Township in connection with approvals of prior expansions of the Landfill, existing sediment/stormwater basins were not considered lakes or ponds.

STEEP SLOPES

Steep slopes are those which exceed 8% having an area greater than 3,000 square feet. A breakdown of steep slopes along with required protection rates are as

 Steep slopes 8% to 15%
 Protection Rate 60% Steep slopes 15% to 25%
 Protection Rate 70% Steep slopes greater than 25% - Protection Rate 85%

The Table below outlines the total amount of steep slopes for each category along with the percentage protection based upon the impacted area as a result of the Phase V Expansion on the parcels to be consolidated with the existing Landfill Lot. Refer to Exhibit #3 (on Sheet 9 of 12).

Steep Slope	Resource Total Area	Utilized Area	Req. Protection Rate	Pro. Protection Rate
8% to 15%	80.8 ac.	54.5 ac.	60%	33%
15% to 25%	95.6 ac.	66.4 ac.	70%	31%
Greater than 25%	68.8 ac.	38.1 ac.	85%	45%

As shown above the required protection rate for each steep slope category is not met and thus Bethlehem Landfill proposes to utilize more protected land (steep slopes) than permitted.

WOODLANDS

Woodlands are defined as all areas of 3,000 square feet or more which contain an average of one or more trees measuring six inches in caliper or greater per 1,000 square feet.

In addition, woodlands meeting the criteria above which also co-exist with other resources (steep slopes, wetlands, floodplains) are considered environmentally sensitive woodlands. For the purposes of defining the limits of woodlands onsite, the 2020 aerial photography was utilized. The required protection rates for Woodland and Environmentally Sensitive Woodlands is 80% and 85% respectively. The table below outlines the total amount of woodlands and environmentally sensitive woodlands, areas of impact and the percentage protection as a result of the Phase V Expansion on the parcels to be consolidated with the existing Landfill Lot. Refer to Exhibit #2 on Sheet 8 of 12.

Woodlands	Resource Total Area	Impacted Area	Req. Protection Rate	Pro. Protection Rate
Woodlands	253.86 ac.	168.37 ac.	80%	34%
Env. Sen. Woodlands	226.97 ac.	151.23 ac.	85%	33%

As outlined above, the required protection rate for all woodlands is not met and thus, Bethlehem Landfill proposes to utilize more protected land (Woodlands) than permitted.

FLOODPLAIN AND FLOODPLAIN SOILS

As per FIRM Map Number 42095C0335E dated July 16, 2014 and a review of soils located within the property against those listed as floodplain soils within the Lower Saucon Township Zoning Ordinance, floodplains exist but floodplain soils do not exist within the property. The floodplain is associated with Bull Run on the former Reddington Property. No development is proposed within the delineated floodplain, thus the 100% protection rate is met.

ROCK OUTCROPS

Upon review of pertinent mapping no rock outcrops were delineated within the

RIPARIAN BUFFERS / WATERS OF THE COMMONWEALTH

Unnamed tributaries to the East Branch of Saucon Creek, Bull Run and unnamed tributaries to the Lehigh River are located within the parcels to be consolidated with the Landfill Lot. Stream protection easements having a total width of 100 feet (50 feet each side of the stream) have been delineated and described by bearing and distance for all identified waterways within the parcels to be consolidated with the Landfill Lot.

These stream protection easements have been established by previous Land Development Plans for expansions and realignments of the Landfill. Two (2) stream protection easements identified as miscellaneous stream protection Easements #12 on Sheet 2 of 12 will become obsolete as a result of PADEP/USACE permitted removal of the stream resource as part of the Phase V Expansion. Thus, Bethlehem proposes to utilize more protected land, (stream easement) than permitted as outlined below.

Riparian buffers are defined as 100 feet from a stream or waterway. Riparian buffers extend beyond the stream protection easements and are identified heron for each tributary. Two (2) riparian buffer areas will be utilized for development of the Phase V Expansion. Riparian buffer areas have a protection rate of 85%. Bethlehem proposes to utilize more protected land (Riparian Buffers) than permitted as outlined below.

Resource	Resource Total Area	Utilized Area	Req. Protection Rate	Pro. Protection Rate
Stream Protection Easement	7.17 ac.	3.19 ac.	100%	56%
Riparian Buffers	7.89 ac.	3.87 ac.	85%	51%

CONCLUSIONS

PROPOSED

PHASE V

IMPACTED AREA

ON NEW PROPERTIES

(180.5 AC.)

0.163 Acres Dedicated Road R/W To Lower Saucon Township (shaded).

IESI Pa Bethlehem -

20021-070642

DBV 2001-1, PG 222569

N/F Bushkill Valley Motorcycle Club Inc

PP&L Power Line -with 100' R/W

As presented, development of the Phase V Expansion within the parcels to be consolidated with the Landfill Lot having a gross area of 286.0 acres result in an impacted area of 180.50 acres. Bethlehem Landfill proposes to utilize more environmentally protected lands than would otherwise be permitted by Section 180-95 of the LST Zoning Ordinance.

Since Bethlehem Landfill is an industrial use located in a light industrial zoning district, Bethlehem is permitted to and therefore proposes to develop the Phase V Expansion in accordance with Section 180-109(G) of the Lower Saucon Township Zoning Ordinance (Natural Resource Mitigation Alternative). It has provided the information and calculations required by that section on this Sheet 7 of 12. BLC requests, as part of this Conditional Use Application, that Lower Saucon Township Council provide written approval for BLC to exceed the net buildable site area permitted by Section 180-95(C)(2)(c)("Permitted Net Buildable Site Area"), utilizing a greater area of natural resource protection land than would otherwise be permitted by the Resource Protection Standards contained in Section 180-95 ("Excess Resource Utilization"), as is proposed on this Sheet 7 of 12. Per Section 180-109(G) of the Lower Saucon Township Zoning Ordinance, BLC will demonstrate and make the required dedication and/or fee-in-lieu of dedication payment prior to final land development approval.

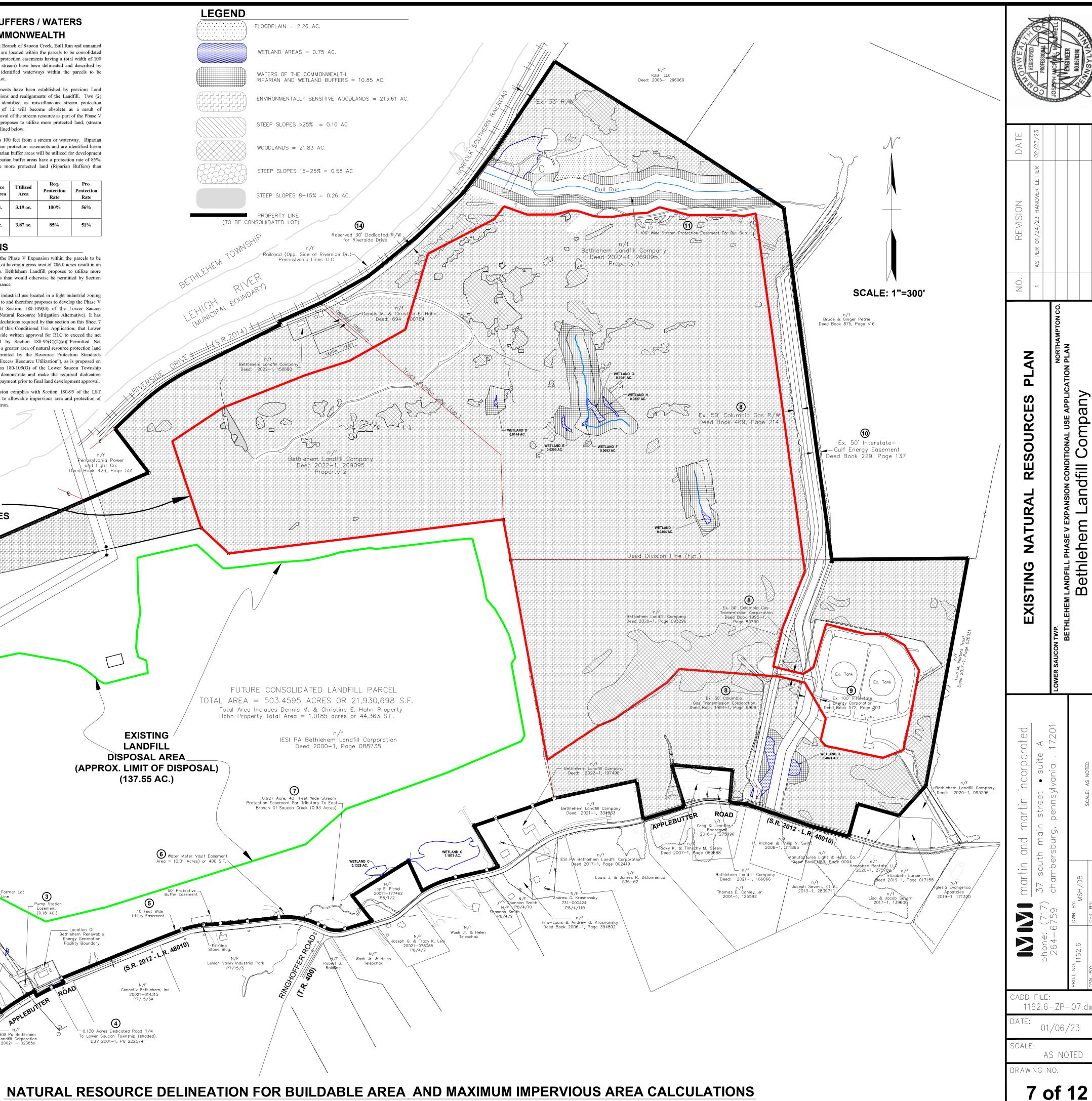
The proposed Phase V Expansion complies with Section 180-95 of the LST Zoning Ordinance with respect to allowable impervious area and protection of existing floodplains as shown heron.

EXISTING

LANDFILL

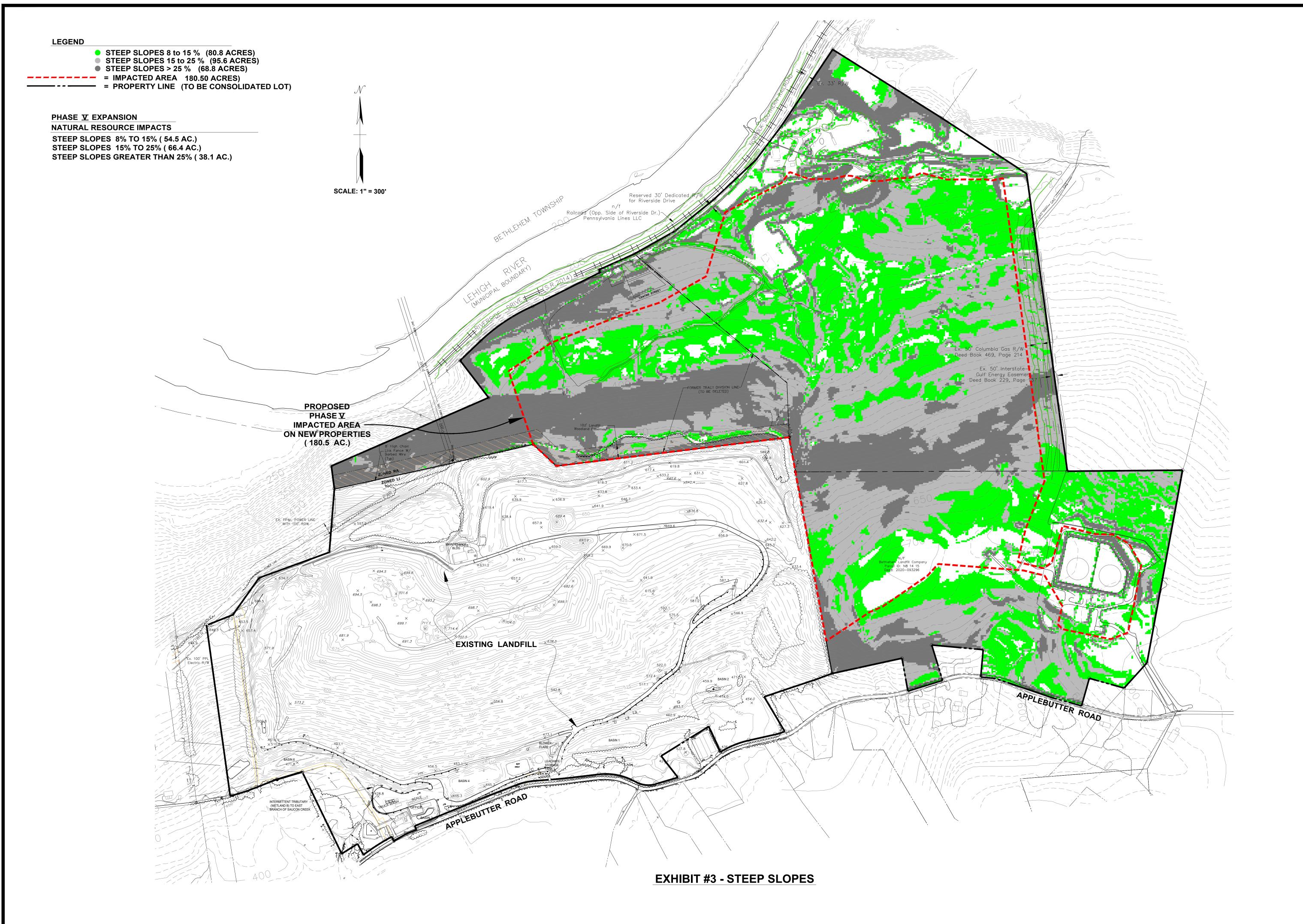
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To Lower Saucon Township (shaded) DBV 2001-1, PG 222574



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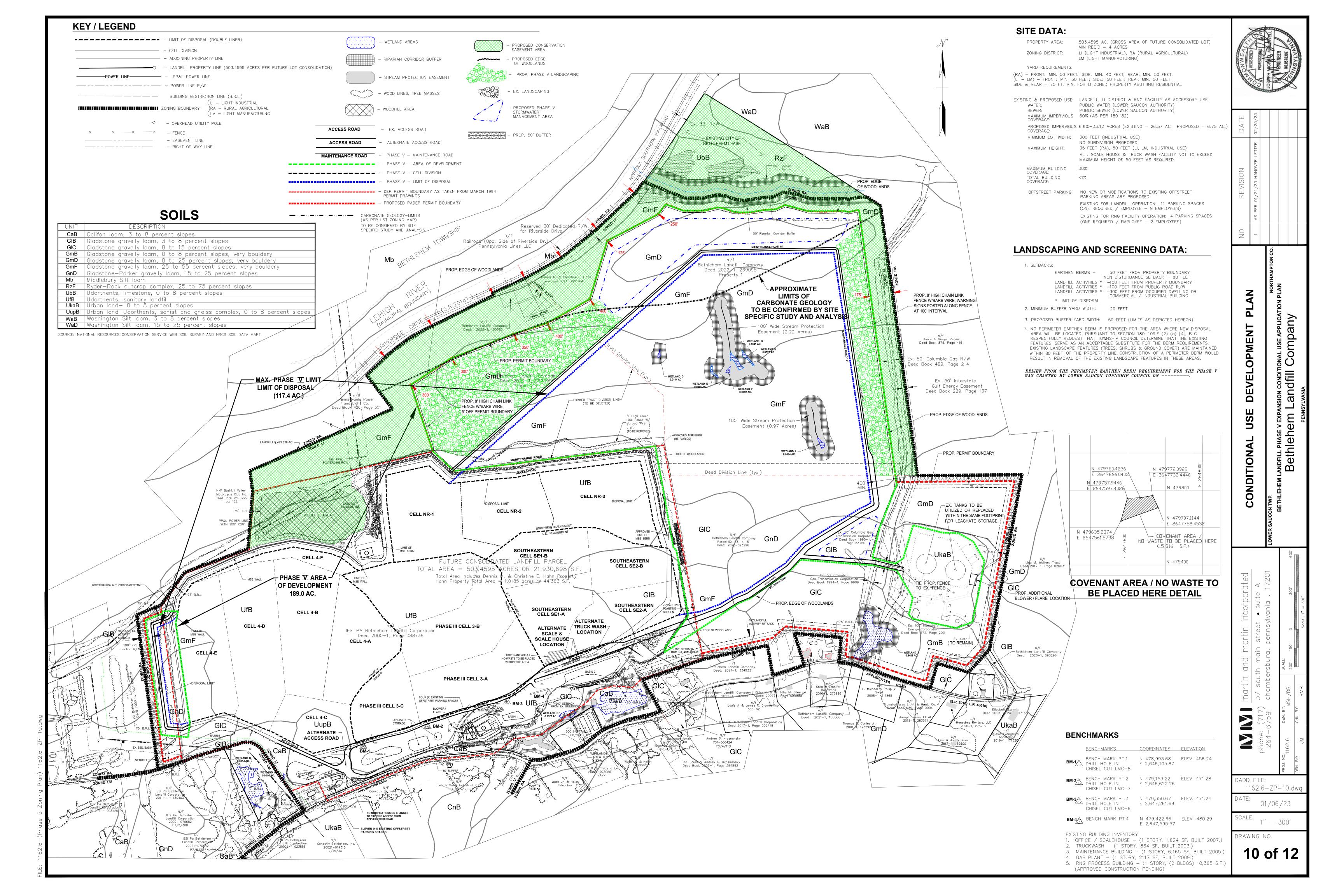
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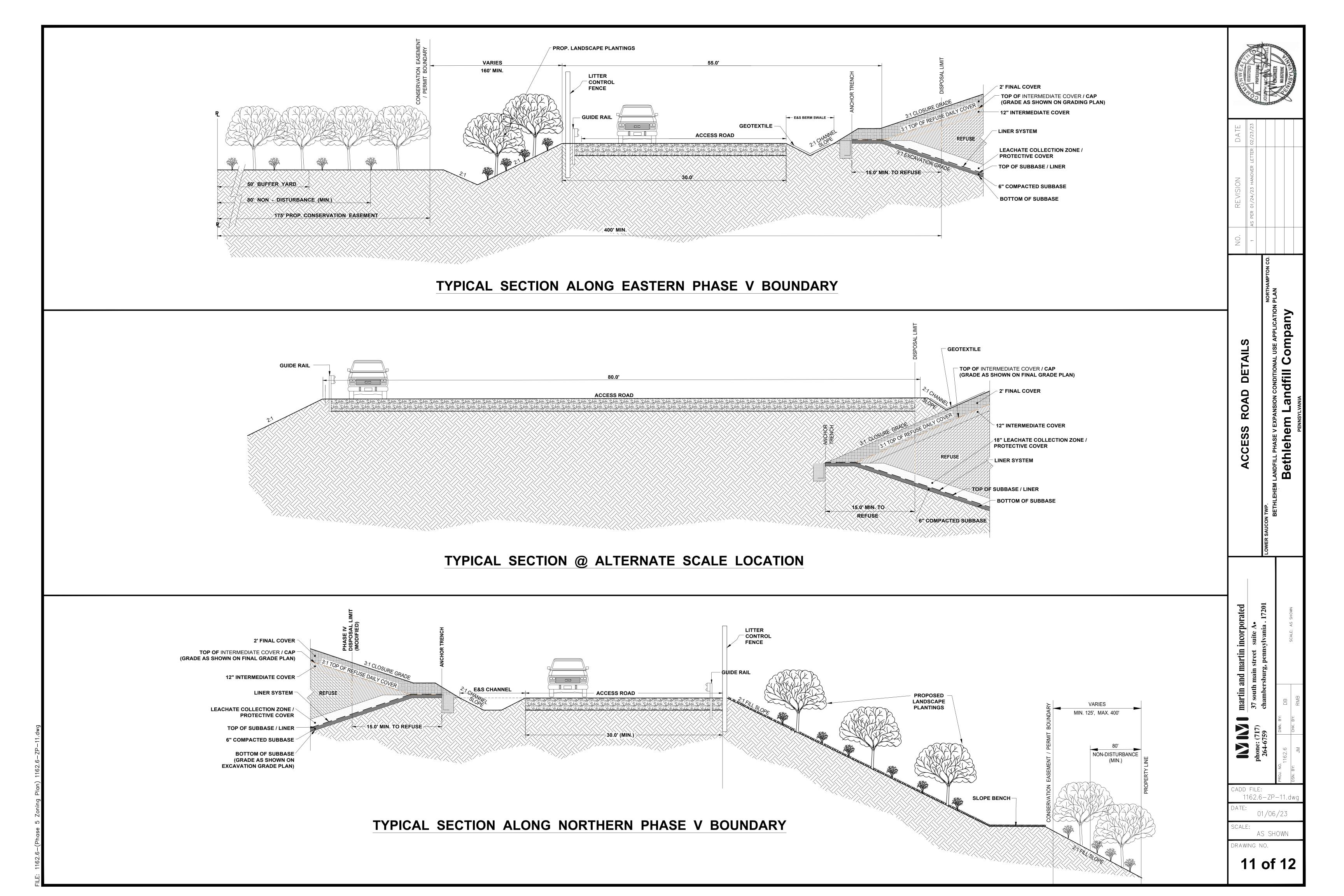
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01/06/23

AS NOTED

DRAWING NO.





SUBMITTALS FOR PRIOR EXPANSIONS OF THE LANDFILL, NAMELY THE 2001 PHASE IV, 2016 SOUTHEASTERN REALIGNMENT. AND 2020 NORTHERN REALIGNMENT EXPANSION LAND DEVELOPMENT PLANS, PROVIDED A NEIGHBORHOOD PROTECTION ANALYSIS WHICH WAS ACCEPTED BY THE TOWNSHIP. THE FOLLOWING ANALYSIS PROVIDES AN UPDATE AS A RESULT OF THE PHASE V EXPANSION. THOSE SECTIONS REVISED INCLUDE: HEAT, NOISE, AND SMOKE, DUST, ETC. ALL OTHER SECTIONS INCLUDED ARE CONSISTENT WITH THE PREVIOUSLY APPROVED NEIGHBORHOOD PROTECTION ANALYSIS ON FILE WITH THE TOWNSHIP.

- RADIOACTIVITY THE ONLY USE OF EQUIPMENT WHICH EMITS RADIOACTIVITY IS THE OCCASIONAL USE OF A NUCLEAR SOIL DENSITY GAUGE DURING CONSTRUCTION INSPECTION ACTIVITIES. THE EQUIPMENT IS OPERATED ONLY BY A TECHNICIAN CERTIFIED TO USE THE EQUIPMENT. IT IS TRANSPORTED AND OPERATED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS. WASTE CONTAINING RADIOACTIVE MATERIALS ABOVE DEP NORM LEVELS IN THE FORM X ARE NOT PERMITTED AT THE SITE, IF ANY WASTE DELIVERED IS SUSPECTED OF CONTAINING SUCH MATERIAL, THE WASTE WILL BE REJECTED PURSUANT TO THE LANDFILL'S WASTE ACCEPTANCE AND CLASSIFICATION PLAN AND FORM X. IF NECESSARY, EMERGENCY PROCEDURES WILL BE IMPLEMENTED SUCH AS CONTACTING THE ENVIRONMENTAL CLEANUP CONTRACTOR AS DESCRIBED IN THE BETHLEHEM LANDFILL PPC PLAN.
- B. HEAT THE ONLY HEAT SOURCE USED AT THE SITE OTHER THAN NORMAL BUILDING AND VEHICLE HEATERS IS THE LANDFILL GAS FLARE USED TO SAFELY BURN LANDFILL GAS AS PART OF THE LANDFILL'S GAS CONTROL SYSTEM, THE FLARE IS LOCATED AT THE SOUTH CENTRAL PORTION OF THE SITE, IT IS LOCATED APPROXIMATELY 200 FEET FROM THE SOUTHERN PROPERTY LINE AND APPLEBUTTER ROAD. THE FLARE CAUSES NO MEASURABLE INCREASE IN TEMPERATURE AT THE PROPERTY LINE. THE PHASE V EXPANSION WILL RESULT IN AN INCREASE IN METHANE GAS GENERATION DUE TO THE EXPANSION OF DISPOSAL FOOTPRINT. AN ADDITIONAL FLARE SYSTEM IS PROPOSED LOCATED ON THE EASTERN END OF THE PROPERTY. THE NEAREST PROPERTY LINE TO THE PROPOSED FLARE IS 200 FEET CONSISTENT WITH THE EXISTING FLARE.
- C. GLARE NO WALKWAY OR PARKING AREA ILLUMINATION IS PROPOSED AT THIS TIME. IF SUCH LIGHTING IS INSTALLED IN THE FUTURE, IT WILL BE DONE IN ACCORDANCE WITH THE REOUIREMENTS OF THE ZONING ORDINANCE. IN THE WINTER MONTHS TEMPORARY LIGHTS ARE ROUTINELY USED ON THE WORKING FACE OF THE LANDFILL DURING OPERATIONAL HOURS BETWEEN 6 AM AND 6PM.
- D. NOISE THERE ARE NO NEARBY (WITHIN 100 FEET) RESIDENTIAL PROPERTY BOUNDARIES TO THE PHASE V EXPANSION DEVELOPMENT AREA. THE LANDFILL RECEIVING HOURS FOR WASTE ARE FROM 7 AM TO 4 PM ON MONDAYS THRU SATURDAYS. THERE WILL BE NO RECEIVING HOURS ON SUNDAYS. SOME EQUIPMENT IS GENERALLY WORKING AT THE SITE FROM ABOUT 30 MINUTES BEFORE THE START OF THE RECEIVING HOURS TO ABOUT 2 HOURS AFTER THE END OF RECEIVING HOURS. THESE TIMES ALLOW FOR START UP, WARMING OF EQUIPMENT, PREPARATION OF THE WORKING FACE TO RECEIVE WASTES BEFORE RECEIVING HOURS, AND COMPACTION OF COVERING OF WASTES AFTER THE END OF RECEIVING HOURS. THE TOWNSHIP ZONING ORDINANCE LISTS LIMITS FOR CONTINUOUS NOISE LEVELS AT THE PROPERTY LINE OF THE ADJACENT PROPERTIES BASED ON THE RECEIVING PROPERTIES LAND USE. THE NEAREST NOISE RECEPTORS TO THE SITE ARE RESIDENTIAL AREAS TO THE SOUTH OF THE PHASE V EXPANSION ALONG APPLEBUTTER ROAD AND TO THE EAST OF THE PHASE V DISPOSAL AREA. FOR RESIDENTIAL PROPERTIES THE LIMITS ARE 60 dBA FROM 7 AM TO 10 PM MONDAY THRU SATURDAY AND 50 dBA AT OTHER HOURS. THE LIMIT IS REDUCED BY 5 dBA FOR "PURE TONES". THE CURRENTLY APPROVED OPERATIONS PLAN FOR THE SITE LISTS THE EQUIPMENT USED FOR OPERATION OF THE FACILITY. NO CHANGE IN EQUIPMENT IS PROPOSED FOR THE PHASE V EXPANSION. THE EQUIPMENT PRODUCING THE MOST NOISE WOULD BE DOZERS, LANDFILI COMPACTORS AND ARTICULATED TRUCKS. THESE OPERATE AT THE WORKING FACE AND ACCESS ROADS. THE ONLY SIGNIFICANT CONTINUOUS NOISE SOURCE IS THE OPERATION OF EQUIPMENT AT THE WORKING FACE. FOLLOWING ARE DATA FROM THE CATERPILLAR EQUIPMENT COMPANY ON THE NOISE LEVELS AT A DISTANCE OF 15 METERS OR (ABOUT 50 FEET) FROM THE EQUIPMENT.

NOISE LEVELS BASED ON OPERATING CONDITIONS AT A DISTANCE OF 15 METERS (+ 50 FEET) FROM CATERPILLAR EQUIPMENT - dBA

	(1)	(2)	(3)	(4)	(5)	
826 Compactor	80.0	79.3	74.5	79.8	83.0	
836 Compactor	79.5	79.3	76.8	81.5	81.0	
D4 Dozer	75.9	75.1	76.5	77.1	83.1	
D8 Dozer	81.0	80.0	81.0	81.0	86.0	
D350 Haul Truck	78.5	77.5	79.0	81.0	81.0	

- (1) = Engine at High Idle (max.)
- (2) = Engine at Rated Speed
- (3) = Engine Cycle (Idle-Max-Idle)
- (4) = Hydraulic Cycle Engine at Max.
- (5) = Intermediate Gear Moving

NOISE LEVELS MEASURED AT IESI BETHLEHEM LANDFILL - JANUARY 8, 2001

TABLE #1

		Noise Levels at Intervals at Loca from Main Acce Working Face -	15 sec. alion 50' ss Road to	(C) Noise Levels at 15 sec. Intervals at Side of Applebutter Rd at Landfill Entrance - Start 9:50 AM		(D) Same as Previous Column Except Excluding 3 data Points Affected by Vehicles Entering Landfill		
(A)		SOUND		SOUND		SOUND		
DISTANCE		PRESSURE	SOUND	PRESSURE	SOUND	PRESSURE	SOUND	
FROM	SOUND	LEVEL	PRESSURE	LEVEL	PRESSURE	LEVEL	PRESSURE	
WORKING	PRESSURE	(dBA)	(4)	(dBA)	(4)	(dBA)	(4)	
FACE (1)	LEVEL	((1)	(42.1)	(-1)	(30/1)	(4)	
	(dBA)	54.0	501.19	50.9	350.75	50.9	350.75	
		56.0	630.96	51.5	375.84	51.5	375.84	
50'	87.0	54.3	518.80	49.6	302.00	49.6	302.00	
100'	70.5	58.5	841.40	64.0	1584.89	64.0	1584.89	
200'	64.0	56.4	660.69	48.8	275.42	48.8	275.42	
400' (2)	54.0	53.6	478.63	48.8	275.42	48.8	275.42	
550' (3)	51.5	56,0	630.96	49.3	291.74	49.3	291.74	
、 ,		58.3	822.24	71.3	3672.82	71.3	3672.82	
		64.4	1659.59	49.8	309.03	49.8	309.03	
		57.6	758.58	48.0	251,19	48,0	251,19	
		55.8	616.60	47.6	239.88	47.6	239,88	
		54.1	506.99	46.8	218,78	46.8	218.78	
		53.8	489.78	63.1	1428.89	63.1	1428,89	
		55.4	588.84	55.8	616,60			
		52.7	431.52	49.2	288,40	49.2	288,40	
		52.4	416.87	49.1	285,10	49.1	285.10	
		54.3	518.80	68.9	2786.12			
		53.5	473.15	61.0	1122.02	70		
		53.2	457.09	61.9	1244.51	61.9	1244.51	
		57.9	785.24	55.3	582.10	55.3	582,10	
		65.0	1778.28	60.0	1000,00	60.0	1000,00	
		86.5	21134.89 (5)					
	•	63.8	1548.82					
		62.3	1303.17					
		54.9	555,90					
						2010000443		
	AVERAGE	63.9	1564.36	58.4	833,41	57.2	720,93	

(1) One compactor and one dozer spreading wastes with trucks delivering wastes about 9:10 to 9:25 AM

(2) Traffic noise from I-78 also audible at this location

(3) This point was across bench in slope so line of sight to working face no longer available; Working face noise not evident over other background noise (I-78 traffic in particular) except for scattered impact sounds and back-up alarms. (4) Since dBA is a logarithmic scale, values are averaged using this column which is the Antilog (dBA/20).

(5) This high value caused by haul truck passing about 10' from meter. EQUIPMENT USED - SPER SCIENTIFIC DIGITAL SOUND METER 840029 PERSONS PRESENT - Chuck Blough and Karen Christman - IESI, Allen O'Dell - Martin & Martin

AS PREVIOUSLY STATED THERE ARE NO NEARBY (WITHIN 100 FEET) RESIDENTIAL PROPERTY BOUNDARIES TO THE PHASE V EXPANSION DEVELOPMENT AREA. SINCE THE WORKING FACE IS THE ONLY SIGNIFICANT CONTINUOUS NOISE SOURCE, DISTANCES FROM RESIDENTIAL PROPERTY LINES TO THE NEAREST WORKING FACE FOR THE PHASE V EXPANSION ARE THE APPLICABLE SEPARATION DISTANCES TO CONSIDER. THE NEAREST RESIDENTIAL PROPERTY LINE WITH AN ASSOCIATED OCCUPIED DWELLING NOT OWNED BY BETHLEHEM LANDFILL COMPANY IS TO THE EAST (PETRIE PROPERTY) APPROXIMATELY 400' FROM THE NEAREST PHASE V WORKING FACE AREA. THE NEAREST OCCUPIED DWELLING NOT OWNED BY BETHLEHEM LANDFILL COMPANY IS TO THE SOUTH (STEELY) APPROXIMATELY 600'FROM THE NEAREST PHASE V WORKING FACE. NOISE LEVELS AT THESE GREATER DISTANCES WERE NOT AVAILABLE FROM THE MANUFACTURE. BLC CONDUCTED NOISE LEVEL MEASUREMENTS AS LISTED ON TABLE 1 ON JANUARY 8, 2001 IN ORDER TO OBTAIN ACTUAL NOISE LEVELS AT THE DISTANCES FROM THE WORKING FACE EQUIPMENT, AT AN ACCESS ROAD AND ALONG APPLEBUTTER ROAD AT THE ENTRANCE.

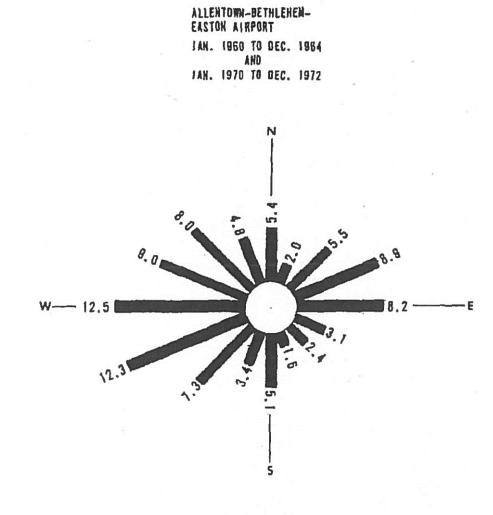
DATA SET (A) ON TABLE 1 GIVES THE TYPICAL SOUND PRESSURE LEVELS AT VARIOUS DISTANCES FROM THE WORKING FACE. AT 400', THE NEAREST RESIDENTIAL USE PROPERTY BOUNDARY, THE NOISE LEVEL WAS 54.0 dBA AT THE WORKING FACE LOWER THAN THE REQUIRED 60 dBA. THE NOISE LEVEL RECEPTER (DWELLING) FOR THIS PROPERTY IS OVER 2000 FEET FROM THE PROPERTY LINE WHERE NOISE LEVELS WILL CONTINUE TO BE LOWER THAN REQUIRED BY ORDINANCE. THE CLOSEST WORKING FACE OPERATIONS WILL BE ABOUT 600' FROM THE NEAREST OCCUPIED DWELLING. THE NOISE LEVEL AT THIS DISTANCE FROM THE WORKING FACE WAS LESS THAN 51.5 dBA WHICH IS LESS THAN THE ORDINANCE'S LIMIT OF 60 dBA.

DATA SET (B) GIVES THE NOISE LEVEL AT A LOCATION 50' FROM THE MAIN ACCESS ROAD OFF APPLEBUTTER ROAD TO THE WORKING FACE WHERE TRUCKS ARE GOING UP OR DOWN A SIGNIFICANT GRADE. THESE DATA WERE OBTAINED AT A TIME WHERE DELIVERIES WERE NOT AT A PEAK RATE. HOWEVER THE AVERAGE LEVEL OBTAINED 50' FROM THE ACCESS ROAD (ABOUT 64 dBA) IS FAR LESS THAN THE 50' FROM THE WORKING FACE (ABOUT 87 dBA). THIS SHOWS THAT THE WORKING FACE IS THE MOST SIGNIFICANT SOURCE OF NOISE RATHER THAN THE ACCESS ROADS. FURTHER THE PHASE V EXPANSION PROPOSES NO MODIFICATION OR CHANGE TO THE EXISTING APPLEBUTTER ROAD ACCESS.

DATA SET (C) AND (D) GIVE NOISE LEVELS ALONG APPLEBUTTER ROAD, BOTH INCLUDING AND EXCLUDING LANDFILL RELATED TRAFFIC. THE AVERAGE NOISE LEVELS (57-58 DBA) WERE COMPARABLE TO NOISE LEVELS 300' FROM THE WORKING FACE AND EASILY EXCEEDED NOISE LEVEL 400' FROM THE WORKING FACE. THIS SHOWS MID-MORNING BACKGROUND NOISE LEVELS ALONG APPLEBUTTER ROAD ARE HIGHER THAN THE OFF-SITE NOISE LEVEL CAUSED BY WORKING FACE OPERATIONS.

- E. SMOKE, DUST, ETC. THE PROCEDURES USED TO CONTROL ODORS, METHANE GAS, DUST AND LITTER ARE DESCRIBED IN THE CURRENTLY APPROVED PLAN OF OPERATIONS AND NUISSANCE MINIMIZATION AND CONTROL PLAN FOR THE SITE. THE PHASE V EXPANSION PROPOSES TO CONTINUE OPERATIONS CONSISTENT WITH THESE APPROVED PLANS. PREVAILING WIND DIRECTIONS ARE FROM THE SOUTHWEST, WEST AND NORTHWEST AS INDICATED IN FIGURE 1 WHICH IS A WIND ROSE FOR THE LEHIGH VALLEY AREA. THIS WOULD TEND TO CARRY DUST AND LITTER TO THE NORTHEAST, EAST AND SOUTHEAST OF THE SITE. IN THESE DIRECTIONS THE NEAREST PROPERTY LINE IS AT LEAST 250' FROM ANY PHASE V DISPOSAL AREA WITH THE NEAREST RESIDENTIAL DWELLING OVER 1000' AWAY (WALTERS).
- F. VIBRATIONS THE LANDFILL UTILIZES A VIBRATORY COMPACTOR WHEN NEEDED. THIS UNIT DOES NOT PRODUCE VIBRATIONS WHICH CAN BE FELT MORE THAN 100-200' AWAY. OPERATION OF THIS EQUIPMENT IN THE PAST HAS NOT CAUSED ANY CONCERNS. BLASTING IS NEEDED ON OCCASIONS TO FACILITATE ROCK REMOVAL FOR CONSTRUCTION OF LANDFILL CELLS. WHEN UTILIZED, AN OUTSIDE CONTRACTOR IS USED TO DO PRE- AND POST- BLAST SURVEYS, RECORD SEISMIC IMPACTS FROM THE BLAST AROUND THE BLAST ZONE AND MEASURE VIBRATIONS OFF THE SITE. THIS IS A NORMAL LANDFILL CONSTRUCTION ACTIVITY. IT IS ANTICIPATED TO BE USED IN THE PHASE V EXPANSION.
- G. STORAGE OF HAZARDOUS AND TOXIC SUBSTANCES THE LANDFILL DOES NOT STORE ANY OF THE SUBSTANCES LISTED IN SECTION 180-96G OF THE ZONING ORDINANCE OR SIMILAR HAZARDOUS AND TOXIC SUBSTANCES EXCEPT FOR HEATING OIL AND DIESEL FUEL. HEATING OIL TANKS ARE LOCATED IN AND AROUND THE OFFICE AND MAINTENANCE BUILDING. PROCEDURES FOR PREVENTION OF AND RESPONSE TO POTENTIAL SPILLS ARE DESCRIBED IN THE PPC PLAN FOR BETHLEHEM LANDFILL.
- H. STORAGE OF CHEMICALS THERE IS NO UNDERGROUND STORAGE OF CHEMICALS. WASTE OIL AND ANTI-FREEZE IS STORED IN 55 GALLON DRUMS IN THE MAINTENANCE BUILDING UNTIL THEY ARE TAKEN OFF-SITE FOR RECYCLING. THESE ITEMS, SHOP CHEMICALS, CLEANING CHEMICALS, AND 5-GALLON CONTAINERS OF GASOLINE FOR SMALL POWER EQUIPMENT ARE STORED IN THE EXISTING OFFICE AND MAINTENANCE BUILDINGS. ALL OF THESE BUILDINGS ARE LOCATED MORE THAN 300' AWAY FROM ANY RESIDENTIAL DWELLING OR RESIDENTIAL DISTRICT BOUNDARY. SPILL PREVENTION AND RESPONSE PROCEDURES ARE DESCRIBED IN THE PPC PLAN FOR BETHLEHEM LANDFILL.
- STORAGE OF WASTES WASTES DELIVERED TO THE SITE FOR DISPOSAL ARE COMPACTED DAILY. ROLLOFF CONTAINERS SHALL BE PROVIDED AT THE EXISTING "DROP-OFF" AREA FOR THE RECYCLABLES AND SOLID WASTE FROM SMALL VEHICLES. THE RECYCLABLES ARE HAULED OFF-SITE FOR RECYCLING AS NEEDED, THE WASTE CONTAINERS ARE HAULED TO THE WORKING FACE AS NEEDED WHICH IS USUALLY EVERY 1-2 DAYS.
- OTHER OTHER ENVIRONMENTAL IMPACTS AND CONTROL MEASURES ARE DESCRIBED IN OTHER SECTIONS OF THE PERMIT APPLICATION.

WIND ROSE FOR THE LEHIGH VALLEY REGION



NOISE LEVEL SUPPLEMENT **FEBRUARY 15, 2023**

OF DCCURRENCE IN PERCENT.

NOTE: HUMBERS EXPRESS FREQUENCY

The Phase V Expansion proposes no operational changes with respect to equipment, equipment usage and delivery methods for waste handling and disposal as compared to previous expansions for which the noise level analysis in 2001 was conducted. Therefore, the noise level analysis initially provided in 2001 as part of the Phase IV expansion and subsequently provided as part of the Southeastern and Northern Realignments remains valid.

In response to concerns raised by the Township and its consultants related to the time elapsed from the 2001 study to 2023, Martin & Martin, Inc. on February 15, 2023 took noise level readings at the current working face at Bethlehem Landfill. Readings were taken at the working face since the 2001 analysis clearly identified that the most significant source of noise is generated at the working face and this will remain true as part of the Phase V Expansion. The current working face is located within the southeastern area of the landfill within the Southeastern Realignment Phase. Except for the location where readings were taken on the landfill, the new readings were taken and are presented consistent with the 2001 study. These consistencies include the sound level metering device (Sper Scientific Digital Sound Meter Model 840029), distance from working face, equipment on the working face, time of day, and weather conditions. With regard to the equipment on the working face at the time of the readings, the 2001 study included one bulldozer and one compactor. During readings taken in this supplemental analysis, one compactor and one dozer were operating consistent with the 2001 analysis. However, additional equipment was present and operating to include one additional bulldozer and a waste trailer tipper. Further, as consistent with the 2001 analysis offsets from the working face moved to the south at distances of 50 feet, 100 feet, 200 feet, 400 feet and 550 feet. Offsets to the south were performed since the majority of residential noise receptors are located to the south toward Applebutter Road from the working face. Table 2 below presents the results of the February 15, 2023 readings obtained at various distances established by the 2001 analysis and the 2001 results so a direct comparison can be made.

	Table #2	
Noise Levels Measu	ıred at Bethlehem Landfill –	February 15, 2023
Distance from Working Face	2023 Typical Sound Pressure Level (dBA)	2001 Typical Sound Pressure Level (dBA)
50'	69.9	87.0
100'	67.1	70.5
200'	62.8	64.0
400°	59.4	54.0
550'	55.9	51.5

Analysis of the results above yield consistency with the 2001 analysis such that noise level readings diminish with distance from the working face and at a distance of 400 feet sound pressure levels drop below 60 dBA. This consistency enables conclusions to be made with regard to the Phase V Expansion as follows.

- 1. The nearest residential dwelling or noise receptor to the proposed Phase V Expansion working face is 600 feet being the Steely Property along Applebutter Road. Both analyses (2001 & 2023) conclude noise levels at this distance from the working face are less than those required by Ordinance (60 dBA).
- 2. The nearest residential property boundary to the proposed Phase V working face is 400 feet. Both analyses conclude noise level readings at this distance are less than 60 dBA as required by the Ordinance.

Thus, we conclude the newly obtained sound level measurements confirm and validate the 2001 study accepted under previous approved expansions and realignments and, therefore, is valid for the Phase V Expansion.



DATE	02/23/23			
REVISION	AS PER 01/24/23 HANOVER LETTER 02/23/23			
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NEIGHBURHOOD PROIECIION ANALYSIS
N TWP. SETHLEHEM LANDFILL PHASE V EXPANSION CONDITIONAL USE APPLICATION PLAN
Bethlehem Landfill Company

(717) (759 \geq

ADD FILE: 1162.6-ZP-12.dw 01/06/23

AS NOTED

RAWING NO.

Exhibit B

BETHLEHEM LANDFILL COMPANY



WASTE CONNECTIONS'

Spill Prevention, Control and Countermeasure Plan (SPCC PLAN)

October 22, 2020



Prepared by:
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BETHLEHEM LANDFILL COMPANY SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN

1.0 INTRODUCTION

1.A. GENERAL APPLICABILITY AND CONFORMANCE [40 CFR 112.1 & 40 CFR 112.2]

The Spill Prevention Control and Countermeasures (SPCC) Plan applies to owners or operators of facilities that drill, produce, gather, store, process, refine, transfer, distribute, use, or consume oil and oil products, and might reasonably be expected to discharge oil in quantities that may be harmful to, into or upon navigable waters of the United States or adjoining shorelines, or waters of the continuous zone, or in connection with activities under the Outer Continental Shelf Lands Act or Deepwater Port Act, or affecting certain natural resources. A facility, as defined by 40 Code of Federal Regulations (CFR) Part 112.2, is "any mobile or fixed, onshore or offshore building, structure, installation, equipment, pipe, or pipeline used in oil well drilling operations, oil production, oil refining, oil storage, oil gathering, oil transfer, oil distribution, and waste treatment, or in which oil is used."

This SPCC Plan has been prepared in compliance with the guidelines outlined in 40 CFR Part 112 and 30 TAC §334.129, titled: "Release Reporting and Corrective Action for Above-ground Storage Tanks (AST's)".

By order of the Environmental Protection Agency (EPA), 40 CFR Part 112 Oil Pollution Prevention, all facilities engaged in the above mentioned activities that meet any of the following criteria shall have an SPCC Plan:

- 1. The facility is non-transportation related.
- 2. The total underground, buried storage capacity of the facility (including storage capacity contained in operating equipment) is greater than 42,000 gallons.
- 3. The aboveground storage capacity of the facility is greater than 1,320 gallons. (This aboveground storage capacity applies to containers with a capacity of 55 gallons or greater, as well as the storage capacity in operating equipment.)
- 4. The facility, due to its location, could reasonably be expected to discharge oil into or upon the navigable waters of the United States or that the discharge of spilled petroleum products could reasonably be expected to discharge oil into or upon the navigable waters of the United States or that the discharge of spilled petroleum products could reasonably be expected to reach the waters of the United States.



The primary objective shall be to prevent spills and second to contain spills should they occur, thus preventing any discharge of petroleum products from non-transportation related activities at on shore and offshore facilities into or upon the navigable water of the United States.

A "harmful quantity" is defined as a discharge, which affects the water quality standards, or causes a film or sheen upon or discoloration of the water or adjoining shoreline. "Navigable water" is defined as waters of the United States including but not limited to all streams, creeks, lakes and ponds connected to the tributary system in a river basin.

1.B. OBJECTIVE OF THE SPCC PLAN

The objective of this Spill Prevention Control and Countermeasure (SPCC) Plan is to (1) prevent the occurrence of oil spills by the use of sound engineering and management controls, (2) where a spill occurs prevent the discharge of oil and other regulated material into "navigable waters of the United States", (3) prevent exposure of personnel and the community, (4) prevent contamination of the environment, and (5) provide an expeditious and effective response to minimize the potential for environmental impairment.

1.C. GENERAL INFORMATION

This plan has been designed for the Bethlehem Landfill, PA Department of Environmental Protection Operating Permit No. 100020, to comply with all applicable requirements of Environmental Protection Agency's (EPA's) regulations under the provision of 40 CFR Part 112 and the Commonwealth of Pennsylvania regulations under the PA Department of Environmental Protection (PaDEP). Direct information regarding 40 CFR 112.4 – 112.15 (July 2002) begins in Section 2.0 of the Document.

This facility is a PaDEP approved Municipal Solid Waste Landfill located at 2335 Applebutter Road, Bethlehem, PA 18015.

The owner/operator of this facility is PA Bethlehem Corp., whose principal address is located at the same address.

The individual responsible at this facility to coordinate all efforts to effectively prelude this SPCC Plan and to implement the required actions/appropriate actions as stated within this SPCC Plan is the facility manager who is also the primary emergency coordinator. In the event of the emergency coordinator's absence, the individuals identified in Table 1 shall serve as back up SPCC coordinators.

1.D. DESCRIPTION OF THE FACILITY

The Bethlehem Landfill consists of approximately 206 acres of land and is located in Lower Saucon Township, Northampton County, Pennsylvania. The nearest receiving body of water is the unnamed tributary to East branch of the Saucon Creek.



Facility Type: Type I Municipal Solid Waste Landfill

Facility Name and Mailing Address:

Bethlehem Landfill Company 2335 Applebutter Road Bethlehem, PA 18015

There are aboveground storage containers with secondary containment at Bethlehem Landfill that are used for storage and dispensing of petroleum products and used oil. Drums and other small quantities of petroleum products are housed within the maintenance facility. The location of the maintenance facility is depicted on the site map presented as Attachment 1.

1. E. SPCC PLAN LOCATION

A completed (and up-to-date) copy of this plan shall be maintained at the facility if the facility is attended at least four (4) hours per day or at the nearest field office if not. The plan must be made available to the EPA Regional Administrator for on-site review during normal working hours.

2.0 AMENDMENT OF SPCC PLAN BY REGIONAL ADMINISTRATOR [40 CFR 112.4]

The plan required submittal to the EPA Regional Administrator (RA) or the appropriate state agency if "a discharge occurs in excess of 1,000 U.S. gallons in a single discharge; or two (2) discharges in excess of 42 US gallons, or I barrel, within any twelve month period". In this case, the plan shall be submitted to the appropriate EPA Regional Administrator and to the appropriate state agency in charge of water pollution control activities within 60 days from the time the facility becomes subject to the above-mentioned requirements.

In addition, the owner or operator must also provide the same information provided to the EPA to the PaDEP so that the PaDEP may conduct a review of the facility and incident, and make recommendations to the RA as to further procedures, methods, equipment and other requirements of equipment necessary to prevent and to contain discharges of oil from the facility. The RA has the authority to require a facility owner or operator to amend the SPCC Plan after the on-site review of the Plan.

3.0 AMENDMENT OF SPCC PLAN BY OWNER OR OPERATOR [40 CFR 112.5]

This SPCC Plan will be amended whenever there is a change in the facility design, construction, storage capacity, operation or maintenance which will affect the potential for the discharge of oil and/or other material into navigable waters of the United State. These amendments will be fully implemented as soon as possible, but not later than six (6) months after such change occurs. The



owner or operator must document completion of the review and evaluation, and must sign a statement as shown in Attachment 2. Any technical amendments to the SPCC Plan shall be certified by a Professional Engineer (P.E.); however, minor changes or revisions non-technical in nature (i.e. changes in personnel or numbers listed in the tables or attachments) may be revised by the owner or operator of the facility.

Notwithstanding compliance to amend the SPCC Plan in accordance with the guidelines reflected in the aforementioned paragraph, a complete review and evaluation of the SPCC Plan will be conducted at least once every five (5) years form the date that the facility become subject to the SPCC Plan requirement, and/or five (5) years form the date the last evaluations of the SPCC Plan was conducted.

4.0 POTENTIAL SPILLS – PRECIDTION AND CONTROL [40 CFR 112.7(a)] AND FAULT ANALYSIS [40 CFR 112.7(b)]

This facility has not experienced a reportable oil spill event during the twelve months prior to January 10, 1974 (effective date of 40 CFR Part 112) and has not experienced a reportable oil spill to date or within the last 12 months. A spill history record will be completed for any reportable oil spill referenced above and can be found at Attachment 3. Appendix A of this plan details emergency procedures in the event a spill occurs on-site.

A potential spill analysis has been prepared for every petroleum product used at this facility and can be found at Attachment 4. Attachment 4 identified all petroleum sources at this facility, provides a prioritized list of areas where spills are likely to occur, and includes a prediction of the direction, rate of flow, and total quantity of oil, which could be discharged from the facility as a result of each type of failure. A breakdown of storage tanks is included in Table 2.

The aboveground storage tanks of this facility handle, store, and distribute petroleum products in the form of diesel fuel and other petroleum products for the purpose of use in operation of on-site equipment and other miscellaneous vehicles. Used oil is also stored at the site. A site plan showing property boundaries and adjacent roadways, drainage ditches, on-site boundaries and storage tanks is included in Attachment 1.

5.0 FACILITY LOCATION, DRAINAGE, AND SECONDARY CONTAINMENT [40 CFR 112.7(c) AND 40 CFR 112.7(d)]

The aboveground storage tanks are located within the boundaries of Bethlehem Landfill.

As per 40 CFR 112.7(c), appropriate containment and diversionary structures or equipment to prevent discharged oil from reaching a navigable watercourse is provided in the following subsections. These structures may include, but are not limited to:

- Dikes, berms, or retaining walls sufficiently impervious to contain spilled oil
- Curbing
- Drip Pans



- Culverting, gutters, or other drainage systems
- Weirs, booms, or other barriers
- Retention ponds
- Sorbent materials
- Equipment available to create emergency diversion basins in the event of a significant release.

Evaluation of the containment, diversionary structures, or equipment listed above or in 40 CFR 112.7(c) is ongoing to maintain the integrity of the equipment and its functional design.

As per 40 CFR 112.7(d), an effective oil spill contingency plan following the provision of 40 CFR Part 109 shall be provide along with a written commitment of manpower, equipment and materials required to expeditiously control and remove any harmful quantity of oil discharged.

6.0 INSPECTION, SECURITY, TRAINING, AND SPCC PLAN AMENDMENT REQUIREMENTS [40 CFR 112.7(e)-(i)]

Inspections required by this part shall be in accordance with the procedures developed for the facility. Copies of the records of inspections signed appropriately shall be made a part of the SPCC Plan and maintained for a period of three (3) years. Records of inspections and tests kept pursuant to usual and customary business practices are sufficient for the purpose of 40 CFR 112.7(e)(8) and this plan.

6. A. INSPECTIONS AND RECORDS [40 CFR 112.7(e)]

All aboveground tanks will be visually inspected by a competent person at a minimum of once a month for condition and need for maintenance. The Aboveground Storage Tank Inspection Form is shown in Attachment 5. A record of the inspection will be retained at the facility. Theses inspections shall be kept on file a minimum of three (3) years. The result of the inspection will be reported to the SPCC coordinator immediately. The following is a guideline of procedures to be initiated during the inspection of all storage tanks.

- 1. Inspect the foundation and supports of tanks that are above the surface of the ground. Visible leaks from a tank and its appurtenances will be promptly corrected.
- 2. Note if any stormwater accumulated within the dike area should be released.
- 3. Note if there is any sheen or discoloration on the surface of the accumulated stormwater.
- 4. If there is any sheen or discoloration on the surface of the accumulated stormwater, contact the SPCC coordinator immediately.
- 5. For each tank, inspect all valves, pipelines, pipeline supports, flange joints, metal surface of tanks, and containment dike for any leaks, damage, or operational problems.



- 6. For each tank, verify valves are locked in the closed position.
- 7. For each tank, verify that all warning signs are in place.
- 8. For each tank, verify that the lighting is functional and provide appropriate lighting for the discovery of spills occurring during hours of darkness, and the prevention of spills that may occur as a result of vandalism.
- 9. For each tank, verify that the peripheral fencing for the facility/tank, if required, is in good condition.
- 10. Carefully examine for deterioration any buried pipeline that is exposed for any reason. Buried metallic piping installations should have a protective wrapping and coating, or the equivalent, and should be catholically protected. (If applicable)
- 11. The inspector will inform the SPCC coordinator of any discrepancies and recommend the appropriate corrective action that must be implemented in a prompt manner.
- 12. The inspector will place the completed inspection in the facility's records.

6. B. PERSONNEL TRAINING [40 CFR 112.7(f)]

Training is an integral part of this SPCC Plan to assure that it is effectively implemented. At a minimum, applicable oil-handling employees will be trained in the areas of operation and maintenance of equipment, general facility operations, loading and unloading procedures, inspection procedures, emergency spill response procedures, and the contents of this plan.

Employees will be aware of all applicable pollution control laws, rules and regulations. Annually scheduled training sessions for the operating personnel shall be conducted to assure an adequate understanding of the SPCC Plan. New employees who will have oil-handling responsibilities shall have initial training within the first six months of employment and annual training thereafter.

This training will be updated at least annually or as required by conditional changes or should the need become apparent to include more effective prevention and control measures. The following is an outline of the specific SPCC Plan training requirements.

- 1. Operation and Maintenance of Equipment:
 - a. A physical walk-through inspection of the area where petroleum storage tanks are located and a review of the SPCC Plan to make employees aware of all areas where the possibility for a leak or spill could occur.



b. Personnel are instructed on the proper operation of equipment to prevent oil, gasoline, diesel fuel and other regulated material releases. A brief overview is given on how to repair the equipment in the event of a spill.

2. Loading/Unloading Procedures:

- a. Personnel are instructed that there will be NO SMOKING on or about any motor vehicle, while loading or unloading petroleum products and/or used oil.
- b. Personnel are instructed that extreme care shall be taken in the loading or unloading of petroleum products into or from any motor vehicle to keep fire away and to prevent persons in the vicinity from smoking, lighting matches, or carrying any flame or lighted cigar, pipe or cigarette.
- c. Personnel are instructed that no petroleum products shall be loaded into or on, or unloaded from any motor vehicle unless the handbrake is securely set and all other reasonable precautions are taken to prevent motion of the motor vehicle during such loading or unloading process.
- d. Personnel are instructed that a motor carrier who transports petroleum products by a cargo tank must ensure that the cargo tank is attended by a qualified person at all times during unloading.
- e. Personnel are instructed that a delivery hose, when attached to the cargo tank, is considered a part of the vehicle.

3. Inspection Procedures:

- a. Personnel are instructed that all aboveground storage tanks are to be visually inspected by a competent person for condition and need for maintenance on a scheduled periodic basis. Such examination will include the foundation and supports of tanks that are above the surface of the ground. Visible leaks from a tank and its appurtenances will be promptly corrected.
- b. Personnel are instructed to inspect any exposed buried line for deterioration. If corrosion damage is found, additional examination and corrective action will be taken based upon the magnitude of the damage.
- c. Personnel are instructed to examine/inspect the general conditions of all aboveground valves and pipelines, flange joints, pipeline supports, locking of valves, and metal surfaces. In addition, periodic pressure testing may be warranted for piping areas where drainage is such that a failure may lead to a spill event if there is reason to suspect the integrity of the piping.
- 4. Emergency Spill Response Procedures:



- a. Personnel are trained on the appropriate use of the on-site spill prevention equipment.
- b. A complete review of the SPCC and contingency plans is performed and employees are instructed on containment of a spill, cleaning up the material, proper material storage, and disposal techniques in accordance with all governing regulations.
- c. Personnel are trained on proper notification procedures to be used in the event of a spill.
- d. In the event an additional temporary secondary containment needs to be built, or the existing containment needs reinforcing, all employees are instructed on how to build a temporary containment area.

6. C. SECURITY [40 CFR 112.7(g)]

The facility shall be fully fenced and locked when not in attendance. Only authorized personnel, or people accompanied by an authorized person, are permitted to conduct petroleum product and/or used oil-handling operations in and around the aboveground storage tanks.

The master flow and drain valves and any other valves that will permit outward flow of a tank's contents to the surface should be securely locked in the closed position when in non-operating or non-standby status.

Per 40 CFR 112.7(g), it has been determined that illumination of the aboveground storage tank during hours of darkness is not required due to the distance of the tank from the general public and the absence of operating personnel during hours of darkness.

When the aboveground storage tanks are not in service during non-operating hours the petroleum product container dispensing system electrical switch will be in the off position and locked. The dispensing hoses for the aboveground storage tanks will be properly drained and coiled/wrapped/secured on a storage rack to prevent any inadvertent spill of liquid contained within the hose.

6. D. LOADING AND UNLOADING (EXCLUDING OFFSHORE FACILITIES) [40 CFR 112.7(h)]

The facility has the capabilities for the loading and unloading of fuels with the exception of a specific design containment pad. Catch basins for spillage of diesel fuel and lubricants shall be utilized should a spill occur during loading and unloading operations. Operational and maintenance procedures are in place to prevent spills and initiate clean-up of any minor spills.

There is sufficient clayey earthen material to construct berms for containment of petroleum product and/or used oil if a spill should occur. Spill containment and clean-up material will be stored in a designated area within the maintenance shop and will be readily available for use in



the unlikely event of a spill. All clean up and contaminated material will be properly disposed in accordance with all governing regulations.

Sorbent pads, earthen material, sandbags, "kitty litter", straw bales, or other inert materials will be used to contain, divert and clean up the spill if the spill has not been contained by a dike, sump, or catch basin. A ditch or diversionary trench may also be excavated in the event of a spill to prohibit any spilled materials from reaching navigable waters of the United States, waters of the Commonwealth of Pennsylvania, or from leaving the property.

6. E. BRITTLE FRACTURE EVALUATION REQUIREMENTS [40 CFR 112.7(i)]

Evaluation shall be conducted for field-constructed aboveground containers undergoing repair, alteration, reconstruction, or change in service that might affect the risk of a discharge or failure due to fracture or other catastrophe.

6. F. CONFORMANCE WITH STATE REQUIREMENTS [40 CFR 112.7(j)]

As discussed in Section 1.A. GENERAL APPLICABILITY AND CONFORMANCE, this SPCC Plan has been prepared in compliance with State rules, regulations, and guidelines. This Plan is also complemented by the previously enacted Preparedness, Prevention and Contingency (PPC) Plan.

7.0 ONSHORE FACILITY REQUIREMENTS (EXCLUDING PRODUCTION FACILITIES [40 CFR 112.8 AND 40 CFR 112.12]

7. A. DRAINAGE [40 CFR 112.8(b) & 112.12(b)]

Where feasible, petroleum storage tank areas are diked to prevent spills. Walls of the diked area shall be of earth, steel, concrete, plastic, or solid masonry designed to be liquid-tight and to withstand a full hydrostatic head. Drainage from each diked area shall be controlled either by dual manually operated gate valves (normally closed and locked) or by elimination of any piped outlet.

The use of ponds and lagoons around undiked areas may not be feasible at this facility. However, the use of combination of booms, curbs, sorbent materials, and other effective methods will be used to contain and clean up a spill. The specific control management practices used is described below.

Drainage (releasing) of rainwater form secondary containment shall not occur without the authorization of the facility manager or their designee. Before release of stormwater form the containment area, it will be verified by visual inspection (Attachment 5) that there is no sheen or discoloration of the surface water (Facility Manager shall consult Stormwater Pollution Prevention Plan for guidance and record keeping as applicable). If water quality is suspect, the inspector will contact the facility manager for instructions.



7. B. BULK STORAGE TANK CONTAINMENT [40 CFR 112.3(c) & 112.12(c)]

No tank should be used for the storage of oil unless its material and construction are compatible with the material stored and conditions of storage such as pressure and temperature, etc.

Containment and diversionary structures will be used to prevent oil or other regulated material from reaching navigable waters. The types of secondary containment utilized at this facility are double wall tank containment and metal containment. Dikes, containment curbs, and pits may be employed in the event of a spill. A ditch or diversionary trench may also be excavated in the event of a spill to prohibit any spilled materials from reaching navigable waters of the United States, waters of the Commonwealth of Pennsylvania, or from leaving the property. Four AST tanks with containment and various 145, 275 and 55 gallon drums (housed in the maintenance building) containing motor fluids are located on-site.

Leakage of oil or other regulated material from any equipment or location such as valves or pumps must be controlled by using drip or catch pans, absorbents or other means of secondary containment.

Drainage of rainwater from any diked area will not be emptied into a storm drain, open watercourse, lake, or pond. New and old tank installations are fail-safe engineered or updated to avoid spills. Liquid level sensing device (if installed) shall be inspected on a regular basis to ensure proper operation.

No underground storage tanks are utilized at this site. Aboveground storage tanks shall be inspected on a regular schedule, or when material repairs are completed, to include a visual inspection of tank integrity, valves, footing, etc. Aboveground storage tanks shall be visually inspected monthly and the inspection recorded on the form in Attachment 5. See Section 6.0 of this document for specific inspection practices. Internal heating coils are not used at this facility.

Visible oil leaks, which result in a loss of oil from tank seams, gaskets, rivets, and/or bolts sufficiently large enough to cause the accumulation of oil, shall be immediately corrected.

7. C. BRIEF OVERVIEW OF SPCC PLAN (LOADING AND UNLOADING FACILITIES) [40 CFR 112.8(d) & 112.12(d)]

The facility has the capabilities for the loading and unloading of fuels with the exception of a specific design containment pad. Catch basins for spillage of diesel fuel and lubricants shall be utilized should a pill occur during loading and unloading operations. Operational and maintenance procedures are in place to prevent spills and clean-up of any minor spills.

There is sufficient clayey earthen material to construct berms for containment of petroleum product and/or used oil if a spill should occur. Spill containment and clean up material will be stored in a designated area within the shop and will be readily available for use in the event of a



spill. All clean up and contaminated material will be properly disposed in accordance with all governing regulations.

Sorbent pads, earthen materials, sandbags, "kitty litter", straw bales, or other inert materials will be used to contain, divert and clean up the spill if the spill has not been contained by a dike, sump, or catch basin. A ditch or diversionary trench may also be excavated in the event of a pill to prohibit any spilled materials from reaching navigable waters of the United States, waters of the Commonwealth of Pennsylvania, or from leaving the property. The mobile storage units are typically parked over areas of solid waste fill which also contain runoff controls for containment or the designated parking spot with containment located at the Fuel Storage Area near the maintenance building.

Underground pipes, pipelines, or pipe supports are not utilized for the use of hydrocarbon or chemical storage at this facility.

At the present time, two 500 gallon stationary aboveground storage tanks of diesel fuel and gasoline are at the facility for facility trucks and heavy equipment that are located near the maintenance shop. One mobile diesel fuel truck (approximately 3,600 gallon capacity) is located onsite for equipment fueling due to the need to keep the mobile tank on waste fill area, and the necessity for solid waste fill area to advance. In addition a 500 gallon gas tank is on-site to fuel the odor suppressant sprayer line.

Warning signs must be placed at a conspicuous location adjacent to the position of stationary aboveground storage tanks.

All petroleum product and/or used oil transfers will be attended by facility personnel or tanker truck driver and never left unattended. The checklist in Attachment 6 may be used as procedural guidelines (1) to unload petroleum contents into the onsite aboveground storage tanks and (2) to prevent premature vehicular departure during unloading operations.

Drains and outlets on tank truck must be checked for leakage before loading/unloading or departure.

7. D. NATIONAL FIRE PROTECTION ASSOCIATION DECALS FOR ABOVEGROUND STORAGE TANKS

Shown at Attachment 7 are the appropriate National Fire Protection Association (NFPA) decals/markings to be displayed on the sides of the aboveground storage tanks (AST) containing flammable and combustible liquid products and antifreeze.

7. E. SPILL POTENTIAL

Equipment and leak prevention apparatuses such as gaskets, pumps, valves, fittings and diking must be maintained and operated in a manner that minimizes failures, leaks, spills or other



incidents that could result in the release of fuel oil or other material form the equipment. Due to the preventive maintenance program, the spill potential is low for the storage tanks.

In the event that a spill should occur, it would probably occur at one of the valves. If a leak or drip is discovered, catch pails will be used as a temporary measure to prevent the loss of material until the equipment can be permanently repaired. Permanent repairs will be made as soon as reasonably possible after detection of the problem. Absorbent materials such as sorbent pads, earthen material, sandbags, "kitty litter", straw bales, or inert material will be available.

- 8.0 OIL PRODUCTION FACILITY REQUIREMENTS
 [40 CFR 112.9, 112.10, 112.11, 112.13, 112.14 AND 112.15]
- 8. A. OIL PRODUCTION FACILITIES [40 CFR 112.9 & 112.13]

This facility does not produce, manufacture, or refine petroleum.

8. B. OIL DRILLING AND WORKOVER FACILITIES [40 CFR112.10 & 112.14]

This facility is not directly involved in oil drilling, oil production, or mining facilities.

8. C. OIL DRILLING, PRODUCTION, OR WORKOVER FACILITIES (OFFSHORE) [40 CFR 112.11 & 112.15]

This facility is not directly involved in the drilling, production, or reworking of offshore petroleum facilities.



TABLE 1

SPCC COORDINATORS

SPCC Primary Coordinator: Astor A. Lawson Title: District Manager

Office Phone: 610-317-3200 Cell Phone: 805-471-7948

SPCC Secondary Coordinator: Cody White Title: Compliance Manager

Office Phone: 610-317-3200 Cell Phone: 610-390-5536

SPCC Secondary Coordinator: Fred Brown Title: Maintenance Manager

Office Phone: 610-317-3200 Cell Phone: 484-429-0805



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Tank No.	Capacity (gallon)	Product Stored	Tank Construction Material (Carbon, steel,	Exempted or Registered ¹	Vapor Recovery System ²	Secondary Containment Type	Direction of Flow
	500	Diesel Fuel AST	Carbon Steel	Registered	No	Double Wall	Flat area, overall drainage area to southern watershed.
2	275	Oil Tank/Heat	Carbon Steel	Registered	No	Double Wall	Flat area, overall drainage area to southern watershed.
3a. 3b.	500	Gasoline AST Gas AST – line sprayer	Carbon Steel	Exempted	No	Double Wall Containment	Flat area, overall drainage area to southern watershed.
4	3,600	Fuel Truck	Carbon Steel	Exempted	No	N/A Mobile	Dependent on where located at time of release mostly southern watershed.
5	Varies	Various petroleum products, motor fluids in 275 and/or 55 gallon drums	Carbon Steel	Exempted	No	Block containment area and/or containment pallets	Concrete floor, overall building drainage to the south.
9	Varies	Waste Oil, 275 and/or 55 gallon drums	Carbon Steel	Exempted	No	HDPE Containment	Concrete floor, overall drainage to the south.
7	1,000	Waste Oil	Carbon Steel	Exempted	No	Steel Double Wall	Overall drainage to the south.
∞	145	Used Antifreeze	Poly	Exempted	No	Poly	Overall drainage area to southern watershed.
6	275	New Antifreeze	Carbon Steel	Exempted	No	Steel Double Wall	Concrete floor, overall building drainage to the south.



TABLE 2 (Continued)

Tank No. 1: Diesel Fuel Storage Tank

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon Steel
- c. Tank compatible with diesel fuel: Yes
- d. Quantity of product: up to 500 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from secondary containment: Dependent on location at time of discharge.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Double wall design of the tank
- h. Location of Substance: fuel storage area near the maintenance shop

Tank No. 2: Oil Heat Tank

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon Steel
- c. Tank compatible with waste oil: Yes
- d. Quantity of product: stored in 275 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping to the southern watershed.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Steel fabricated with the tank
- h. Location of Substance: Fuel storage area near the maintenance building.

Tank No. 3: Gasoline

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon steel
- c. Tank compatible with gasoline: Yes
- d. Quantity of product: 500 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from secondary containment: Southern watershed.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Double wall constructed steel tank.
- h. Location of Substance: Fuel storage area near the maintenance shop and line sprayer.

Tank No. 4: Diesel Fuel Tank (on service truck, portable)

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon steel
- c. Tank compatible with diesel fuel: Yes
- d. Quantity of product: 3,600 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from secondary containment: Dependent on location at time of discharge.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Dependent upon where tank is located at any given time. The tank is normally stationed over waste fill, near the active face, in areas where surface runoff is prevented by dikes.



h. Location of Substance: Varies.

Tank No. 5: Various motor fluid products in 275, 245 and/or 55 gallon drums

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon steel
- c. Tank compatible with product stored: Yes
- d. Quantity of product: Varies, typically in 275 gallon tanks total < 1,500 gallons.
- e. Direction of flow of the contained substance in the event of an accidental release escaping from secondary containment: South, towards solid waste fill area
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: steel containment for 275/245 gal tanks and pallet containment for drums.
- h. Location of Substance: Maintenance Facility, See Attachment 1

Tank No. 6: Waste Oil Storage Tank (inside Maintenance Shop)

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon steel
- c. Tank compatible with waste oil: Yes
- d. Quantity of product: stored in 275 gallons and/or 55 gallon drums up to 750 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from maintenance building to the southern watershed.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Yes steel, the tanks are located in the maintenance shop; there are no floor drains in the shop.
- h. Location of Substance: Maintenance Building

Tank No. 7: Waste Oil Storage Tank (outside maintenance shop)

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Carbon Steel
- c. Tank compatible with waste oil: Yes
- d. Quantity of product: stored in 1,000 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from maintenance building to the southern watershed.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Double Wall
- h. Location of Substance: maintenance building

Tank No. 8: Used Antifreeze Storage Tank (maintenance shop)

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Polyethylene
- c. Tank compatible with used antifreeze: Yes
- d. Quantity of product: stored in 145 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from maintenance building to the southern watershed.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Polyethylene
- Location of Substance: maintenance building



Tank No. 9: New Antifreeze Storage Tank (maintenance shop)

- a. Major Type of Failure: Leakage, Rupture, Overflow
- b. Tank constructed of: Polyethylene
- c. Tank compatible with used antifreeze: Yes
- d. Quantity of product: stored in 145 gallons
- e. Direction of flow of the contained substance in the event of an accidental release escaping from maintenance building to the southern watershed.
- f. Rate of Flow: See Attachment 4
- g. Secondary Containment: Polyethylene
- h. Location of Substance: maintenance building



TABLE 3

BETHLEHEM LANDFILL CONTACTS

SPCC Primary Coordinator: Astor A. Lawson

Title: District Manager

Office Phone: 610-317-3200 Cell Phone: 805-471-7948

SPCC Secondary Coordinator:

Cody White

Title: Compliance Manager

Office Phone: 610-317-3200 Cell Phone: 610-390-5536

SPCC Secondary Coordinator:

Fred Brown

Title: Maintenance Manager

Office Phone: 610-317-3200 Cell Phone: 484-429-0805



TABLE 4

AGENCY CONTACTS

In case of a release to the environment, the following entities shall be contacted:

Fire, Police, and Ambulance (for emergencies) 911

2.	D.E.P. Emergency Response (24 hour)	877-333-1904
3.	National Response Center	800-424-9902
4.	Lower Saucon Township	610-865-3291
5.	Northampton County Emergency Management Agency	610-759-2600
6.	PaDEP – Harrisburg Northeast Regional Office	570-826-2511
7.	EPA 24-Hour Number	215-597-9898
8.	Northampton County	610-829-6500
9.	Emergency Fire Personnel	911
10.	Poison Control Center	800-521-6110

In the event of a release to the environment or any emergency that causes or has the potential to cause ground or surface water contamination:

U.S. EPA	215-597-9825
Region III	
165 Arch Street	
Philadelphia, PA 19106	

In the event of actual or potential contamination of surface waters:

PA Fish Commission	717-626-0228
Southeastern Regional Office	
P.O. Box 8	
Elm, PA 17521	

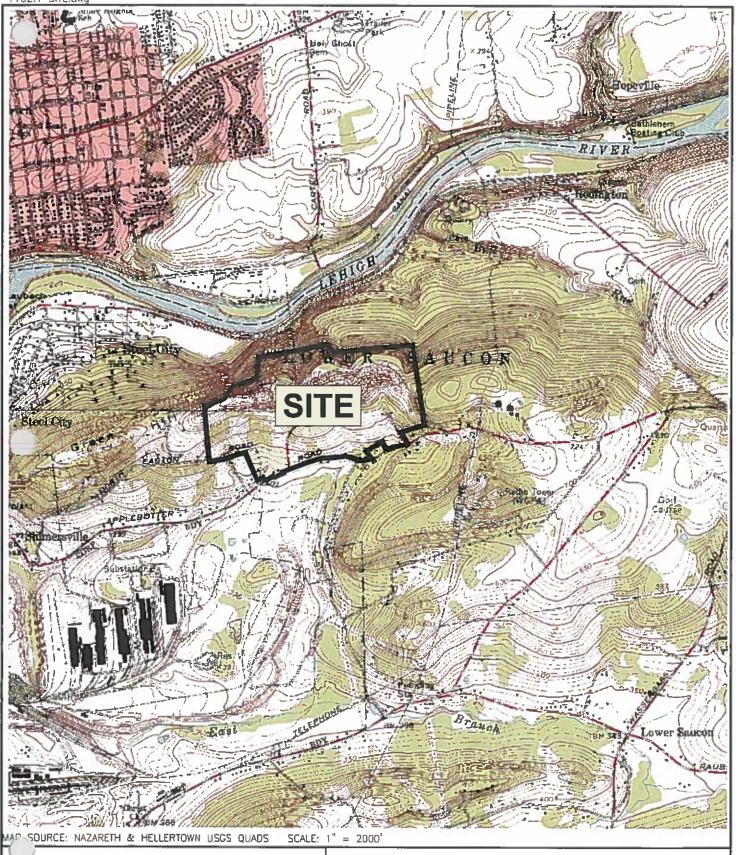
In the event of a hazardous waste spill:

National Response Center	800-424-8802
Washington, DC	





SITE MAPS (2)



martin and martin incorporated

phone: (717) 37 south main street • suite A chambersburg penset chambersburg, pennsylvania . 17201 SITE MAP

51PA Bethlehem Landfill Corp. 2335 Applebutter Road Bethlehem, Pennsylvania 18015



ATTACHMENT 2 PLAN REVIEW & AMENDMENTS

I have co	mpleted review a	nd evaluation of the SPCC Pla	n for Bethlehem Landfill on
	, 2020, and	d will / will not amend the Plan (Circle one)	n as a result.
Authorize	ed Representative		
Signature	**	Date	: <u>~</u> ,
		List of Rev	visions
Number	Date	Author	Signature of Authorized Representative
1			
2		1	
3			
4			

5



ATTACHMENT 3 SPILL HISTORY

(Complete this form for any reportable spill(s) which has (have) occurred during the twelve months prior to January 10, 1974 (effective date of 40 CFR Part 112), or within the last 12 months into navigable waters).

1.	Date:	Volume:	Cause:	
	Corrective	Action Taken:		
	Plans for Pr	reventing Recurrence:		
2.	Date:	Volume:	Cause:	
	Corrective	Action Taken:		
	·			
	Plans for Pr			
3.	Date:	Volume:	Cause:	
	Corrective	Action Taken:		
	Plans for Pr			
				_
ne o	of Facility:			



ATTACHMENT 4

POTENTIAL SPILLS - PREDICTION & CONTROL

	SOURCE	MAJOR TYPE OF FAILURE	TOTAL QUANTITY (GALLONS)	RATE OF FLOW	DIRECTION OF FLOW	SECONDARY CONTAINMENT
	Tank No. 1	(a) Leakage	500	*Gradual to	South	Double Wall
	Diesel Fuel	(b) Rupture (c) Overflow	500 500	Instantaneous *Instantaneous *100 gpm		Yes N/A
	Tank No. 2	(a) Leakage	275	*Gradual to Instantaneous	South	Double Wall
	Oil Heat	(b) Rupture	275	*Instantaneous		Yes
	Tank	(c) Overflow	275	*20 gpm		Yes
	Tank No. 3 a. & b.	(a) Leakage	500	*Gradual to Instantaneous	South	Double Wall
	Gasoline	(b) Rupture	500	*Instantaneous		Yes
		(c) Overflow	500	*20 gpm		N/A
)	Tank No. 4 (Mobile)	(a) Leakage	3,600	*Gradual to Instantaneous	Varies on location	N/A
	Diesel Fuel	(b) Rupture	3,600	*Instantaneous	generally	N/A
	Tanker	(c) Overflow	3,600	*100 gpm	South	N/A
	Tank No. 5 Various	(a) Leakage	<275 Instanta	*Gradual to aneous Shop	Inside	Inside Shop
	Motor Fuels	(b) Rupture	<275	*Instantaneous		Yes
	Tank No. 6	(a) Leakage	<275	*Gradual to Instantaneous	Inside Shop	Inside Shop
	Used Oil	(b) Rupture	<275	*Instantaneous	·	Inside Shop
	Tank No. 7	(a) Leakage	<1,000	*Gradual to Instantaneous	South	Yes
	Used Oil	(b) Rupture	<500	*Instantaneous		Outside Shop
	Tank No. 8 Used	(a) Leakage	<145	*Gradual to Instantaneous	South	Yes
	Antifreeze	(b) Rupture	<100	*Instantaneous		Outside Shop
	Tank No. 9	(a) Leakage	<275	*Gradual to Instantaneous	South	Inside Shop
)_	New Antifreeze	(b) Rupture	<100	*Instantaneous		



ATTACHMENT 5

ABOVEGROUND STORAGE TANKS MONTHLY INSPECTION FORM

Facility Name:	
Facility Name:Inspected By:	
Aboveground Storage Tanks: Visible signs of fuel or lubricant leaks Visible cracks along the seams and joints Visible cracks on the surface of tanks (sides, top and/or bottom) Presence of required fire protection code warning signs/labels on the surface of the tanks Fire extinguisher in good condition, visible, accessible, securely mounted, marked and tagged Visible signs of paint peeling from exterior surface of tanks Visible signs of corrosion on the exterior metal surface of tanks Visible leaks at valves, pipelines and flange joints connected to tanks Vapor recovery system or vapor release system in good condition	
NOTES:	_
Aboveground Storage Tanks Support Systems: • Visible stains on concrete • Collapse of pavement in places • Visible signs of corrosion on the external metal surface support system • Visible cracks in the metal support system • Visible crack in the concrete surface	
Secondary Containment: Visible cracks in the secondary containment walls (earth, steel, concrete or solid masonry dike berms/walls) Visible signs of leaks outside the secondary containment Visible signs of deterioration of the secondary containment walls (earth, steel concrete or solid masonry dikes, berms/walls) Accumulation of storm water within the diked/bermed area Sheen or discoloration on the surface of accumulated stormwater within the diked/bermed area If NO, then discharge appropriately If YES, has SPCC Coordinator been notified and appropriate measures been taken? Provide detailed notes. Drain plug secured within the drain pipe to the secondary containment wall Containment area clean/free of litter	l



ATTACHMENT 5 (continued)

NOTES:	
Appurtenance	
AdequateWarning	ely security of hoses to ensure no spillage of substances outside of containment
	dispensing pumps secured/locked when storage tank is unattended
SPCC PPeripher	of the storage tanks is functional lan spill response equipment and material are on hand and in serviceable condition al fencing, if required, in good condition inspect audible alarms and/or high level gauges to verify working order
_	
NOTES:	
Unloading and	Loading Area:
	signs of leaks/spills on the ground where unloading/loading operations of petroleum producted
	signs present at the aboveground storage tanks to prevent vehicular departure before ect of transfer lines
_	inspect for adequate security (fencing entire facility)
 Visually 	ensure proper lighting at or near petroleum storage tanks
NOTES:	
Signature of Ins	pector:
Date:	



ATTACHMENT 6

UNLOADING CHECKLIST

- 1. Ensure that no one (person) smokes on or about any motor vehicle while loading or unloading any petroleum product and/or used oil.
- 2. Extreme care shall be taken in the loading or unloading of any petroleum product and/or used oil into or from any motor vehicle to keep fire away and to prevent persons in the vicinity from smoking, lighting matches, or carrying any flame or lighted cigar, pipe, or cigarette.
- 3. No material shall be loaded into or on, or unloaded from, any motor vehicle unless the hardbrake is securely set and all other reasonable precautions are taken to prevent motion of the motor vehicle during such loading or unloading process.
- 4. A motor carrier who transports petroleum product by a cargo tank must ensure that the cargo tank is attended by a qualified person at all times during unloading.
- 5. Ensure that the motor carrier cargo tank hose connections are constructed of aluminum or brass fittings.
- 6. Contractors are required to conduct a walk around inspection of the aboveground storage tanks before transferring products and report to the Facility Supervisor if leaks are detected. If there is a leak detected, the motor carrier driver will not transfer product until corrective action is taken.
- 7. The appropriate Facility Supervisor should be notified upon arrival of the cargo carrier so that a pre-check of the exterior conditions of the aboveground storage tank can be conducted prior to transfer of product.
- 8. The motor carrier must ensure that the ground cable from the cargo tank to the receptacle (Aboveground Storage Tank) is connected prior to dispensing petroleum product.

SPECIFIC CONTROL MANAGEMENT PRACTICES

- 1. Proper coupling of hose connections prior to loading and unloading operations.
- 2. Pre-inspection of the exterior area of aboveground storage tanks to check for leaks, condition of tanks and appurtenances.
- 3. A Facility Employee "attends" loading and unloading of petroleum product for use in business operations.
- 4. If a minor spill or leak occurs, Facility Personnel apply absorbent material (i.e. *Absorb-N-Dry* absorbs oil, grease, odors, moistures and liquids) to the impacted area, and allow the absorbent material to absorb the spilled liquid.
- 5. Sweep up/clean up the contaminated spill area (absorbent material) and properly dispose of the contaminated material.
- 6. Shut down/close the appropriate valve for each connecting line to the aboveground storage tank should a line break during loading or unloading operations.



UNLOADING CHECKLIST

(continued)

7. Open air vent line attached to the top surface of aboveground storage tanks prior to loading and unloading operations.



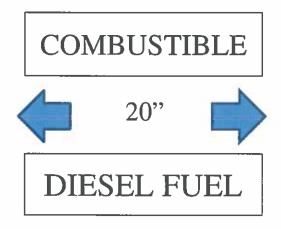
ATTACHMENT 7

NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) DECALS/MARKINGS FOR DISPLAY ON ABOVEGROUND STORAGE TANKS (AST)

The following diagrams show the appropriate decals/markings/signage to be placed on the sides of the ASTs (275 gallons to 10,000 gallons AST) containing combustible (diesel fuel) liquid products. These appropriate markings meet the criteria of the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), National Fire Protection Association (NFPA), Insurance Code, and County and State Fire Marshall's office.

1. Aboveground Storage Tank containing combustible liquid product – diesel fuel.

SIDE VIEW OF AST



(NOT DRAWN TO SCALE)

NOTES:

- a. Dimension of Pressure Sensitive Decals
 (Combustible) (Diesel Fuel): 4 inches wide x 20 inches long
- b. Color Coding: Red Letters; White Background
- c. Size of Letters: 3 inches
- d. Number of Decals: One (1) each for each side of AST



TITLE 40 CODE OF FEDERAL REGULATIONS (CFR) TITLE 112 (REVISED JULY 2005) (Partial)

This document may be viewed in its entirety at:

www.epa.gov/sites/production/files/2014-04/documents/b 40cfr112.pdf



ATTACHMENT 9

CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST

Facility	Name:	Bethlehem Landfill Com	pany
Facility	Address:	2335 Applebutter Road,	Bethlehem, PA 18015
1.		y transfer oil over water to equal to 42,000 gallons?	o or from vessels and does the facility have a total oil storage capacity
		Yes	No_X
2.	lack secondary	containment that is suffi	capacity greater than or equal to 1 million gallons and does the facility iciently large to contain the capacity of the largest aboveground oil allow for precipitation within any aboveground oil storage tank area?
		Yes	No_X
3.	located at a dist	tance (as calculated using able formula) such that a	capacity greater than or equal to 1 million gallons and is the facility the appropriate formula in 40 CFR 112, Appendix C, Attachment C-discharge from the facility could cause injury to fish and wildlife and
		Yes	No_X
4.	located at a dist	tance (as calculated using	capacity greater than or equal to 1 million gallons and is the facility the appropriate formula in 40 CFR 112, Appendix C, Attachment C-discharge form the facility would shut down a public drinking water
		Yes	NoX
5.			capacity greater than or equal to 1 million gallons and has the facility nount greater than or equal to 10,000 gallons within the last 5 years?
		Yes	No_X
I certify docume	nt, and that base		ally examined and am familiar with the information submitted in this individuals responsible for obtaining this information, I believe that omplete.
Print Na	ame: Astor A	A. Lawson	
Signatu		1000)	
	District Manage	<u> </u>	
Date:	10/22/2020		
		. A	ATTACHMENT 9



CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST (continued)

ENGINEER CERTIFICATION

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest that this Spill Prevention Control and Countermeasures (SPCC) Plan has been prepared in accordance with good engineering practices.

Engineer: Kevin Bodner
Signature:
Date: 10 27 20
MANAGER CERTIFICATION
Name of Facility: Bethlehem Landfill Company
Type of Facility: MSW Landfill
Year of Initial Facility Operation: 1941 as City of Bethlehem Landfill
Location of Facility: 2335 Applebutter Road, Bethlehem, PA 18015
Name and Address of Owner: Bethlehem Landfill Company
2335 Applebutter Road
Bethlehem, PA 18015
Designated Person Responsible for Spill Prevention (SPCC Coordinator): Name: Astor A. Lawson Title: District Manager
Assistant SPCC Coordinator: Name: Cody White Title: Compliance Manager
Oil Spill History: This facility has not had a known major reportable oil spill event during the preceding 12 months.



ATTACHMENT 9 CERTIFICATION OF THE APPLICABILITY OF THE SUBSTANTIAL HARM CRITERIA CHECKLIST (continued)

Management Approval

This SPCC Plan has been reviewed and approved by management at a level with the authority to commit necessary resources for implementing the Plan. The programs and procedures outlined in the Plan will be implemented and periodically reviewed and updated in accordance with 40 CFR Part 112, as amended and applicable state and local requirements.

Signature:	Contition	Date: _	10/22/2020
Name:	Astor A. Lawson (Printed)		
Title:	District Manager		



STATE NOTIFICATON

Notification to the PA Department of Environmental Protection would be primary with other agency notifications.

Refer to Table 4 and Appendix A.2.



APPENDIX A EMERGENCY RESPONSE, NOTIFICATION & SPILL CLEAN-UP

1.0 EMERGENCY SPILL RESPONSE PROCEDURES

Prompt response to a spill is the best means of minimizing any impact to the environment and in particular, preventing a discharge reaching the water of the United States. In the event of a spill of a petroleum product, the employee first becoming aware of the spill will assume the roll of temporary emergency coordinator until he/she can notify the primary emergency coordinator. If the temporary spill coordinator is unable to notify either the primary spill coordinator or any of the back-up emergency coordinators, then he/she will assume the responsibility of implementing the emergency spill response procedures to protect the public health and safety and the environment.

1.A. ASSESSMENT OF HAZARD

Upon notification of a petroleum related spill, the spill coordinator will determine the hazard potential of a spill response by determining at least the following factors:

- 1. The substance spilled and its hazard potential.
- 2. The quantity of substance spilled and the extent of the area impacted by the spilled substance.
- 3. The source of the leakage/spill.

Where appropriate, the spill coordinator shall consult with the facility Safety Manager to determine the potential hazard of the substance spilled to the employees and to the surrounding public.

If a spill is determined to be of such a magnitude that it cannot be safely and effectively controlled by facility personnel, then the coordinator shall promptly notify outside emergency response agencies to obtain assistance to control and clean up the area impacted. A list of contacts can be found in Appendix A.2. and Table 4.

1.B. SECURE SPILL RESPONSE AND PERSONAL PROTECTIVE EQUIPMENT

Upon determination of he hazard potential of the spilled substance, the spill coordinator shall direct employees to obtain the appropriate spill response equipment and to wear the required Personal Protective Equipment (PPE). Employees will be informed regarding the location of spill response equipment and PPE during orientation and during routine training. Shown in Appendix A.3. is a list of the spill response equipment and personal protective requirements for responses to oil pollution and/or other regulated material spills at the facility.

Employees are not to issue spill response equipment and Personal Protective Equipment (PPE) without having been trained on the proper use and limitations of the equipment.

1.C. CONTAINMENT AND ELIMINATING SPILL SOURCE



Upon obtaining the proper spill response equipment and PPE, the spill responder(s) shall first attempt to contain the spill so as to prevent its entry into a storm sewer, a ditch or any conveyance that eventually discharges to the waters of the United States. Examples of equipment and media that can be used to contain spills include, but are not limited to sorbent pads, earthen material, sandbags, "kitty litter", straw bales, and inert material.

At the same time that containment is being placed or as soon as possible after placement of containment, the spill responder(s) shall attempt to seal or otherwise stope the source of the spill. Common methods of eliminating a spill source include, but are not limited to closing valves, apply leak stopping compound for pinhole leaks, insert leaking 55 gallon drum within drum over packs, deactivating pumps, and diverting flow to another pathway.

2.0 SPILL CLEAN UP AND MITIGATE ENVIRONMENTAL IMPACT

Once the spill is contained and the source eliminated, the spill responders shall collect the spilled material by the appropriate manner and place the material into secure containers.

The area or surface in contact with the spilled material shall be decontaminated by an appropriate method that is permissible under Local, State, and Federal laws. The specific method used will depend upon the substance, the availability of permitted sewer discharge to a POTW, regulatory standards applicable to wastes, and other factors. The SPCC Spill Coordinator will select the appropriate decontamination method after determining the applicable facts and by conferring either with the regulators or a professional in the subject of spill response.

All spill material and debris will be managed in a manner that fully complies with applicable Local, State and Federal laws regarding recycling or disposal of wastes. The preferred method is to recycle or reclaim materials from spills in an effort to minimize waste generation. Where this is not feasible or allowed, then the collected spilled material will be disposed of in accordance with applicable Local, State and Federal laws.

3.0 NOTIFICATION OF COMPANY AND GOVERNMENTAL AGENTS

3.A. IMMEDIATE NOTIFICATION OF A SPILL

- 1. Any spill of a petroleum substance shall be reported immediately to the primary emergency coordinator or the alternate emergency coordinator by the employee who first notices the spill.
- 2. The primary emergency coordinator or in his/her absence, the alternate emergency coordinator shall notify the appropriate governmental authorities whenever a spill exceeds the reportable quantities required under State or Federal law as listed below.
 - a. In accordance with 40 CFR 112.4(a) the Federal reportable quantities are:
 - i. A discharge in excess of 1,000 gallons in a single event or



- ii. Two (2) discharges in excess of 42 U.S. gallons, or 1 barrel, within any twelve month period.
- b. The Commonwealth of Pennsylvania's Reportable Quantities (PA Code Title 25 pg. 262.46) Reporting and Clean-up of Surface Spills and Overfills) are:
 - i. Spill or overfill of petroleum that results in a release to the environment that exceeds 5 gallons (hazardous waste), or that causes a sheen on nearby surface water, or
 - ii. Spill or overfill of hazardous substance that results in a release to the environment that equals or exceeds its reportable quantity under CERCLA (40 CFR Part 302).

3.B. SEQUENCE OF EVENTS FOR NOTIFICATION PROCEDURES

The following is a sequence of events for notification procedures in the event of a discharge and/or release of petroleum product and/or used oil from Bethlehem Landfill.

The procedures outline responsibilities for notifying Bethlehem Landfill, local county, state and federal agencies, law enforcement authorities, nearby communities and adjacent landowners and businesses of a potential release or spill from the Bethlehem Landfill which may have a significant effect outside the boundary of the landfill property.

Internal Notification

The first person becoming aware of an emergency situation will immediately notify the primary coordinator. The primary coordinator or designee will assess the situation to determine any possible hazard to human health or the environment that may result from the release or spill and determine if the SPCC Plan will be implemented.

If the primary coordinator determines that the facility has had or may have a release or spill of petroleum product and/or used oil, which could threaten human health or the environment, the following actions will be taken:

- 1. Assess the incident and estimate the amount (quantity) of petroleum product and/or used oil that has been or will be released.
- 2. Notify the Primary Coordinator or emergency response team leader who will take appropriate action to implement emergency spill/release response procedures to contain, control, and clean up the release (discharge), and/or spill.
- 3. Initiate an emergency response form shown in Appendix A.2. and record the following information within the form:
 - a. Description of material spilled and/or released (discharged);
 - b. Date and time of the incident:



- c. Location of the incident:
- d. Source and cause of incident;
- e. If a spill, estimated volume of the spill, present and anticipated movement, including any petroleum product and/or used oil reaching navigable water of the United States and/or waters of the state;
- f. Equipment, apparatus or storage tank that was involved;
- g. Measures taken to control the incident;
- h. Weather conditions at the time of the incident (i.e. rain, snow, hail);
- i. The wind direction and speed;
- j. Type of clean-up operations and effectiveness of clean-up;
- k. Persons on the scene and the person to contact for information;
- 1. Any persons injured as a result of the spill and/or release; and,
- m. Time estimate on how long the release and/or discharge will last.
- 4. The appropriate Landfill Contact persons to alert on noted in Table 3.

Agency Notification

In the event of an unauthorized discharge or release of petroleum product and/or used oil of twenty-five (25) gallons or more onto land or any quantity into a water environment that results or imminently threatens to result in an emergency condition, the primary coordinator or his designee will notify the appropriate agencies immediately, but in no case later than 24 hours after discovery of the release (discharge) or spill. This notification will be by telephone, and then followed by written notification. Written notification will directly follow with clean-up documentation.

In the event that a significant unauthorized discharge or release of petroleum product and/or used oil of twenty-five (25) gallons or more onto land or any quantity into a water environment of the state occurs, but does <u>not</u> constitute an emergency condition, the primary coordinator or his designee will notify the agencies promptly, but in no case later than 24 hours after learning of the unauthorized discharge. This notification will be by telephone.

The designated telephone numbers to be used to notify the respective agencies are located in Table 4.

The following is a list of relevant information to be reported to local, state, and federal authorities via telephone regarding the nature of the release (discharge) and/or spill:



- 1. Name of the person making the notification and telephone number where any return calls can be received from appropriate agencies.
- 2. Name and location of facility or site where the unauthorized discharge is imminent or has occurred.
- 3. Date and time the incident began and ended or estimated time of continuation if discharge is continuing.
- 4. Extent of any injuries and identification of any personnel hazards which response agencies may face.
- 5. Common or scientific chemical name, D.O.T. hazard classification and the best estimate of amount of any or all discharged or released pollutants.
- 6. Brief description of the incident that will be sufficient to permit response agencies to formulate the level and extent of response activity.

Written Notification

Written reports (Appendix A.1.) of unauthorized discharge/release/spill incidents of 1,000 gallons in a single event or two (2) discharges in "harmful quantities" within any twelve (12) month period will be submitted to federal, state, and county agencies in addition to verbal notification in accordance with federal regulations. This written notification will be submitted within 15 calendar days after verbal notification.

The written notification reports will include the following listed data:

- 1. Name of persons and company filing the written report;
- 2. Name, address, and telephone number of the owner/operator of the facility;
- 3. Time and date of verbal notification, name of person making the notification, and identification of the facility from which the unauthorized discharge occurred;
- 4. Type of incident (e.g. spill, discharge, release);
- 5. Dates, times, and duration of the unauthorized discharge and if not corrected, the anticipated time it is expected to continue;
- 6. Name and quantity of material(s) involved;
- 7. Details of the circumstances and events leading to any emergency condition;
- 8. Common or scientific name, D.O.T. hazard classification, and best estimate of amounts of any or all discharged pollutants, including methodology for calculations and estimates;
- 9. Statement of actual or probable fate or disposition of the pollutant;



- 10. Assessment of actual or potential hazards to human health or the environment, where applicable;
- 11. Remedial actions taken, or to be taken, to stop unauthorized discharges or to recover pollutants;
- 12. Estimated quantity and disposition of recovered material that resulted from the incident; and,
- 13. Procedures or measures which have or will be adopted to prevent a recurrence of the incident.

3.C. DISCHARGE/RELEASE/SPILL CLEAN-UP

The following procedures are to be adhered to when responding to and cleaning up a discharge/release/spill:

- 1. Any material spilled will most likely be contained within the facility through the use secondary containment, temporary earthen berms, diversion ditches, booms, or equivalent containment measures. If for some unforeseen reason the spill reaches flowing water, storm sewers, tec., the first employee at the scene of the discharge/release/spill location will initiate notification procedures immediately and will also initiate measures to prevent any additional material from reaching the navigable waters of the United States and waters of the Commonwealth.
- In the event a spill occurs and the material is contained within the secondary containment area, the containment structure will immediately be inspected to assure that the secondary containment walls are intact.
- 3. In the event that the secondary containment wall is leaking, a temporary berm will be constructed using available equipment and supplies located on-site.
- 4. All clean-up personnel in direct contact with petroleum product and/or used oil or performing the actual clean-up tasks will wear personal protective clothing and equipment to include rubber boots, coveralls, and disposable gloves to prevent contamination to individuals personal clothing or his/her skin.
- 5. In some cases, if the discharge/release/spill is minor, absorptive material may be used to clean-up the discharge/release/spill. If used, the absorptive material should be spread on the contaminated area and left in place as long as necessary to ensure that all spilled material has been absorbed. The contaminated material and any contaminated soil will then be cleaned up and properly disposed in an approved manner.
- 6. If the material spill is too large to be cleaned up using sorbent material, then all free flowing petroleum product and/or used oil contained within the secondary containment area will be pumped into an appropriate storage container, solidified with an approved solidification agent and properly disposed at an approved disposal facility.
- 7. All surfaces exposed to the spilled petroleum product and/or used oil will be appropriately decontaminated.



8. It is the responsibility of the primary coordinator or his designee to assure that all material has been decontaminated and properly disposed of in accordance with all federal, state and local regulations.

3.D. DISCHARGE/RELEASE/SPILL RESPONSE AND NOTIFICATION REPORT FORM

A discharge/release/spill response and notification report form to be completed in the event of an unauthorized discharge/release/spill of petroleum product and/or used oil can be found in Appendix A.2.

3.E. SPILL RESPONSE AND PERSONAL PROTECTIVE EQUIPMENT

A list of equipment and material available for use in cleaning up a spill can be found in Appendix A.3.



EMERGENCY EVENT INVESTIGATION REPORT

The following is an example of a written notification to the appropriate agency.

Regional Administrator U.S. EPA Region III 165 Arch Street Philadelphia, PA 19106

Dear Sir/Madam:

	Herein notifies you of the following:
1.	Name of facility:
2.	Name(s) of the owner or operator of the facility:
3.	Location of the facility:
4.	Date of initial facility operation:
5.	Maximum storage or handling capacity of the facility and normal daily through put:
6.	Description of the facility, including maps, flow diagrams, and topographic maps:
7.	Attached is a complete copy of the SPCC Plan with amendment.
8.	A description and cause(s) of the incident, including the date, times, and duration, the common scientific name of spilled pollutant, estimated amount spilled, failure analysis for system or subsystem in which the failure occurred:
9.	Time and date of verbal notification, name of person making the notification, and identification of the facility from which the unauthorized discharge occurred:
10.	The corrective actions and/or countermeasures taken, including an adequate description of equipmer repairs and/or replacements and the disposition of recovered material:



11. Additional preventive measures taken or con	templated to minimize the possibility	of recurrent:
	· · ·	

APPENDIX A.1.

EMERGENCY EVENT INVESTIGATION REPORT (continued)

Please contact (Name of Manager or his designee) at (telephone number) if you have any questions on matters addressed in this correspondence.

Sincerely,

NOTE: A complete copy of all information provided to the U.S. EPA Regional Administrator pursuant to 40 CFR 112.4a shall be sent at the same time to the PaDEP in charge of water pollution activities in and for the state. In addition, a complete copy of all information shall be sent to Northampton County Emergency Management.



SPILL RESPONSE AND NOTIFICATION REPORT FORM

Incident & Response

Material Spill:	
Date of Incident:	Time of Spill:
Quantity of Spilled Material:	
Duration of Discharge:	
Weather Conditions:	
	<u> </u>
Description of clean-up operations	(equipment, materials, effectiveness, etc.):
Person Discovering Spill:	
Person at the scene at time of spill:	
Name of Emergency Coordinator/S	ite Manager Notified:
	mes & description of injuries):



APPENDIX A.2.

SPILL RESPONSE AND NOTIFICATION REPORT FORM (continued)

Notification

Name of Agency	PHONE NUMBER	DATE/TIME NOTIFIED	PERSON CONTACTED
Fire/Ambulance/Police	911		
PaDEP Emergency Number	866-852-0208	(X	
National Emergency Response	1-800-424-8802		
Northampton County Emergency Mgmt. Coordinator	610-759-2600		
USEPA – Region 3 Philadelphia 24 hrs/day phone #	215-597-9825		

Additional Agency Notification (if required

Pa Fish Commission Southeastern Regional Office	717-626-0228	
Other Agency		



APPENDIX A.3.

SPILL RESPONSE AND PERSONAL PROTECTIVE EQUIPMENT (PPE)

The following is a list of equipment and material that may be available for use in cleaning up a spill:

- 1. Safety Glasses
- 2. Rubber Boots
- 3. Disposable Gloves
- 4. Sorbent Material pads, booms, socks
- 5. Shovels/Scoops
- 6. Plastic Bags
- 7. Wheel Loader or equivalent
- 8. Clayey Earth Material
- 9. Coveralls, TYVEK
- 10. Back-Hoe, Earthmoving Equipment