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COMMUNITY SOLAR ENERGY PILOT PROGRAM

PROGRAM YEAR 1, APPLICATION PERIOD YEAR 1

FOR: OCEAN COUNTY LANDFILL CORPORATION

MANCHESTER TOWNSHIP, OCEAN COUNTY, NJ 08759



09/09/2019

Ocean County Landfill Corporation
Community Solar Project

To: New Jersey Board of Public Utilities
South Clinton Avenue, 7th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350

OCEAN COUNTY LANDFILL CORP. COMMUNITY SOLAR PROJECT

September 9, 2019

New Jersey Board of Public Utilities
44 South Clinton Avenue, 7th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350

RE: Program Year 1, Application Period 1 Community Solar Application

Dear Members of the Board of Public Utilities,

Advanced Solar Products, Inc. ("ASP") is pleased to submit this Community Solar application for Program Year 1, Application Period 1. ASP proposes to construct a 4,999.68 kW DC (3,600 kW AC) solar PV system at 2498 Route 70, Manchester Township, NJ 08759 to service customers in the JCP&L territory. The Community Solar facility will encompass 50 acres of the 725 acre property.

In May 2019, the Ocean County Landfill Corporation ("OCLC") working with its consultant, Greener By Design ("GBD") issued a competitive Request for Proposal seeking a qualified and experienced solar developer to install a PV system on the capped portion of the landfill as a Community Solar project. The Project Team of Spano Partners Holdings, LLC and ASP responded to the RFP and was subsequently awarded the project by way of a Letter of Intent, issued by OCLC, on August 14, 2019.

The Project Team carefully evaluated the May 2019 Request for Proposal and made several visits to the site. Based on the information gathered, current market factors, and our Project Team's expertise, we believe that the addition of a solar photovoltaic system at the Ocean County Landfill will provide the Township's low and middle income population with substantial economic and societal benefits while posing no adverse impact on the community.

This landfill site will be sustainably redeveloped to include all NJDEP guidelines and requirements. The project has the support of the Township and the Township has committed to assist the OCLC to find local low- and moderate-income subscribers. Through this project, the OCLC is committed to serving LMI customers, using the landfill to achieve renewable energy goals, greater than 51% residential subscribership, a 12% cost discount on electricity, educational opportunities and local job creation.

Title

If you have any questions, please do not hesitate to contact me at (908) 751-5858 x 108.
Thank you.

Sincerely,

Advanced Solar Products, Inc.

A handwritten signature in black ink, appearing to read 'Amjed Ibrahim', written over the company name.

Amjed Ibrahim

Project Manager

Advanced Solar Products, Inc.

270 South Main Street, Suite 203

Flemington, NJ 08822

(908) 751-5818

Community Solar Energy Pilot Program Application Form

Section A: Application Form Requirements, Instructions, Terms and Conditions

The following Application Form is intended only for entities submitting a community solar project for consideration by the New Jersey Board of Public Utilities (“Board” or “BPU”). Projects selected by the Board will be approved for participation in the Community Solar Energy Pilot Program, pursuant to the rules at N.J.A.C. 14:8-9.

This Application Form is valid only for the following Program Year and Application Period:

Program Year 1, Application Period 1

Application Period Opens: April 9, 2019 at 9:00 A.M.

Application Period Closes: September 9, 2019 at 5:00 P.M.

I. Minimum Qualification Requirements

The Community Solar Energy Pilot Program is open to projects that meet the following minimum requirements, and the full requirements defined in N.J.A.C. 14:8-9 (available for reference at the following link: [http://njcleanenergy.com/files/file/R_2019%20d_021%20\(51%20N_J_R_%20232\(a\)\).pdf](http://njcleanenergy.com/files/file/R_2019%20d_021%20(51%20N_J_R_%20232(a)).pdf)).

1. The proposed community solar project must be located in the electric service territory of an Electric Distribution Company (“EDC”) in the State of New Jersey.
2. Existing solar projects may not apply to requalify as a community solar project. An existing solar project, as defined in N.J.A.C. 14:8-9.2, means a solar project having begun operation and/or been approved by the Board for connection to the distribution system prior to February 19, 2019. Projects having received a subsection (t) conditional certification from the Board prior to February 19, 2019 should refer to section B. XIII. Special Authorizations and Exemptions for additional information.
3. The Board will not consider Applications for EDCs to develop, own, or operate community solar project(s).
4. The Board will not consider Applications for projects sited on preserved farmland, as defined in N.J.A.C. 14:8-9.2.
5. The Board will not consider Applications for projects exceeding the capacity limit for individual community solar projects, set at 5 MW as defined in N.J.A.C. 14:8-9.4(g).

II. Instructions for Completing the Community Solar Energy Pilot Program Application Form

1. Each solar project applying to participate in the Community Solar Energy Pilot Program requires the submission of an individual Application Form. Do not apply for more than one (1) project per Application Form. There is no limit to the number of Application Forms that can be submitted by any one Applicant (see the definition of an “Applicant” in section A. III. Terms and Conditions).

2. Complete sections B and C, and Appendix A in full. All questions are required to be answered, unless explicitly marked as optional. All attachments are required, unless explicitly marked as optional. All attachments must be attached to the end of the Application Form, therefore forming a complete application package. Note that attachments marked as optional will be considered if included, but their absence will not penalize an Application.
3. Original signatures on all forms and certifications of this Application Form are required. The certifications contained in section C must be notarized.
4. Specific exemptions are identified throughout the Application Form which apply only if: 1) the Applicant is a government entity (municipal, county, or state), AND 2) the community solar developer will be selected by the Applicant via a Request for Proposals (“RFP”), Request for Quotations (“RFQ”), or other bidding process. If this is the case, the Applicant must include a letter describing the proposed bidding process, and the Applicant should complete all sections of the Application Form based on the project as it will be designed in the bidding process. The Applicant must further commit to issuing said RFP, RFQ, or other bidding process within 90 days of the proposed project being approved by the Board for participation in the Community Solar Energy Pilot Program (see section B. XIII. Special Authorizations and Exemptions).

III. Terms and Conditions

General Terms and Conditions

1. The “Applicant” is defined as the entity that submits the Community Solar Energy Pilot Program Application Form (for example, an Applicant may be a project developer, project owner, project operator, property owner, contractor, installer, or agent thereof).
2. Prior to completing the Application Form, the Applicant must carefully review the rules at N.J.A.C. 14:8-9, and any other rules, regulations, and codes applicable to the design, construction, and operation of a community solar project in New Jersey. All Applications must be in compliance with all local, state and federal rules, regulations and laws. Furthermore, submission of an Application Form does not obviate the need for compliance with all applicable local, state, and federal laws and regulations at any time during the design, construction, operation, and decommissioning of a community solar project including, but not limited to, regulations by commissions such as the New Jersey Highlands Council and the New Jersey Pinelands Commission.
3. By submitting an Application, the Applicant acknowledges notice on behalf of all project participants that the information included in the Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47:1A-1 et seq. Aggregated information may be used by the Board and/or other state, federal, county, regional or local agencies in reports and evaluations, and the geographic location may be used to update Geographic Information System (“GIS”) mapping. Applicants may identify sensitive and trade secret information that they wish to keep confidential by submitting them in accordance with the confidentiality procedures set forth in

N.J.A.C. 14:1-12.3. Furthermore, the Applicant understands that the list of approved community solar projects will be published on the Board of Public Utilities website.

4. Amendments or supplements to the Community Solar Energy Pilot Program Application Form will be made available via the New Jersey Clean Energy Program (“NJCEP”) website at www.njcleanenergy.com. This Application Form may be modified for future Application Periods at any time without prior notification.

Evaluation of Applications and Approval of Projects

5. Only Applications that are administratively complete by the close of the Application Period will be considered for participation in the Community Solar Energy Pilot Program during that Program Year. An application will be deemed administratively complete if: 1) All questions are completed, except those explicitly marked as optional, 2) All required attachments are included (see Appendix B for a checklist of required attachments), and 3) All required signatures are included. Applicants will be notified if an Application is deemed administratively incomplete. An incomplete Application may be amended and resubmitted during the following Application Period without advantage or disadvantage.
6. The Applicant may be required to supplement the information provided in the Application Form upon request from the Board or Board Staff.
7. Following the close of the Application Period, each Application will be reviewed and evaluated by a dedicated Evaluation Committee.
8. In reviewing each application, Board Staff may consult with the New Jersey Department of Environmental Protection (“NJDEP”), the New Jersey Department of Agriculture, or other state agencies and consultants as are relevant to the Application. Any information marked and submitted as confidential will be treated as such by the receiving agency, and used for the sole purpose of evaluation.
9. The criteria for evaluation of Applications are presented in Appendix C (Evaluation Criteria). Projects must score a minimum 30 points total in order to be considered for participation in the Community Solar Energy Pilot Program. Projects that score above 30 points will be presented to the Board for approval for participation in the Community Solar Energy Pilot Program in order, starting with the highest-scoring project and proceeding to the lowest-scoring project, and until the allocated program capacity for that Program Year is filled.
The allocated program capacity for Program Year 1 is 75 MW. At least 40% of program capacity (i.e. at least 30 MW) will be allocated to LMI projects.
10. Board Staff may reject Applications that are incomplete at the close of the Application Period, that are not in compliance with the rules and regulations established in N.J.A.C. 14:8-9, or that do not meet a minimum standard for selection, as set forth in this Application Form.

Milestones and Follow-Up for Approved Projects

11. Should the proposed community solar project be approved by the Board for participation in the Community Solar Energy Pilot Program, such approval will be contingent on the project being constructed and operated as was proposed in its Application.

Furthermore, pursuant to the rules at N.J.A.C. 14:8-9.3(c), approved projects are expected to begin construction within 6 months of their approval by the Board, and are expected to become fully operational within 12 months of their approval by the Board. Extensions may be granted by Board Staff at its discretion, based on its assessment of the specific circumstances of each project approved.

In order to monitor compliance, approved projects will be required to submit updates to the Board:

- a. Prior to the beginning of construction, the Applicant must provide evidence that commitments in the following categories have been met: project location, community and environmental justice engagement, other benefits.
- b. Prior to applying for permission to operate (“PTO”), the Applicant must provide evidence that commitments in the following categories have been met: siting (other than location), all permits received.
- c. Prior to applying to the EDC for allocation of bill credits, the Applicant must provide evidence that commitments in the following categories have been met: product offering, subscriber type, geographic limit within EDC service territory.

If the approved project fails to be completed as proposed in the Application, and the Applicant fails to remediate the failure or provide an equivalent modification within a reasonable timeframe, the project may be penalized up to and including a withdrawal of the permission to operate in the Community Solar Energy Pilot Program.

Special Considerations for Project Siting

12. Unless the proposed community solar facility is located on a rooftop, parking lot, or parking structure, the Applicant must meet with the NJDEP’s Office of Permit Coordination and Environmental Review (“PCER”) to determine what permits may be required and to identify other potential issues. More information is available at: <http://www.nj.gov/dep/pcer>. The Applicant must have completed the NJDEP Permit Readiness Checklist and submitted said Checklist to NJDEP PCER prior to submitting the Application to the Board (see section B. VIII. Permits). The Permit Readiness Checklist is available at the following link: <https://www.nj.gov/dep/pcer/introchecklist.htm>.

13. Special attention should be paid when siting a project on a landfill, a brownfield, or an area of historic fill. For reference, NJDEP’s *Guidance for Installation of Solar Renewable Energy Systems on Landfills in New Jersey* can be found at the following link: <https://www.nj.gov/dep/dshw/swp/solarguidance.pdf>.

14. The Applicant should review the environmental compliance history at the proposed site and the various operations that were conducted there. Satisfaction of all outstanding NJDEP regulatory

compliance obligations, if applicable, will be required prior to applying for permission to operate. The Applicant should identify any outstanding compliance and enforcement issues associated with the property on which the proposed project is to be sited and resolve them accordingly before submitting the Post Construction NJDEP Compliance Form, if applicable.

15. If the proposed project is sited on Green Acres preserved open space, as defined in N.J.A.C. 14:8-9.2, or on land owned by NJDEP, the Applicant must receive special approval for the project from NJDEP prior to submitting the Application to the Board, and attach proof of approval to their application package (see section B. VII. Community Solar Facility Siting).

Submitting an Application

Applications must adhere to all of the following instructions for submission. Applications must be received no later than 5:00 P.M. on the date of the close of the Application Period in order to be considered.

Mail or hand-deliver the original complete Application package plus three copies of the complete Application package to:

New Jersey Board of Public Utilities
44 South Clinton Avenue, 7th Floor
Post Office Box 350
Trenton, New Jersey 08625-0350
Attn: Office of Clean Energy
Community Solar Energy Pilot Program Application Package

In addition, submit an electronic version of the complete Application package to both of the following email addresses: communitysolar@njcleanenergy.com and board.secretary@bpu.nj.gov.

Questions and Further Information

Please address all questions pertaining to the Application Form to communitysolar@njcleanenergy.com.

Additional guidance and Frequently Asked Questions will be available on the NJCEP website at: <http://njcleanenergy.com/renewable-energy/programs/community-solar>.

If the proposed community solar project will be primarily built by a contracted EPC company, complete the following (optional, complete if known):

If the EPC company information is left blank and the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program, the Applicant must inform the Board of the information below once the EPC company becomes known.

EPC Company Name (optional, complete if applicable): Advanced Solar Products, Inc.
 First Name: Lyle Last Name: Rawlings
 Daytime Phone: (908) 751-5818 Email: Lyle@advancedsolarproducts.com
 Mailing Address: 270 South Main Street, Suite 203,
 Municipality: Flemington, County: _____ Zip Code: 08822

IV. Property/Site Owner Information

Property Owner Company/Entity Name: Ocean County Landfill Corp./Atlantic Pier Corporation
 First Name: Larry Last Name: Hesse
 Daytime Phone: 732.657.5100 Email: lhesse@cjhesse.com
 Applicant Mailing Address: 2498 State Highway 70
 Municipality: Manchester Twsp County: Ocean County Zip Code: 08759

V. Community Solar Subscriber Organization (optional, complete if known)

If this section, "Community Solar Subscriber Organization," is left blank and the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program, the Applicant must inform the Board of the information below once the Subscriber Organization becomes known.

Subscriber Organization Company/Entity Name (optional, complete if applicable): _____
 First Name: _____ Last Name: _____
 Daytime Phone: _____ Email: _____
 Mailing Address: _____
 Municipality: _____ County: _____ Zip Code: _____

VI. Proposed Community Solar Facility Characteristics

Community Solar Facility Size (as denominated on the PV panels):
3.6 MW AC 4,999 MW DC

Community Solar Facility Location (Address): 2498 ROUTE 70
 Municipality: Manchester Twsp County: Ocean Zip Code: 08759

Name of Property (optional, complete if applicable): Ocean County Landfill Corporation
 Property Block and Lot Number(s): Block 2 Lot 6 APC, 19 APC, 20 APC, 21 OCLC, 22 APC
Block 2 Lot 23 APC, 24 APC, 59 APC, 62 APC



Community Solar Site Coordinates: -74.032390 Longitude 40.024231 Latitude

Total Acreage of Property Block and Lots: 725 acres, _____ acres

Total Acreage of Community Solar Facility: 50 _____ acres

Attach a delineated map of the portion of the property on which the community solar facility will be located. In the electronic submission, two copies of the delineated map should be provided: 1) as a PDF document, and 2) as a design plan in drawing file format (.dwg) or as a shapefile (.shp), in order to facilitate integration with Geographic Information System (GIS) software.

EDC electric service territory in which the proposed community solar facility is located: *(select one)*

- Atlantic City Electric
- Jersey Central Power & Light
- Public Service Electric & Gas
- Rockland Electric Co.

Estimated date of project completion* *(The Applicant should provide a good faith estimate of the date of project completion; however, this data is being collected for informational purposes only.):* September (month) 2020 (year)

Project completion is defined pursuant to the definition at N.J.A.C. 14:8-9.3 as being fully operational, up to and including having subscribers receive bill credits for their subscription to the project.

The proposed community solar facility is an existing project* Yes No

If "Yes," the Application will not be considered by the Board. See section B. XIII. for special provisions for projects having received a subsection (t) conditional certification from the Board prior to February 19, 2019.

*Existing project is defined in N.J.A.C. 14:8-9.2 as a solar project having begun operation and/or been approved by the Board for connection to the distribution system prior to February 19, 2019.

VII. Community Solar Facility Siting

1. The proposed community solar project has site control* Yes No

If "Yes," attach proof of site control.
If "No," the Application will be deemed incomplete.

*Site control is defined as property ownership or option to purchase, signed lease or option to lease, or signed contract for use as a community solar site or option to contract for use as a community solar site.

2. The proposed community solar facility is located, in part or in whole, on preserved farmland* Yes No

If "Yes," the Application will not be considered by the Board.



*Preserved farmland is defined in N.J.A.C. 14:8-9.2 as land from which a permanent development easement was conveyed and a deed of easement was recorded with the county clerk's office pursuant to N.J.S.A. 4:1C-11 et seq.; land subject to a farmland preservation program agreement recorded with the county clerk's office pursuant to N.J.S.A. 4:1C-24; land from which development potential has been transferred pursuant to N.J.S.A. 40:55D-113 et seq. or N.J.S.A. 40:55D-137 et seq.; or land conveyed or dedicated by agricultural restriction pursuant to N.J.S.A. 40:55D-39.1.

3. The proposed community solar facility is located, in part or in whole, on Green Acres preserved open space* or on land owned by the New Jersey Department of Environmental Protection (NJDEP) Yes No

If "Yes," the Applicant must attach special authorization from NJDEP for the site to host a community solar facility. The Board will not consider Applications for projects located, in part or in whole, on Green Acres preserved open space or on land owned by NJDEP, unless the Applicant has received special authorization from NJDEP and includes proof of such special authorization in the Application package.

*Green Acres preserved open space is defined in N.J.A.C. 14:8-9.2 as land classified as either "funded parkland" or "unfunded parkland" under N.J.A.C. 7:36, or land purchased by the State with "Green Acres funding" (as defined at N.J.A.C. 7:36).

4. The proposed community solar facility is located, in part or in whole, on land located in the New Jersey Highlands Planning Area or Preservation Area Yes No

5. The proposed community solar facility is located, in part or in whole, on land located in the New Jersey Pinelands Yes No

6. The proposed community solar facility is located, in part or in whole, on land that has been actively devoted to agricultural or horticultural use and that is/has been valued, assessed, and taxed pursuant to the "Farmland Assessment Act of 1964," P.L. 1964, c.48 (C. 54:4-23.1 et seq.) at any time within the ten year period prior to the date of submission of the Application Yes No

7. The proposed community solar facility is located, in part or in whole, on a landfill Yes No
 If "Yes," provide the name of the landfill, as identified in NJDEP's database of New Jersey landfills, available at www.nj.gov/dep/dshw/lrm/landfill.htm: Ocean County Landfill Corporation (OCLC) Solid Waste Facility (SWF)

8. The proposed community solar facility is located, in part or in whole, on a brownfield Yes No
 If "Yes," has a final remediation document been issued for the property? Yes No



If “Yes,” attach a copy of the Response Action Outcome (“RAO”) issued by the LSRP or the No Further Action (“NFA”) letter issued by NJDEP.

9. The proposed community solar facility is located, in part or in whole, on an area of historic fill Yes No
 If “Yes,” have the remedial investigation requirements pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-4.7 been implemented? Yes No
 Has the remediation of the historic fill been completed pursuant to the Technical Requirements for Site Remediation, N.J.A.C. 7:26E-5.4? Yes No
 If the remediation of the historic fill has been completed, attach a copy of the Response Action Outcome (“RAO”) issued by a Licensed Site Remediation Professional (“LSRP”) or the No Further Action (“NFA”) letter issued by NJDEP.

10. The proposed community solar facility is located on a parking lot Yes No

11. The proposed community solar facility is located on a parking deck Yes No

12. The proposed community solar facility is located on a rooftop Yes No

13. The proposed community solar facility is located on a canopy over an impervious surface (e.g. walkway) Yes No

14. The proposed community solar facility is located on the property of an affordable housing building or complex Yes No

15. The proposed community solar facility is located on a water reservoir or other water body (“floating solar”) Yes No

16. The proposed community solar facility is located on an area designated in need of redevelopment Yes No
 If “Yes,” attach proof of the designation of the area as being in need of redevelopment from a municipal, county, or state entity.

17. The proposed community solar facility is located on land or a building that is preserved by a municipal, county, state, or federal entity Yes No
 If “Yes,” attach proof of the designation of the area as “preserved” from a municipal, county, or state entity.

18. The proposed community solar facility is located, in part or in whole, on forested lands Yes No

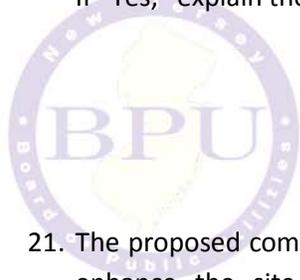


Construction of the proposed community solar facility will require cutting down one or more trees Yes No
 If "Yes," estimated number of trees required to be cut for construction: _____

19. The proposed community solar facility is located on land or a building owned or controlled by a government entity, including, but not limited to, a municipal, county, state, or federal entity Yes No

20. Are there any use restrictions at the site? Yes No
 If "Yes," explain the use restriction below and provide documentation that the proposed community solar project is not prohibited.

Will the use restriction be required to be modified? Yes No
 If "Yes," explain the modification below.



21. The proposed community solar facility has been specifically designed or planned to preserve or enhance the site (e.g. landscaping, land enhancements, pollination support, stormwater management, soil conservation, etc.) Yes No
 If "Yes," explain below, and provide any additional documentation in an attachment.

The site closure plan includes various measures to enhance the site. Measure detailed in the closure plan will include:

- Vegetative cover: to protect slopes from soil erosion, Enhance evapotranspiration, and Improve site aesthetics.
- Control surface water drainage: The surface water drainage system incorporates measures to control run off. Surface water is transported by interior and perimeter drainage channels to stormwater Basins A, B, C and D. All basins recharge to groundwater with no discharge to bodies of surface water.

VIII. Permits

1. The Applicant has completed NJDEP Permit Readiness Checklist, and submitted it to NJDEP's PCER Yes No
 If "Yes," attach a copy of the completed Permit Readiness Checklist as it was submitted to NJDEP PCER. [Attached 8.1](#)



If “No,” the Application will be deemed incomplete. Exception: Applications for community solar projects located on a rooftop, parking lot, or parking structure are exempt from this requirement.

Letter from NJDEP indicating email response is sufficient

2. The Applicant has met with NJDEP’s PCER Yes No
 If “Yes,” attach proof of a meeting with NJDEP PCER.

If “No,” the Application will be deemed incomplete. Exception: Applications for community solar projects located on a rooftop, parking lot, or parking structure are exempt from this requirement.

3. Please list all permits, approvals, or other authorizations that will be needed for the construction and operation of the proposed community solar facility pursuant to local, state and federal laws and regulations. Include permits that have already been received, have been applied for, and that will need to be applied for. The Applicant may extend this table by attaching additional pages if necessary. These include:

- a. Permits, approvals, or other authorizations from NJDEP (i.e. Land Use, Air Quality, New Jersey Pollutant Discharge Elimination System “NJPDES”, etc.) for the property.
- b. Permits, approvals, or other authorizations from NJDEP (i.e. Land Use, Air Quality, NJPDES, etc.) directly related to the installation and operation of a solar facility on this property.
- c. Permits, approvals, or other authorizations other than those from NJDEP for the development, construction, or operation of the community solar facility (including local zoning and other local and state permits)

An Application that does not list all permits, approvals, or other authorizations that will be needed for the construction and operation of the proposed community solar facility will be deemed incomplete.

If a permit has been received, attach a copy of the permit.

Permit Name & Description	Permitting Agency/Entity	Date Permit Applied for (if applicable) / Date Permit Received (if applicable)
Industrial Development		
Electrical Permits		
Solid Waste Facility Permit (SWF Permit)	NJDEP	October 6, 2015
Discharge to Groundwater (DGW) Permit		
NJPollution Discharge Elimination System (NJPDES)		
Closure and Post-Closure Care Plan Permit		
Sanitary Landfill Major Disruption Approval		
Utility Approval		
Soil Conservation District Approval		
County Planning Board Approval		
Municipal Zoning/Planning Board		
Municipal Tree Removal Permit		
Municipal Construction Office Permits		



4. The Applicant has consulted the hosting capacity map of the relevant EDC and determined that, based on the capacity hosting map as published at the date of submission of the Application, there is sufficient capacity available at the proposed location to build the proposed community solar facility [Attached 8.4](#) Yes No
 If “Yes,” include a screenshot of the capacity hosting map at the proposed location, showing the available capacity.
 If “No,” the Application will be deemed incomplete.

IX. Community Solar Subscriptions and Subscribers

1. Estimated or Anticipated Number of Subscribers (*please provide a good faith estimate or range*):
650
2. Estimated or Anticipated Breakdown of Subscribers (*please provide a good faith estimate or range of the kWh of project allocated to each category*):
 Residential: 80% Commercial: 10%
 Industrial: 10% Other: _____ (define “other”: _____)
3. The proposed community solar project is an LMI project* Yes No
 *An LMI project is defined pursuant to N.J.A.C. 14:8-9 as a community solar project in which a minimum 51 percent of project capacity is subscribed by LMI subscribers.
4. The proposed community solar project will allocate at least 51% of project capacity to residential customers Yes No
5. The proposed community solar project is being developed in partnership with an affordable housing provider: Yes No
 If “Yes,” attach a letter of support from the affordable housing provider.
6. An affordable housing provider is seeking to qualify as an LMI subscriber for the purposes of the community solar project Yes No
 If “Yes,” estimated or anticipated percentage of the project capacity for the affordable housing provider’s subscription (*provide an estimate or range*): _____

If “Yes,” what specific, substantial, identifiable, and quantifiable long-term benefits from the community solar subscription are being passed through to their residents/tenants?



Additionally, the affordable housing provider must attach a signed affidavit that the specific, substantial, identifiable, and quantifiable long-term benefits from the community solar subscription will be passed through to their residents/tenants.

7. This project uses an anchor subscriber (*optional*) Yes No
 If "Yes," name of the anchor subscriber (*optional*): _____
 Estimated or anticipated percentage or range of the project capacity for the anchor subscriber's subscription: _____
8. Is there any expectation that the account holder of a master meter will subscribe to the community solar project on behalf of its tenants? Yes No
 If "Yes," what specific, identifiable, sufficient, and quantifiable benefits from the community solar subscription are being passed through to the tenants?



Additionally, the account holder of the master meter must attach a signed affidavit that the specific, identifiable, sufficient, and quantifiable benefits from the community solar subscription will be passed through to the tenants.

If "No," please be aware that, if, at any time during the operating life of the community solar project the account holder of a master meter wishes to subscribe to the community solar project on behalf of its tenants, it must submit to the Board a signed affidavit that the specific, identifiable, sufficient, and quantifiable benefits from the community solar subscription will be passed through to its tenants.

9. The geographic restriction for distance between project site and subscribers is: (*select one*)
- No geographic restriction: whole EDC service territory
 - Same county OR same county and adjacent counties
 - Same municipality OR same municipality and adjacent municipalities

Note: The geographic restriction selected here will apply for the lifetime of the project, barring special dispensation from the Board, pursuant to N.J.A.C. 14:8-9.5(a).



10. Product Offering: *(The Applicant must also complete and attach one or more product offering form(s) found in Appendix A. See Appendix A for exemptions.)*

The subscription proposed offers guaranteed or fixed savings to subscribers Yes No

If "Yes," the guaranteed or fixed savings are offered as:

- A percentage saving on the customer's annual electric utility bill
- A percentage saving on the customer's community solar bill credit
- Other: _____

If "Yes," the proposed savings represent:

- 0% - 5% of the customer's annual electric utility bill or bill credit
- 5% - 10% of the customer's annual electric utility bill or bill credit
- 10% - 20% of the customer's annual electric utility bill or bill credit
- over 20% of the customer's annual electric utility bill or bill credit

The subscription proposed offers subscribers ownership or a pathway to ownership of a share of the community solar facility Yes No

If "Yes," include proof of a pathway to ownership of a share of the community solar facility offered to the subscribers in Appendix A.

11. The list of approved community solar projects will be published on the Board's website. Additionally, subscriber organizations have the option of indicating, on this list, that the project is currently seeking subscribers.

If this project is approved, the Board should indicate on its website that the project is currently seeking subscribers Yes No

If "Yes," the contact information indicated on the Board's website should read:

Company/Entity Name: SPH Contact Name: Joe SPano
 Daytime Phone: (732) 713-9068 Email: Jspano@spanopartners.com

Note: it is the responsibility of the project's subscriber organization to notify the Board if/when the project is no longer seeking subscribers, and request that the Board remove the above information on its website.

X. Community Engagement

1. The proposed community solar project is being developed by or in collaboration* with the municipality in which the project is located Yes No

If "Yes," explain how and attach a letter of support from the municipality in which the project is located.

*Collaboration with the municipality should include, at minimum, one or more meetings with relevant municipal authorities and clear evidence of municipal involvement and approval of the design, development, or operation of the proposed community solar project.



2. The proposed community solar project is being developed in collaboration* with one or more local community organization(s) Yes No

If "Yes," explain how and attach a letter of support from the local community organization(s).

*Collaboration with a local community organization should include, at minimum, one or more meetings with the relevant local community organization(s) and clear evidence of the local community organization's involvement and approval of the design, development, or operation of the proposed community solar project.

3. The proposed community solar project was developed, at least in part, through a community consultative process* Yes No

If "Yes," please describe the consultative process.

*A community consultative process should include, at minimum, one or more opportunities for public intervention and outreach to the municipality and/or local community organizations.

Acting on behalf of OCLC, GbD collaborated with the Township and the Township's Municipal Engineer, Maser Consulting, PA to enhance and improve the community benefits of the Township's separate Community Solar application by agreeing to consider a cooperative approach to combine local government, professionals, and contractor resources to aggregate the Township's LMI & non-profit resident and stakeholder groups to deliver the greatest possible benefit for the longest term at the lowest implementation cost.

XI. Project Cost

1. Provide the following cost estimates and attach substantiating evidence in the form of charts and/or spreadsheet models:

Applicants are expected to provide a good faith estimate of costs associated with the proposed community solar project, as they are known at the time the Application is filed with the Board. This information will not be used in the evaluation of the proposed community solar project.

Net Installed Cost (in \$)	
Net Installed Cost (in \$/Watt)	
Initial Customer Acquisition Cost (in \$/Watt)	
Annual Customer Churn Rate (in %)	



Annual Operating Expenses (in c/kWh)	
LCOE (in c/kWh)	

- Pursuant to N.J.A.C. 14:8-9.7(q), "community solar projects shall be eligible to apply, via a one-time election prior to the delivery of any energy from the facility, for SRECs or Class I RECs, as applicable, or to any subsequent compensations as determined by the Board pursuant to the Clean Energy Act."

For indicative purposes only, please indicate all local, state and federal tax incentives which will be applied to if the proposed community solar project is approved for participation in the Community Solar Energy Pilot Program:

Modified Accelerated Cost Recovery System (MACRS), ITC, Solar Renewable Energy Certificates (SRECs)

XII. Other Benefits

- The proposed community solar facility is paired with another distributed energy resource:
 - Micro-grid project Yes No
 - Storage Yes No
 - Other (*identify*): _____ Yes No

- The proposed community solar facility provides grid benefits (e.g. congestion reduction) Yes No
 If "Yes" to any, please explain how and provide supporting documents.

- The proposed community solar project will create temporary or permanent jobs in New Jersey Yes No
 If "Yes," estimated number of temporary jobs created in New Jersey: 20
 If "Yes," estimated number of permanent jobs created in New Jersey: 2

- The proposed community solar project will provide job training opportunities for local solar trainees Yes No
 If "Yes," will the job training be provided through a registered apprenticeship? Yes No

Local union hall will be used for the electrical construction of the site. Our electrical Subcontractor has on many occasions brought in apprentices to train on such job sites.



If "Yes," identify the entity or entities through which job training is or will be organized (e.g. New Jersey GAINS program, partnership with local school):

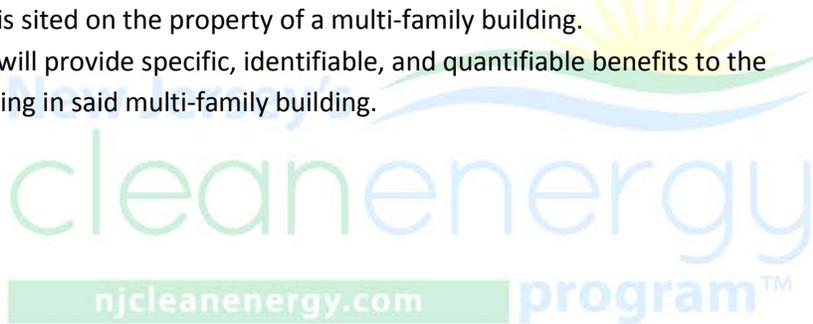
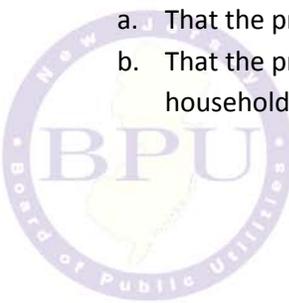
International Brotherhood of Electrical Workers (IBEW) Local 400

XIII. Special Authorizations and Exemptions

1. Is the proposed community solar project co-located with another community solar facility (as defined at N.J.A.C. 14:8-9.2)? Yes No
 If "Yes," please explain why the co-location can be approved by the Board, consistent with the provisions at N.J.A.C. 14:8-9.

2. Does this project seek an exemption from the 10-subscriber minimum? Yes No
 If "Yes," please demonstrate below (and attach supporting documents as relevant):

- a. That the project is sited on the property of a multi-family building.
- b. That the project will provide specific, identifiable, and quantifiable benefits to the households residing in said multi-family building.

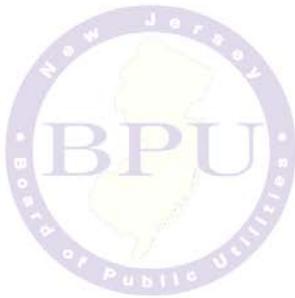


3. Specific sections throughout the Application Form are identified as optional only if: 1) the Applicant is a government entity (municipal, county, or state), and 2) the community solar developer will be selected by the Applicant via a RFP, RFQ, or other bidding process. Has the Applicant left those specific sections blank? Yes No
 If "Yes," attach a letter describing the proposed bidding process. The Applicant must further commit to issuing said RFP, RFQ, or other bidding process within 90 days of the proposed project being approved by the Board for participation in the Community Solar Energy Pilot Program. The Applicant will be required to provide the information contained in those optional sections to the Board once it becomes known.

4. Has the proposed community solar project received, in part or in whole, a subsection (t) conditional certification from the Board prior to February 19, 2019? Yes No
 If "Yes," the project may apply to participate in the Community Solar Energy Pilot Program if it commits to withdrawing the applicable subsection (t) conditional certification immediately if it is approved by the Board for participation in the Community Solar Energy Pilot Program. Attach a signed affidavit that the Applicant will immediately withdraw the applicable subsection (t)



conditional certification if the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program.



Section C: Certifications

Instructions: Original signatures on all certifications are required. All certifications in this section must be notarized.

Applicant Certification

The undersigned warrants, certifies, and represents that:

- 1) I, Joseph Spano (name) am the Managing Partner (title) of the Applicant Spano Partners Holdings, LLC (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the SREC Registration Program or subsequent revision to the SREC Registration Program, if applicable; and
- 5) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 6) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: _____

Date: 8/21/19

Print Name: Joseph Spano

Title: Managing Partner

Company: Spano Partners Holdings, LLC.

Signed and sworn to before me on this 21 day of August 21, 2019

Signature _____

Name

Anthony T Psomas

Notary Public
New Jersey

My Commission Expires 3-13-2024
No. 2223278

New Jersey Board of Public Utilities

Page 20 of 28

Program Year 1, Application Period 1

Project Developer Certification

This Certification "Project Developer / Installer" is optional if: 1) the Applicant is a government entity (municipal, county, or state), AND 2) the community solar developer will be selected by the Applicant via a Request for Proposals (RFP), Request for Quotations (RFQ), or other bidding process. In all other cases, this Certification is required.

The undersigned warrants, certifies, and represents that:

- 1) I, Joe Spano (name) am the Managing Member (title) of the Project Developer Spano Partners Holding (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the SREC Registration Program or subsequent revision to the SREC Registration Program, if applicable; and
- 5) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 6) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: _____

Date: 9/4/19

Print Name: Joe Spano

Title: Managing Member

Company: Spano Partners Holdings, LLC

Signed and sworn to before me on this 4 day of September, 2019

Signature _____

Name _____

Anthony T Psomas
Notary Public
New Jersey
My Commission Expires 3-13-2024
No. 2223278



Project Owner Certification

The undersigned warrants, certifies, and represents that:

- 1) I, Joe Spano (name) am the Managing Member (title) of the Project Owner Spano Partners Holdings LLC (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) The system proposed in the Application will be constructed, installed, and operated in accordance with all Board policies and procedures for the SREC Registration Program or subsequent revision to the SREC Registration Program, if applicable; and
- 5) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 6) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: [Signature] Date: 9/5/19

Print Name: Joe Spano
 Title: Managing Member Company: Spano Partners Holdings, LLC

Signed and sworn to before me on this 5 day of September, 2019

[Signature]
 Signature

Name
Anthony T Psomas
 Notary Public
 New Jersey
 My Commission Expires 3-13-2024
 No. 2223278



Property Owner Certification

The undersigned warrants, certifies, and represents that:

- 1) I, Lawrence Hesse (name) am the President (title) of the Property Atlantic Pier Co 2498 Route 70, Manchester Township, NJ 08758 (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package pertaining to siting and location of the proposed community solar project has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) My organization or I understand that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 4) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature: 

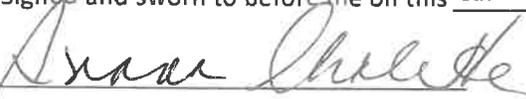
Date: 9-6-2019

Print Name: Lawrence Hesse

Title: President

Company: Atlantic Pier Company

Signed and sworn to before me on this 6th day of September, 2019


Signature

Ivana Choletto
Name
Notary Public of New Jersey
My Commission Expires Mar. 7, 2021



Property Owner Certification

The undersigned warrants, certifies, and represents that:

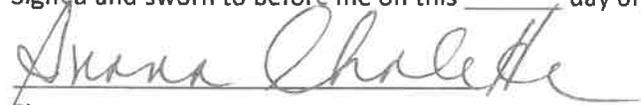
- 1) I, Lawrence Hesse (name) am the President (title) of the Property Ocean County Landfill Corporation 2498 Route 70, Manchester Township, NJ 08759 (name) and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package pertaining to siting and location of the proposed community solar project has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) My organization or I understand that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 4) My organization acknowledges that **submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.**

Signature:  Date: 9-6-2019

Print Name: Lawrence Hesse

Title: President Company: Ocean County Landfill Corporation

Signed and sworn to before me on this 6th day of September, 2019


Signature

Ivana Cholette
Name **Notary Public of New Jersey**
My Commission Expires Mar. 7, 2021



Subscriber Organization Certification (optional, complete if known)

The undersigned warrants, certifies, and represents that:

- 1) I, Jeffrey Mayer (name) am the CEO + General Mgr (title) of the Subscriber Organization Solomon Community Solar LLC and have been authorized to file this Applicant Certification on behalf of my organization; and
- 2) The information provided in this Application package has been personally examined, is true, accurate, complete, and correct to the best of the undersigned's knowledge, based on personal knowledge or on inquiry of individuals with such knowledge; and
- 3) The community solar facility proposed in the Application will be constructed, installed, and operated as described in the Application and in accordance with all Board rules and applicable laws; and
- 4) My organization understands that certain information in this Application is subject to disclosure under the Open Public Records Act, N.J.S.A. 47-1A-1 et seq., and that sensitive and trade secret information that they wish to keep confidential should be submitted in accordance with the confidentiality procedures set forth in N.J.A.C. 14:1-12.3.; and
- 5) My organization acknowledges that submission of false information may be grounds for denial of this Application, and if any of the foregoing statements are willfully false, they are subject to punishment to the full extent of the law, including the possibility of fine and imprisonment.

Signature: [Handwritten Signature]

Date: 9/9/19

Print Name: Jeffrey Mayer
Title: CEO + General Mgr

Company: Solomon Community Solar LLC

Signed and sworn to before me on this 9th day of September, 2019

Kathleen Vandgrift
Signature
Kathleen Vandegrift
Name

KATHLEEN VANDEGRIFT
NOTARY PUBLIC OF NEW JERSEY
My Commission Expires 7/07/2020

Section D: Appendix

Appendix A: Product Offering Questionnaire

Complete the following Product Offering Questionnaire. If there are multiple different product offerings for the proposed community solar project, please complete and attach one Product Offering Questionnaire per product offering.

Applicants are expected to provide a good faith description of the product offerings developed for the proposed community solar project, as they are known at the time the Application is filed with the Board. If the proposed project is approved by the Board, the Applicant must notify the Board and receive approval from the Board for any modification or addition to a Product Offering Questionnaire.

Exception: This "Product Offering Questionnaire" is optional if: 1) the Applicant is a government entity (municipal, county, or state), AND 2) the community solar developer will be selected by the Applicant via a Request for Proposals (RFP), Request for Quotations (RFQ), or other bidding process.

This Questionnaire is Product Offering number 1 of 1 (total number of product offerings).

- Community Solar Subscription Type (examples: kilowatt hours per year, kilowatt size, percentage of community solar facility's nameplate capacity, percentage of subscriber's historical usage, percentage of subscriber's actual usage):

percentage of subscriber's actual usage

- Community Solar Subscription Price: (check all that apply)
 - Fixed price per month
 - Variable price per month, variation based on: _____
 - The subscription price has an escalator of 1.5 % every year (interval)

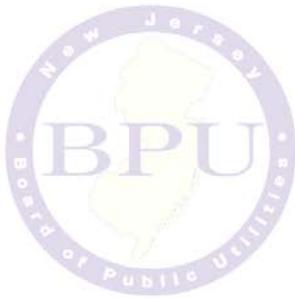
- Contract term (length): _____ months, or _____ years OR month-to-month

- Fees
 - Sign-up fee: None
 - Early Termination or Cancellation fees: None
 - Other fee(s) and frequency: no fees

- Does the subscription guarantee or offer fixed savings or specific, quantifiable economic benefits to the subscriber? Yes No
 If "Yes," the savings are guaranteed or fixed:

- As a percentage of monthly utility bill
- As a fixed guaranteed savings compared to average historic bill
- As a fixed percentage of bill credits
- Other: _____

6. Special conditions or considerations:



Appendix B: Required Attachments Checklist

Note that this list is for indicative purposes only. Additional attachments may be required, and are identified throughout this Application Form.

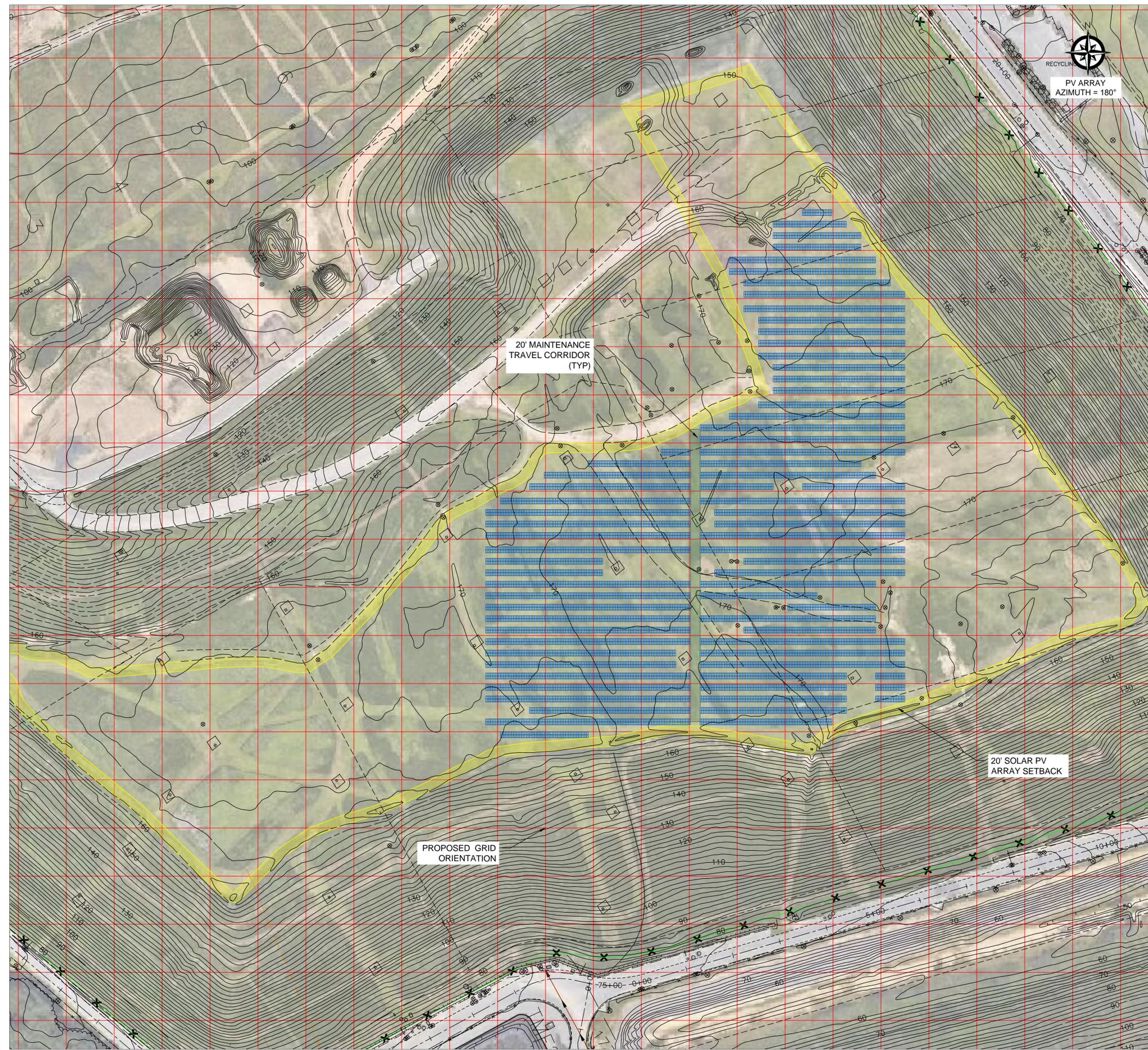
Required Attachments for all Applications	Page	Attached?
Delineated map of the portion of the property on which the community solar facility will be located.	p.7	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
For electronic submission only: copy of the delineated map of the portion of the property on which the community solar facility will be located as a PDF and in drawing file format (.dwg) or as a shapefile (.shp).	p.7	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Proof of site control.	p.8	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Copy of the completed Permit Readiness Checklist as it was submitted to NJDEP PCER, if applicable.	p.11	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Proof of a meeting with NJDEP PCER, if applicable.	p.12	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
A screenshot of the capacity hosting map at the proposed location, showing the available capacity.	p.12	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Substantiating evidence of project cost in the form of charts and/or spreadsheet models.	p.16	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Certifications in Section C.	p.19-23	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Product Offering Questionnaire(s).	p.24	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Required Attachments for Exemptions	Page	Attached?
The Applicant is a government entity (municipal, county, or state), and the community solar developer will be selected by the Applicant via a Request for Proposals (RFP), Request for Quotations (RFQ), or other bidding process: ⇒ Attach a letter from the Applicant describing the bidding process	p.6, p.19	<input type="checkbox"/> Yes <input type="checkbox"/> No
The proposed community solar project is located, in part or in whole, on Green Acres preserved open space or on land owned by NJDEP. ⇒ Attach special authorization from NJDEP for the site to host a community solar facility.	p.8	<input type="checkbox"/> Yes <input type="checkbox"/> No
The proposed community solar project has received, in part or in whole, a subsection (t) conditional certification from the Board prior to February 19, 2019. ⇒ Attach a signed affidavit that the Applicant will immediately withdraw the applicable subsection (t) conditional certification if the proposed project is approved by the Board for participation in the Community Solar Energy Pilot Program.	p. 19	<input type="checkbox"/> Yes <input type="checkbox"/> No

Appendix C: Evaluation Criteria

The Evaluation Criteria chart below lists the various categories that the Board will consider in evaluating project Applications. Projects must score a minimum 30 points total in order to be considered for participation in the Community Solar Energy Pilot Program. Projects that score above 30 points will be awarded program capacity in order, starting with the highest-scoring project and proceeding to the lowest-scoring project.

Evaluation Criteria	Max. Points
Low- and Moderate-Income and Environmental Justice Inclusion Higher preference: LMI project	30
Siting Higher preference: landfills, brownfields, areas of historic fill, rooftops, parking lots, parking decks Medium preference: canopies over impervious surfaces (e.g. walkway), areas designated in need of redevelopment No Points: preserved lands, wetlands, forested areas, farmland Bonus points for: landscaping, land enhancement, pollination support, stormwater management, soil conservation	20 Max. possible bonus points: 5
Product Offering Higher preference: guaranteed savings >10%, flexible terms* Medium preference: guaranteed savings >5% No Points: no guaranteed savings, no flexible terms* *Flexible terms may include: no cancellation fee, short-term contract	15
Community and Environmental Justice Engagement Higher preference: partnership with municipality, partnership with local community organization(s), partnership with affordable housing provider Medium preference: letter of support from municipality, project owner is a government and/or public and/or quasi-public entity, project owner is an affordable housing developer	10
Subscribers Higher preference: more than 51% project capacity is allocated to residential subscribers	10
Other Benefits Higher preference: Provides local jobs/job training, demonstrates co-benefits (e.g. paired with storage, micro-grid project, energy audit, EE measures)	10
Geographic Limit within EDC service territory Higher preference: municipality/adjacent municipality Medium preference: county/adjacent county No Points: any geographic location within the EDC service territory.	5



SOLAR SYSTEM-POLE MOUNTED SYSTEM :
 SYSTEM SIZE = 4,999.680 kW DC (@STC)
 (13,888) 360 WATT MODULES
 (496) PARALLEL STRINGS OF (28) MODULES IN SERIES PER STRING

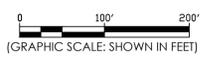


2 SITE LOCATION MAP
 SCALE: N.T.S.



3 SOLAR PV ARRAY
 SCALE: N.T.S.

1 SOLAR PV ARRAY SITE PLAN
 (PLAN VIEW)



REVISIONS			
NO.	DESCRIPTION	BY	DATE

PROJECT TITLE:
 OCEAN COUNTY LANDFILL CORP.
 SOLAR PHOTOVOLTAIC SYSTEM

SITE:
 OCEAN COUNTY LANDFILL CORP.
 2498 ROUTE 70
 MANCHESTER TOWNSHIP, NJ 08759

OWNER:



270 SOUTH MAIN STREET
 FLEMINGTON, NJ 08822
 908-751-5818 (PHONE)
 908-751-5819 (FAX)
 lyle@advancedsolarproducts.com

NJ CERTIFICATE OF AUTHORIZATION LICENSE
 NO.: 24GA28102500

DRAWN: CD DATE: 5/25/2017

CHECKED: RS DATE: 5/25/2017

SCALE: AS SHOWN DWG. NO.: E-2

DRAWING TITLE:
 SITE PLAN

PRELIMINARY
NOT FOR CONSTRUCTION

LYLE K. RAWLINGS, P.E.
 NJ PROFESSIONAL ENGINEER LIC #28627

OPTION TO LEASE FOR OCEAN COUNTY LANDFILL CORPORATION OF
MANCHESTER TOWNSHIP, NEW JERSEY

WHEREAS, OCEAN COUNTY LANDFILL CORPORATION, is the owner of certain real property located in the Township of Manchester, County of Ocean, and State of New Jersey, currently known as Block 2, Lots 21, formerly known as (block and lots on deed); and

WHEREAS, ATLANTIC PIER COMPANY, INC., is the owner of certain real property located in the Township of Manchester, County of Ocean, and State of New Jersey, currently known as Block 2, Lots 6, 19, 20, 22, 23, 24, 59, and 62, formerly known as (block and lots on deed); and

WHEREAS, LAWRENCE HESSE, INDIVIDUALLY, is the president of OCEAN COUNTY LANDFILL CORPORATION and owner of ATLANTIC PIER COMPANY, INC, and is ready, willing, able and desirous of leasing the above described real property; and

WHEREAS, SPANO PARTNERS HOLDINGS of Millstone Township, New Jersey is interested in obtaining the rights to lease said property and desires currently to obtain an Option to Lease up to thirty - two (32) acres of land for a period of up to twenty-five (25) years upon terms to be agreed upon by the parties; and

WHEREAS, the parties are desirous of creating an option for the exclusive benefit of SPANO PARTNERS HOLDINGS of Millstone Township, New Jersey and grant unto SPANO PARTNERS HOLDINGS a period of up to two (2) years to exercise such option.

IT IS AGREED AS FOLLOWS:

1. SPANO PARTNERS HOLDINGS shall have a period of up to two (2) years commencing from the execution of this agreement and ending on or about August 31, 2021 to lease the above described real property upon terms and conditions to be agreed upon by the parties.

2. Parties acknowledge that SPANO PARTNERS HOLDINGS is desirous of the rental of such properties following its approval in obtaining all approvals, permits, variances, waivers, etc. for the installation of solar generation plant on the properties held by the above owners.

3. Parties acknowledge that the exercise of this option is contingent upon SPANO PARTNERS HOLDINGS obtaining all state, federal, and other approvals including the Board of Public Utilities' approval.

4. The consideration for this option is the sum of TEN (\$10.00) DOLLARS paid by SPANO PARTNERS HOLDINGS to the within owners. The receipt of which consideration is hereby acknowledged.

5. It is agreed that SPANO PARTNERS HOLDINGS shall at sole cost and expense install and maintain the solar generation facility upon the above described property and that SPANO PARTNERS HOLDINGS shall remain the owner of all such installed equipment at all times.

6. It is further agreed that under the terms of the lease the system will be owned, operated and maintained by SPANO PARTNERS HOLDINGS without the involvement of the owners.

7. All energy including capacity generated by the system shall remain the sole and exclusive property of SPANO PARTNERS HOLDINGS.

8. SPANO PARTNERS HOLDINGS shall at sole cost and expense periodically inspect, clean, maintain, repair and replace the system at intervals determined by SPANO PARTNERS HOLDINGS to be necessary or desirable.

9. Prior to the execution of such a lease, the parties shall enter into an as built survey description of the property delineating the area to be used by SPANO PARTNERS HOLDINGS.



Building lifetime relationships with our clients and employees.



CLOSURE AND POST CLOSURE CARE AND FINANCIAL PLAN UPDATE

April 2016

Prepared for:

Ocean County Landfill Corporation
Manchester Township, New Jersey



100 Crystal Run Road, Suite 101
Middletown, NY 10941
(845) 695-0200

REPORT CERTIFICATION

C/PC Update

Ocean County Landfill Corporation Solid Waste Facility Manchester, New Jersey

The material and data in this report were prepared under the supervision and direction of the undersigned.

CORNERSTONE ENVIRONMENTAL GROUP, LLC



Prentiss A. Shaw, P.E.
Certifying Engineer

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1 INTRODUCTION

1.1 Solid Waste Facility Description

The Ocean County Landfill Corporation (OCLC) Solid Waste Facility (SWF) is located in Manchester Township, Ocean County, New Jersey. The SWF encompasses an area of approximately 725 acres, of which 284 acres are currently dedicated for landfill disposal activities and a number of ancillary features; such as, a network of perimeter access roads, truck scales, a leachate storage/treatment system, a gas collection and flaring system, a storm water management system and recharge basins and several screening berms. The SWF also includes a permitted Transfer Station/Materials Recovery Facility (TS/MRF).

Ocean County relies upon OCLC to design, construct and operate a solid waste facility to meet the solid waste disposal needs of its residents and municipalities. OCLC has provided solid waste management services for the residents and municipalities in Ocean County since 1972 and takes pride in operating a technologically advanced, state-of-the-art landfill facility that has an exemplary environmental record. The OCLC SWF is designated in the Ocean County District Solid Waste Management Plan (OCDSMP) for disposal of all non-hazardous solid waste generated in Ocean County that is not recycled or taken to a duly permitted out-of-state facility for disposal. OCLC also holds a Solid Waste Franchise for this purpose. The Franchise was awarded by the New Jersey Department of Environmental Protection (NJDEP) on August 31, 1994.

1.2 Solid Waste Facility Permit

OCLC's current Solid Waste Facility Permit (SWF Permit) was recently renewed by NJDEP and issued on October 6, 2015. A copy of the SWF Permit is included in Appendix A. The most recent permit approved and authorized a final elevation up to 185 feet above mean sea level and includes authorization for the landfill waste disruption project and approval of an engineering design for a Sustainable Landfill Project (SLP).

This Closure and Post Closure Plan is an update of OCLC's current Closure and Post Closure Plan which was approved by the NJDEP by letter dated March 31, 2011. A copy of the approval letter is included in Appendix B. As discussed with NJDEP, it was agreed to delay the subsequent update until after the permit renewal was issued. Relevant correspondence is included in Appendix B. This update has been prepared in accordance with the requirements of NJAC 7:26 2A.9 except for timeframe for the financial model update as discussed above.

The following items are included in this Closure and Post Closure Plan update:

- A closure plan describing the final closure of the facility.

- A post closure environmental monitoring plan which describes the environmental monitoring to be performed during the Post Closure Period.
- A post closure maintenance plan which details the maintenance activities to be conducted during the Post Closure Period.
- A schedule for implementation of all Closure and Post Closure Activities.
- Cost estimates for the activities outlined in the Closure and Post Closure Plan.
- A financial plan which sets forth the anticipated costs and expenses for all identified Closure and Post-Closure Activities and establishes the means for meeting these costs and expenses.
- An Environmental Improvements Financial Plan demonstrating that notwithstanding anticipated withdrawals for on-going environmental improvements at the landfill, sufficient funds are accruing in escrow for closure and post-closure costs not covered by the Statutory Account.

Under the New Jersey Sanitary Landfill Closure and Contingency Fund Act, OCLC collects a \$1/ton surcharge on waste disposed at the landfill for deposit into an escrow account to be used for closure and post closure costs. Referred to herein as the Statutory Account, these funds are currently held by US Bank (Account No. 2572004529). In addition, OCLC maintains three separate escrow accounts held by Bank of New York Mellon which are referred to individually as follows: Environmental Improvements Escrow Account (No. 944727), Closure/Post-Closure Account (No. 944725), and Post-Closure Administrative Account (No. 944726). Funds from the Environmental Improvements Account are used in part for on-going environmental improvements at the landfill and are also used, along with funds from the Closure/Post Closure Account, to fund costs incurred for Closure and Post-Closure Activities during the landfill's operating life. Funds accruing in the Post-Closure Administrative Account are to be used for certain administrative costs incurred during the Post-Closure Period.

Pursuant to the approval of the NJDEP, by Order dated August 22, 2001, the three escrow accounts held by the Bank of New York Mellon can be treated as one fund for the purposes of this filing. They are collectively referred to herein as the Environmental Improvements and Closure/Post Closure (EI and C/PC) Account.

2 CLOSURE PLAN

This Closure Plan describes the Final Cover Construction activities that will occur both before and after waste is no longer being accepted for disposal at the landfill; that is, before and after the landfill's Date of Closure as set forth in Section 5.1. It also describes the use and removal of temporary cover approved by NJDEP.

2.1 Final Cover

Final and temporary cover systems are designed to provide stable, long-term protection against exposure of waste and are intended to limit infiltration and support vegetative growth. These systems are constructed in phases as areas reach permanent or interim final grades, respectively.

Final Cover Construction consists of the following:

- On slopes with less than 7 percent final grade, a 40 mil HDPE geomembrane is used overlain by 18 inches of well drained soil with the upper 6 inches being topsoil. The geomembrane shall be bedded on a minimum thickness of 6 inches of subbase material which is free of rocks, fractured stones, or other debris which could damage the geomembrane.
- On slopes between 7 percent and 33 percent final grade, a textured 40 mil HDPE geomembrane is used, overlain by 18 inches of well drained soil with the upper 6 inches being topsoil. Also, 4 inch stormwater drainage pipes are placed in the drainage layer above the geomembrane.
- The establishment of vegetative cover in accordance with the New Jersey State Soil Conservation Committee Standards.

A temporary cover system is being utilized in select areas to control odors and manage gas collection pending waste decomposition and settlement of the in-place waste which enables reclamation of airspace for disposal of additional waste. The temporary cover system consists of the same components as the final cover system except the topsoil layer is four inches thick instead of six. While the temporary final cover is in place, it will require the same maintenance as final cover. The temporary cover will be removed in phases to allow for future cell development according to the site's operational sequence.

2.2 Vegetative Cover

After placement of the final/temporary cover, the area will be seeded to provide for establishment of a vegetative cover. The primary purposes for immediate establishment of vegetation are as follows:

- Protect slopes from soil erosion.
- Enhance evapotranspiration.
- Improve site aesthetics.

The vegetative cover soil will be prepared and seeded in accordance with the Soil Erosion and Sediment Control (SCS) Plan approved by the Ocean County Soil Conservation District and the Technical Specifications prepared with each capping project. A copy of the current Technical Certification is maintained at the SWF. Conditions of the approved SCS Plan will be adhered to throughout the Post Closure Period

2.3 Surface Water Drainage Controls

The surface water drainage system detailed in the SCS Plan for the landfill incorporates measures to control run off. Surface water is transported by interior and perimeter drainage channels to stormwater Basins A, B, C and D. All basins recharge to groundwater with no discharge to bodies of surface water. Basins A, B, C, and D are existing basins certified under the current SCS Plan. All surface water control structures are designed in accordance with applicable state and federal regulations. Conditions of the approved SCS Plan will be adhered to throughout the Post Closure Period.

2.4 Gas Control

A byproduct of the decomposition of solid waste is landfill gas. The OCLC landfill has an approved active gas collection and flaring system for use in controlling landfill gas (active meaning a vacuum is applied to pipe network to collect the gas).

Active gas collection systems are installed as cells are constructed. This allows landfill gas to be collected from areas while cells are operational. In addition, an active gas collection component is incorporated into both the temporary and final cover systems. Gas collection measures consist of the following:

- Active gas collection at primary manholes.
- Active operational gas collection, if necessary.
- Active gas collection at intermediate grades as temporary cap is constructed.
- Active gas collection at final grades.

Once a cell becomes operational, gas collection is initially performed at primary manholes and through the leachate collection system piping. An operational gas collection system may be constructed during waste placement as needed, and at OCLC's discretion. Its

primary use would be to collect gas before a temporary or final cover gas collection system is constructed.

The gas collection component of a temporary or final cover system consists of slotted polyethylene pipes bedded in stone, installed on approximate horizontal spacing of 200 feet. A vacuum is applied to the collection piping to withdraw the gas from the landfill. The gas collection pipes are connected to solid gas transmission pipes which ultimately route the gas directly or through a network of perimeter gas headers to the OCLC flare station or to one or both of the two nearby independently owned and operated landfill gas to energy (LFGE) Facilities.

The LFGE Facilities and the OCLC flares reduce the concentration of non methane organic compounds present in the landfill gas by at least 98 percent by weight. Any landfill gas not used by the LFGE Facilities is controlled by combustion in one of the OCLC flares. The flares will be maintained and operated during the Post Closure Period as needed. As the gas diminishes, the flare capacity can be reduced. OCLC's Title V Operating Permit BOP 160001 (Title V Permit) includes conditions related to the air emissions from the two enclosed flares, one portable flare, leachate treatment facility, and miscellaneous insignificant other emission sources at the SWF. Its Title V Permit was amended on November 2, 2015 to incorporate the waste excavation screeners and a new emergency generator and more recently on April 5, 2016 to incorporate a minor modification changing the design capacity in the permit to include capacity resulting from final elevations in Cell 8, Cell 7E and Cell 7D approved in the SWF Permit.

2.5 Measures to Conform the Site to the Surrounding Area

Measures taken to conform the closed landfill cells to the surrounding area are concentrated on minimizing their visual impact and establishing final cover vegetation in accordance with the landscaping plan for the site. Final grades provide moderate slopes that grade gently to the surrounding terrain. Good vegetative cover is and will continue to be established to ensure visual compatibility with the surrounding area. Buffer zones and screening berms planted with evergreens currently surround most of the active and closed landfill areas. Plantings necessary to insulate the landfill from the surrounding area will be well established by the commencement of the Post-Closure Period. Required buffer zones and screening berms will be maintained throughout the Post Closure Period.

2.6 Landfill Engineering Services

Engineering services will continue to be required during Final Cover Construction after the Date of Closure. Construction Plans and Technical Specifications will be prepared for the placement of final cover and installation of the gas collection system and surface water control structures that will be required after the Date of Closure. These construction activities will be observed and certified in accordance with the Construction Quality Assurance and Quality Control Plan in place for the SWF. Once completed, a certification

will be prepared by a New Jersey licensed professional engineer. This certification will evaluate the entire landfill to ensure that all areas have been closed in accordance with the approved Closure and Post Closure Plan. This certification will be prepared within 6 months after completion of the final phase of all closure activities.

3 POST-CLOSURE ENVIRONMENTAL MONITORING PLAN

The following items have been included in the Post Closure Environmental Monitoring Plan:

- Groundwater Monitoring.
- Gas Monitoring.
- Leachate Monitoring.
- Surface Water Monitoring.

3.1 Groundwater Monitoring

OCLC has been issued a New Jersey Pollution Discharge Elimination System (NJPDDES)/Discharge to Groundwater (DGW) Permit. Groundwater monitoring is currently and is anticipated to continue to be conducted on a semi-annual basis. Monitoring is and will be conducted as described in the approved Groundwater Protection Plan (GWPP) for the SWF and in accordance with the conditions of the NJPDDES/DGW Permit. For the purpose of the Financial Plan component of this Closure/Post-Closure Plan update, it is assumed that the current sampling program, with its testing parameters, will be continued throughout the Post-Closure Period. The results of this sampling will be reported to the NJDEP.

3.2 Gas Monitoring

The gas monitoring program consists of a methane gas survey and routine gas quality analysis. It is anticipated that gas monitoring during the Post-Closure Period will be conducted as described in the approved Operations and Maintenance (O&M) Manual for the SWF and as required by OCLC's current Title V Permit.

A methane gas survey will be performed on a quarterly basis within the buffer zone around the perimeter of the landfill areas to assess potential lateral gas migration. The results of the perimeter gas monitoring will be submitted to the NJDEP quarterly, within 60 days of the data collection. The gas survey will also include methane sampling around the perimeter of the buildings, such as the maintenance building, scale house, and leachate treatment facility. The results of the gas monitoring around buildings are retained on-site in OCLC's records.

Routine gas quality analyses will include monthly monitoring of the well field to determine whether air intrusion is occurring by recording landfill gas oxygen content. Landfill gas

temperature and wellhead pressure readings will also be taken to confirm that gas is being extracted safely from the field. In addition, on a quarterly basis, the surface of the landfill will be monitored to verify that methane concentrations above the surface do not exceed 500 ppm and to ensure that gas is being collected at a sufficient extraction rate.

OCLC has installed two enclosed flares to combust gas collected by the landfill gas collection system. Both will continue to be operated, as needed, during the Post Closure Period. As required by OCLC's Title V Permit, the stream of gas delivered to the flaring system, or delivered to the LFG Facilities, is tested for methane content. The analytical results of this sampling shall be submitted to NJDEP within 30 days of receipt. In addition, the operating temperature at the control flares is continuously monitored to ensure proper gas destruction performance. Monitoring of flare emissions is done by calculation and is reported to the NJDEP on an annual basis.

3.3 Leachate Monitoring

The leachate collection and treatment system will be operated and maintained during the Post Closure Period. It is anticipated that post closure leachate monitoring will be conducted as described in the approved O&M Manual for the SWF, as required by all applicable NJDEP regulations, and in accordance with the conditions of the Industrial Discharge Permit (IDP) issued by the Ocean County Utilities Authority (OCUA). OCLC has been informed by NJDEP that a NJPDES Permit is no longer required because OCLC has an approved IDP from the OCUA.

The leachate monitoring program determines the following:

- Total quantity of leachate collected.
- Chemical characteristics of the leachate.
- Quantity of leachate collected in the secondary leachate collection system.
- Leachate head build-up at less than 12 inches.

The total leachate production during the Post-Closure Period, after final closure of all landfill cells, is expected to decrease over time and eventually reach a steady state. OCLC will continue to compile the leachate flow meter recordings and submit this information on a quarterly basis. Total leachate quantities leaving the leachate treatment facility and pumped through the outfall line to the OCUA trunk line are measured by a run-time recorder or flow meter on a continuous basis using a chart recorder/totalizer unit. OCLC records the leachate flow meter reading on a daily basis, and reviews the charts on a weekly basis. Daily recordings of leachate flow ensure that the system's operation is not impeded.

A sampling manhole is located at the terminal end of the leachate outfall line just before its connection with the OCUA trunk line. Leachate effluent is monitored for various

parameters at the sampling manhole on a monthly, quarterly, or semi-annual basis, depending upon the sampling parameter. The monitoring is performed by collecting either grab or composite type samples, again depending upon the sampling parameters. Results of the monitoring are compiled and submitted to the OCUA monthly, in accordance with the IDP Permit. These reports are prepared by the treatment plant operator who will be responsible for the operation and maintenance of the leachate collection and treatment systems during the Post-Closure Period.

Leachate that is collected in the secondary collection system flows to secondary leachate pumping stations. The quantity of secondary leachate is monitored in the corresponding secondary manholes and is measured on a daily basis by OCLC. The volume of any liquid collected in the secondary collection system manholes is reported to the NJDEP on a quarterly basis by OCLC.

All leak detection risers and containment structures are checked on a regular basis by OCLC personnel for the presence of leachate. A record is kept of the results of each inspection.

3.4 Surface Water Monitoring

It is anticipated that surface water monitoring during the Post-Closure Period will be conducted as described in the approved O&M Manual for the SWF and in accordance with the existing General NJPDES DGW Permit and Site-Specific NJPDES DGW Permit.

In conjunction with the construction of landfill cells, a network of surface water control structures has been or will be installed. These facilities will safely convey surface water away from the landfill to 4 separate stormwater recharge basins as described in Section 2.3. All four of these basins are designed to be recharge basins which will handle stormwater runoff by discharging it back into the groundwater. The design of these basins has been approved as part of the SCS Plan for the SWF.

4 POST-CLOSURE MAINTENANCE ACTIVITIES

Post Closure maintenance activities for the Post Closure Period will be as set-forth in NJAC 7:26-2A.9 and described below.

4.1 Final Cover Maintenance

Final cover maintenance includes the repair and replacement of any topsoil and cover soil lost due to erosion. This condition can occur prior to or after the establishment of self-sustaining vegetative cover. Final cover maintenance is anticipated to continue throughout the Post-Closure Period.

Final cover maintenance will include placement of additional cover soil within areas in need of repair. This material will be spread and fine graded to maintain a minimum thickness of 12 inches. Any drainage pipe which needs to be repaired will be installed to the original design configuration. Topsoil will then be spread over the area as needed to maintain a minimum depth of 6 inches. The area will then be vegetated as described in Section 4.2.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas that require final cover maintenance will be identified and included in the quarterly inspection report. All final cover maintenance will be performed in a timely manner after issuance of the inspection report.

4.2 Vegetative Maintenance

Vegetative maintenance will include the application of seed, lime, fertilizer, and mulch on areas in which self-sustaining vegetative cover has not been fully established. This includes areas where final cover maintenance is needed, or areas in which prior seeding have not been effective. Vegetative maintenance should only be necessary for 11 years after the installation of final cover. This is typically more than enough time to create a well established and sustainable vegetative growth over the area.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas which require vegetative maintenance will be identified and noted in the quarterly inspection report. Vegetative maintenance will be performed during optimum seeding dates as specified in the SCS Plan.

4.3 Settlement Repair

Settlement repair will be required in areas in which settlement of the in-place solid waste has produced depressions in the final cover which cause ponding of surface water or create unstable slope conditions. Settlement repair could include, if necessary, replacement of an

entire final cover section, including subbase material, geomembrane, cover soil and topsoil. Settlement repair is anticipated to continue throughout the Post-Closure Period.

Any areas requiring minimal settlement repair will be maintained as per Section 4.1, Final Cover Maintenance. Areas requiring more extensive settlement repair will have all topsoil and cover soil removed. The existing geomembrane will be cut and removed. Subgrade material will be placed and compacted in the depression until the ground line matches the surrounding grade. Geomembrane will be installed and seamed to the surrounding membrane cap. All seams will be tested to conform to the specifications for geomembrane caps. Cover soil will then be placed and fine graded to a minimum depth of 12 inches. Topsoil will be spread over the area to a minimum depth of 6 inches. The area will then be vegetated.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas which require settlement repair will be identified and noted in the quarterly report. All settlement repairs will be performed in a timely manner after issuance of the inspection report.

4.4 Fertilizing

Fertilizer and lime will be applied to facilitate the establishment of a self-sustaining vegetative cover. Similar to vegetative maintenance, fertilizing is only necessary for the first 11 years after placement of the vegetative cover. These areas will be re-fertilized as needed and at the discretion of OCLC to promote a self-sustaining vegetative cover. Areas requiring re-fertilization will not be identified in the Quarterly Post Closure Inspection Reports. Fertilizing will be performed in accordance with the schedule provided in Section 5.

4.5 Mowing

After final closure, landfill areas will be mowed on a regular basis to prevent the overgrowth of shrubs, trees, and other deep rooted vegetation as well as for aesthetic purposes. It is assumed that mowing will be required three times per year as per the NJDEP Technical Manual for Sanitary Landfill Permits and Approvals.

Mowing will not be identified in the Quarterly Post Closure Inspection Reports. Mowing will be performed in accordance with the schedule provided in Section 5.

4.6 Monitoring Well Maintenance Repair and Replacement

Inspection of groundwater monitoring wells will be conducted semi-annually to ensure that all wells are in good condition. Maintenance work associated with monitoring wells may include brush clearing, lock replacement, cap or protective casing replacement, and grout seal repair. Any wells deemed inoperative or malfunctioning will be replaced.

4.7 Drainage System Cleaning, Repair, and Maintenance

Inspections of all closed landfill areas after the Date of Closure will be conducted quarterly as described in Section 4.12. During these inspections, the surface water management system will be surveyed to check if any structures require cleaning, repair, or maintenance. The results of these inspections will be included in the quarterly report. Necessary maintenance of the surface water management system will be performed in a timely manner after issuance of the inspection report.

Maintenance of the surface water control system will include cleaning accumulated sediment from channels and culverts. Concrete, rip rap or gabion lined channels will be inspected to check the integrity of the channel lining. Any inadequate channel linings will be repaired or replaced. The recharge basins will also be surveyed to determine if sediment has accumulated to the design sediment storage elevation. Sediment will be removed from the basins once this capacity has been reached. The maintenance activities for the surface water management system will occur throughout the Post Closure Period.

4.8 Gas System Operation, Maintenance, and Repair

After final closure of all landfill cells, decomposition of in-place solid waste will continue producing methane gas. This will require continued operation and maintenance of the gas collection and control system during the Post Closure Period.

The gas collection and control system will be staffed on a part time basis to ensure its proper operation and to perform scheduled and unscheduled maintenance. Operation of the gas collection and control system will require electricity, spare parts, and system monitoring. The gas collection and transmission piping within landfill cells will require periodic adjustments to ensure efficient gas collection. The condensate collection and pumping system will also be maintained to provide environmentally safe management of gas condensate.

During the monthly system monitoring outlined in Section 3.2 above, the gas collection system will be checked to ensure proper collection and conveyance of landfill gas to the flares or to the nearby LGE Facilities. Any repairs required will be identified and included in the inspection report. Repairs may include replacement of pipe, fittings, valves, test ports, or cleaning of transmission piping. Unless there is an exceedance of federal New Source Performance Standards (NSPS), the repair will be performed in a timely manner after issuance of the inspection report. If there is an NSPS exceedance, the repair will be performed as soon as practicable to correct the exceedance within the timeframes specified by the NSPS regulations. The location will be re-monitored to verify that the repair was adequate.

4.9 Leachate Collection System Operation, Maintenance, and Repair

As with the landfill gas collection system, the leachate collection and conveyance system will need to be operated and maintained during the 30 year Post Closure Period.

Labor for the operation and maintenance of the leachate system will be provided by the operator of the leachate treatment facility located on site. This will include leak detection monitoring and daily flow recordkeeping and reporting. The operation of the system will also require electricity. Maintenance activities will include cleaning the leachate collection and transmission piping and repair and/or replacement of pumps and controls, piping, fittings, valves, and other manhole appurtenances.

Inspections of the landfill area will be conducted quarterly during the Post Closure Period. During these inspections, the leachate collection system manholes and piping will be checked to ensure proper operation. Any repairs required will be identified and included in the inspection report. All repairs will be performed in a timely manner after issuance of the inspection report.

4.10 Leachate Handling

Leachate collected during the Post Closure Period will be handled in the leachate treatment facility prior to delivery and discharge to the OCUA sewer trunk line. This will require operation and maintenance of the leachate storage lagoons, storage tanks, treatment facility, and outfall line during the Post Closure Period.

The operation of the leachate handling system will require one full time, licensed treatment plant operator. This operator will also have responsibility for the operation and maintenance of the leachate collection system as described in Section 4.9. Duties will include operation of treatment units within the plant to ensure proper performance and compliance with applicable discharge permits. Other operation and maintenance requirements are:

- Electricity to run the treatment facility and pump stations.
- Chemicals used in treatment.
- Funds for payment of OCUA discharge fees.
- Monitoring the treatment facility influent and effluent, and preparation of reports required by regulatory agencies.
- Maintenance and repair and/or replacement of parts such as pumps, meters, piping, fittings, valves, etc.

- Maintenance and cleaning of leachate storage lagoon and treatment units and disposal of accumulated sludges.

The operator will be responsible for performing or contracting for all activities associated with the operation and maintenance of the leachate handling system during the Post Closure Period.

4.11 Facility Access Controls

Access to the OCLC SWF is controlled by fencing. A perimeter chain link fence prevents unauthorized access to the site. Necessary fencing will be maintained during the Post Closure Period. As part of the quarterly site inspection, the fence line will be checked for any breaches and necessary repairs. Any problems will be noted in the quarterly inspection report. All repairs will be performed in a timely manner after issuance of the inspection report.

Access to landfill areas is provided by paved internal access roads. These roadways provide the access to all landfill areas necessary for monitoring and maintenance activities. Any roadway repairs needed will be identified during quarterly site inspections and noted in the quarterly reports. Repairs to roadways will be performed within 3 months of the issuance of the inspection report.

4.12 Inspection and Certification (Engineering Services)

As indicated above, quarterly inspections of the closed landfill will be conducted throughout the Post Closure Period. These inspections will address final cover, vegetation, settlement, surface water management systems, the gas collection system, leachate collection system, and facility access. Any repairs required will be identified and noted in the Quarterly Post Closure Inspection Report. In addition, any areas in need of repair identified in the previous quarterly report will be inspected to ensure that the repairs were completed in accordance with the Post Closure Plan. Where required, all work will be certified by an engineer licensed by the State of New Jersey.

5 IMPLEMENTATION SCHEDULE

5.1 Key Terms and Dates

This section outlines schedules for implementing the Closure and Post-Closure Plan update. As indicated above, this update takes into account the permit renewal elements including the Existing Landfill waste disruption and SLP design as well as the approved final elevation of 185 feet. Therefore, the projected Date of Closure is near the end of 2038 and the 30 year Post Closure Period will run from 2039 through 2068. Certain activities associated with the Closure and Post Closure Plan are currently on going and will continue through the Post Closure Period. In this discussion of implementation schedules, the following terms are utilized:

- **“Closure” or “Date of Closure”** – is the date when waste disposal stops. The Date of Closure for the purposes of this update is projected to be the end of 2038.
- **“Final Cover Construction”** – is the activity associated with the installation of a final cover system as described previously on a portion of the landfill which has achieved design elevations and grades.
- **“Temporary Cover Construction”** – is the activity associated with the installation of a cover system similar to the final cover system on a portion of the landfill which has achieved interim elevations and grades. This system is installed to control odors and manage gas collection pending waste decomposition and the resulting settlement of the in-place waste which enables reclamation of airspace for disposal of additional waste. The temporary cover will be removed to allow overfill operations up to design elevations and grades.
- **“Post-Closure Period”** – is the 30 year period after the Date of Closure. For the purposes of this update, this period is expected to begin in 2039 and extend through 2068.
- **“Post-Closure Activities”** – are monitoring, operation, maintenance, repair, and inspection activities which are required once Final Cover Construction is completed.
- **“Type A Post-Closure Activities”** – are Post-Closure Activities that begin once a landfill area receives final or temporary cover whether before or after the Date of Closure.
- **“Type B Post-Closure Activities”** – are Post-Closure Activities which begin after the Date of Closure.

5.2 Landfill Closure

The landfill operation at the OCLC SWF is being developed and closed incrementally, on a cell or subcell basis. The landfill operation has been divided into 6 remaining operational stages. Final Cover Construction will occur during each of these stages on a portion of the landfill. Final Cover Construction will not occur on portions of the landfill used during the last operational stage until after the Date of Closure. A schedule has been developed for the Final Cover Construction in conjunction with each operational stage of the landfill, subject to change due to fluctuating waste rates and types received, actual waste densities achieved and actual operating conditions encountered. This "Landfill Site Development Plan" is summarized in Figure 1. Final Cover Construction within each operational stage will include the placement of cover materials and the installation of gas collection facilities, surface water control structures, and landfill access facilities.

5.3 Post-Closure Activities

Post-Closure Activities are divided into two main categories: Type A Post Closure Activities, and Type B Post Closure Activities.

The Type A Post Closure Activities are undertaken at closed cells both during the operational stages of the landfill and after the Date of Closure. Once final or temporary cover is installed, Post-Closure Activities must be performed to ensure the integrity of the cover system. Type A Post-Closure Activities are divided into two subcategories. The first includes activities which will be performed for a finite period of time. This includes vegetative maintenance and fertilizing. These activities will be performed for 11 years after Final Cover Construction in each stage of the landfill operation. The second category includes final cover maintenance, settlement repair, mowing and site inspections. These activities will begin once Final Cover Construction is completed, and will continue to the end of the Post Closure Period.

Type B Post Closure Activities are tasks which are also part of regular landfill operations and continue as Post Closure Activities after the Date of Closure. This includes all environmental monitoring and operation and maintenance of the surface water, gas and leachate management systems. These activities will be performed throughout the 30 year Post Closure Period.

All Post Closure Activities are summarized in Table E-3 included in Appendix E.

5.4 Post-Closure Administrative Costs

Funds in the Post-Closure Administrative Account (No. 944726) are being accrued for administrative costs that will be incurred during the 30 year Post Closure Period. These costs include annual lease payments pursuant to the post closure lease approved by the NJDEP in an Order dated May 15, 1997. Post Closure administrative costs also include

taxes, expenses for legal and accounting services, and costs for environmental impairment liability insurance coverage.



State of New Jersey

CHRIS CHRISTIE
Governor

KIM GUADAGNO
Lt. Governor

MAIL CODE 401-02C
BUREAU OF SOLID WASTE PERMITTING
SOLID AND HAZARDOUS WASTE MANAGEMENT
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Ocean County Landfill Corporation
25 1st Avenue
Atlantic Highlands, NJ 07716

Re: Closure and Post-Closure Financial Plan Approval
OCEAN COUNTY LANDFILL
Manchester Twp., Ocean County
Facility ID No.: 133642

Dear Mr. Hesse:

This letter is to advise you that the Closure and Post-Closure Care Financial Plan submitted on April 22, 2016 by Cornerstone Environmental for the Ocean County Landfill has been reviewed by the Division of Solid and Hazardous Waste and is hereby approved.

The Plan assumes that the landfill will reach capacity in the year 2038 and the thirty (30) year post closure period will be from 2039 through 2068. The Plan takes into account that the landfill is being developed and closed incrementally, on a cell or sub cell basis. The operation of the landfill has been divided into six (6) remaining stages. Final cover construction will not occur on portions of the landfill used during the last operational stage until after 2038.

All requests for withdrawals of funds from the DEP Closure Escrow Accounts for closure and post-closure activities are to be submitted in duplicate on form SFA-004 to:

New Jersey Department of Environmental Protection
Mail Code 401-02C
SRP/SHWM
BPL/ Escrow Unit
Trenton, New Jersey 08625

In accordance with N.J.A.C. 7:26-2A.9(g)13, authorization for each withdrawal will be granted in accordance with the 2016 Closure and Post-Closure Financial Plan.

This Approval is not intended to be an automatic acceptance of future expenditures. Future expenses will be reviewed by the Division. Reimbursements for work performed will be based on reasonableness and adequate documentation. All work performed must be included in Closure and Post-Closure Care and Financial Plan.

Pursuant to N.J.A.C. 7:26-2A.9(f)6, the owner/operator shall review the cost estimates every two (2) years and revise the Closure and Post-Closure Financial Plan as necessary. The updated Financial Plan shall be submitted on the second anniversary of the date the Financial Plan was last approved. Therefore, the updated Financial Plan, shall be submitted two years from the date of this letter. OCLF shall submit the attached Schedules "A", "B" and "C" with that future update. A separate Schedule "C" shall be prepared and submitted for the DEP \$1.00/ton Account and for each of the three (3) BPU Accounts.

Should you have any questions regarding this letter, please contact Mary Anne Goldman of my staff by telephone at 609-984-6985, or by email at MaryAnne.Goldman@dep.nj.gov.

Very truly yours,



Anthony Fontana, Chief
Bureau of Solid Waste Permitting

c: Mary Herald, BPL
Carlton Dudley, BPL
Theodore Schwartz, Esq.
Prentiss Shaw, P.E., Cornerstone Env.

Doc: LF Financial Plan Approval

1 INTRODUCTION

1.1 Solid Waste Facility Description

The Ocean County Landfill Corporation (OCLC) Solid Waste Facility (SWF) is located in Manchester Township, Ocean County, New Jersey. The SWF encompasses an area of approximately 725 acres, of which 284 acres are currently dedicated for landfill disposal activities and a number of ancillary features; such as, a network of perimeter access roads, truck scales, a leachate storage/treatment system, a gas collection and flaring system, a storm water management system and recharge basins and several screening berms. The SWF also includes a permitted Transfer Station/Materials Recovery Facility (TS/MRF).

Ocean County relies upon OCLC to design, construct and operate a solid waste facility to meet the solid waste disposal needs of its residents and municipalities. OCLC has provided solid waste management services for the residents and municipalities in Ocean County since 1972 and takes pride in operating a technologically advanced, state-of-the-art landfill facility that has an exemplary environmental record. The OCLC SWF is designated in the Ocean County District Solid Waste Management Plan (OCDSMP) for disposal of all non-hazardous solid waste generated in Ocean County that is not recycled or taken to a duly permitted out-of-state facility for disposal. OCLC also holds a Solid Waste Franchise for this purpose. The Franchise was awarded by the New Jersey Department of Environmental Protection (NJDEP) on August 31, 1994.

1.2 Solid Waste Facility Permit

OCLC's current Solid Waste Facility Permit (SWF Permit) was recently renewed by NJDEP and issued on October 6, 2015. A copy of the SWF Permit is included in Appendix A. The most recent permit approved and authorized a final elevation up to 185 feet above mean sea level and includes authorization for the landfill waste disruption project and approval of an engineering design for a Sustainable Landfill Project (SLP).

This Closure and Post Closure Plan is an update of OCLC's current Closure and Post Closure Plan which was approved by the NJDEP by letter dated March 31, 2011. A copy of the approval letter is included in Appendix B. As discussed with NJDEP, it was agreed to delay the subsequent update until after the permit renewal was issued. Relevant correspondence is included in Appendix B. This update has been prepared in accordance with the requirements of NJAC 7:26 2A.9 except for timeframe for the financial model update as discussed above.

The following items are included in this Closure and Post Closure Plan update:

- A closure plan describing the final closure of the facility.

- A post closure environmental monitoring plan which describes the environmental monitoring to be performed during the Post Closure Period.
- A post closure maintenance plan which details the maintenance activities to be conducted during the Post Closure Period.
- A schedule for implementation of all Closure and Post Closure Activities.
- Cost estimates for the activities outlined in the Closure and Post Closure Plan.
- A financial plan which sets forth the anticipated costs and expenses for all identified Closure and Post-Closure Activities and establishes the means for meeting these costs and expenses.
- An Environmental Improvements Financial Plan demonstrating that notwithstanding anticipated withdrawals for on-going environmental improvements at the landfill, sufficient funds are accruing in escrow for closure and post-closure costs not covered by the Statutory Account.

Under the New Jersey Sanitary Landfill Closure and Contingency Fund Act, OCLC collects a \$1/ton surcharge on waste disposed at the landfill for deposit into an escrow account to be used for closure and post closure costs. Referred to herein as the Statutory Account, these funds are currently held by US Bank (Account No. 2572004529). In addition, OCLC maintains three separate escrow accounts held by Bank of New York Mellon which are referred to individually as follows: Environmental Improvements Escrow Account (No. 944727), Closure/Post-Closure Account (No. 944725), and Post-Closure Administrative Account (No. 944726). Funds from the Environmental Improvements Account are used in part for on-going environmental improvements at the landfill and are also used, along with funds from the Closure/Post Closure Account, to fund costs incurred for Closure and Post-Closure Activities during the landfill's operating life. Funds accruing in the Post-Closure Administrative Account are to be used for certain administrative costs incurred during the Post-Closure Period.

Pursuant to the approval of the NJDEP, by Order dated August 22, 2001, the three escrow accounts held by the Bank of New York Mellon can be treated as one fund for the purposes of this filing. They are collectively referred to herein as the Environmental Improvements and Closure/Post Closure (EI and C/PC) Account.

2 CLOSURE PLAN

This Closure Plan describes the Final Cover Construction activities that will occur both before and after waste is no longer being accepted for disposal at the landfill; that is, before and after the landfill's Date of Closure as set forth in Section 5.1. It also describes the use and removal of temporary cover approved by NJDEP.

2.1 Final Cover

Final and temporary cover systems are designed to provide stable, long-term protection against exposure of waste and are intended to limit infiltration and support vegetative growth. These systems are constructed in phases as areas reach permanent or interim final grades, respectively.

Final Cover Construction consists of the following:

- On slopes with less than 7 percent final grade, a 40 mil HDPE geomembrane is used overlain by 18 inches of well drained soil with the upper 6 inches being topsoil. The geomembrane shall be bedded on a minimum thickness of 6 inches of subbase material which is free of rocks, fractured stones, or other debris which could damage the geomembrane.
- On slopes between 7 percent and 33 percent final grade, a textured 40 mil HDPE geomembrane is used, overlain by 18 inches of well drained soil with the upper 6 inches being topsoil. Also, 4 inch stormwater drainage pipes are placed in the drainage layer above the geomembrane.
- The establishment of vegetative cover in accordance with the New Jersey State Soil Conservation Committee Standards.

A temporary cover system is being utilized in select areas to control odors and manage gas collection pending waste decomposition and settlement of the in-place waste which enables reclamation of airspace for disposal of additional waste. The temporary cover system consists of the same components as the final cover system except the topsoil layer is four inches thick instead of six. While the temporary final cover is in place, it will require the same maintenance as final cover. The temporary cover will be removed in phases to allow for future cell development according to the site's operational sequence.

2.2 Vegetative Cover

After placement of the final/temporary cover, the area will be seeded to provide for establishment of a vegetative cover. The primary purposes for immediate establishment of vegetation are as follows:

- Protect slopes from soil erosion.
- Enhance evapotranspiration.
- Improve site aesthetics.

The vegetative cover soil will be prepared and seeded in accordance with the Soil Erosion and Sediment Control (SCS) Plan approved by the Ocean County Soil Conservation District and the Technical Specifications prepared with each capping project. A copy of the current Technical Certification is maintained at the SWF. Conditions of the approved SCS Plan will be adhered to throughout the Post Closure Period

2.3 Surface Water Drainage Controls

The surface water drainage system detailed in the SCS Plan for the landfill incorporates measures to control run off. Surface water is transported by interior and perimeter drainage channels to stormwater Basins A, B, C and D. All basins recharge to groundwater with no discharge to bodies of surface water. Basins A, B, C, and D are existing basins certified under the current SCS Plan. All surface water control structures are designed in accordance with applicable state and federal regulations. Conditions of the approved SCS Plan will be adhered to throughout the Post Closure Period.

2.4 Gas Control

A byproduct of the decomposition of solid waste is landfill gas. The OCLC landfill has an approved active gas collection and flaring system for use in controlling landfill gas (active meaning a vacuum is applied to pipe network to collect the gas).

Active gas collection systems are installed as cells are constructed. This allows landfill gas to be collected from areas while cells are operational. In addition, an active gas collection component is incorporated into both the temporary and final cover systems. Gas collection measures consist of the following:

- Active gas collection at primary manholes.
- Active operational gas collection, if necessary.
- Active gas collection at intermediate grades as temporary cap is constructed.
- Active gas collection at final grades.

Once a cell becomes operational, gas collection is initially performed at primary manholes and through the leachate collection system piping. An operational gas collection system may be constructed during waste placement as needed, and at OCLC's discretion. Its

primary use would be to collect gas before a temporary or final cover gas collection system is constructed.

The gas collection component of a temporary or final cover system consists of slotted polyethylene pipes bedded in stone, installed on approximate horizontal spacing of 200 feet. A vacuum is applied to the collection piping to withdraw the gas from the landfill. The gas collection pipes are connected to solid gas transmission pipes which ultimately route the gas directly or through a network of perimeter gas headers to the OCLC flare station or to one or both of the two nearby independently owned and operated landfill gas to energy (LFGE) Facilities.

The LFGE Facilities and the OCLC flares reduce the concentration of non methane organic compounds present in the landfill gas by at least 98 percent by weight. Any landfill gas not used by the LFGE Facilities is controlled by combustion in one of the OCLC flares. The flares will be maintained and operated during the Post Closure Period as needed. As the gas diminishes, the flare capacity can be reduced. OCLC's Title V Operating Permit BOP 160001 (Title V Permit) includes conditions related to the air emissions from the two enclosed flares, one portable flare, leachate treatment facility, and miscellaneous insignificant other emission sources at the SWF. Its Title V Permit was amended on November 2, 2015 to incorporate the waste excavation screeners and a new emergency generator and more recently on April 5, 2016 to incorporate a minor modification changing the design capacity in the permit to include capacity resulting from final elevations in Cell 8, Cell 7E and Cell 7D approved in the SWF Permit.

2.5 Measures to Conform the Site to the Surrounding Area

Measures taken to conform the closed landfill cells to the surrounding area are concentrated on minimizing their visual impact and establishing final cover vegetation in accordance with the landscaping plan for the site. Final grades provide moderate slopes that grade gently to the surrounding terrain. Good vegetative cover is and will continue to be established to ensure visual compatibility with the surrounding area. Buffer zones and screening berms planted with evergreens currently surround most of the active and closed landfill areas. Plantings necessary to insulate the landfill from the surrounding area will be well established by the commencement of the Post-Closure Period. Required buffer zones and screening berms will be maintained throughout the Post Closure Period.

2.6 Landfill Engineering Services

Engineering services will continue to be required during Final Cover Construction after the Date of Closure. Construction Plans and Technical Specifications will be prepared for the placement of final cover and installation of the gas collection system and surface water control structures that will be required after the Date of Closure. These construction activities will be observed and certified in accordance with the Construction Quality Assurance and Quality Control Plan in place for the SWF. Once completed, a certification

will be prepared by a New Jersey licensed professional engineer. This certification will evaluate the entire landfill to ensure that all areas have been closed in accordance with the approved Closure and Post Closure Plan. This certification will be prepared within 6 months after completion of the final phase of all closure activities.

3 POST-CLOSURE ENVIRONMENTAL MONITORING PLAN

The following items have been included in the Post Closure Environmental Monitoring Plan:

- Groundwater Monitoring.
- Gas Monitoring.
- Leachate Monitoring.
- Surface Water Monitoring.

3.1 Groundwater Monitoring

OCLC has been issued a New Jersey Pollution Discharge Elimination System (NJPDDES)/Discharge to Groundwater (DGW) Permit. Groundwater monitoring is currently and is anticipated to continue to be conducted on a semi-annual basis. Monitoring is and will be conducted as described in the approved Groundwater Protection Plan (GWPP) for the SWF and in accordance with the conditions of the NJPDDES/DGW Permit. For the purpose of the Financial Plan component of this Closure/Post-Closure Plan update, it is assumed that the current sampling program, with its testing parameters, will be continued throughout the Post-Closure Period. The results of this sampling will be reported to the NJDEP.

3.2 Gas Monitoring

The gas monitoring program consists of a methane gas survey and routine gas quality analysis. It is anticipated that gas monitoring during the Post-Closure Period will be conducted as described in the approved Operations and Maintenance (O&M) Manual for the SWF and as required by OCLC's current Title V Permit.

A methane gas survey will be performed on a quarterly basis within the buffer zone around the perimeter of the landfill areas to assess potential lateral gas migration. The results of the perimeter gas monitoring will be submitted to the NJDEP quarterly, within 60 days of the data collection. The gas survey will also include methane sampling around the perimeter of the buildings, such as the maintenance building, scale house, and leachate treatment facility. The results of the gas monitoring around buildings are retained on-site in OCLC's records.

Routine gas quality analyses will include monthly monitoring of the well field to determine whether air intrusion is occurring by recording landfill gas oxygen content. Landfill gas

temperature and wellhead pressure readings will also be taken to confirm that gas is being extracted safely from the field. In addition, on a quarterly basis, the surface of the landfill will be monitored to verify that methane concentrations above the surface do not exceed 500 ppm and to ensure that gas is being collected at a sufficient extraction rate.

OCLC has installed two enclosed flares to combust gas collected by the landfill gas collection system. Both will continue to be operated, as needed, during the Post Closure Period. As required by OCLC's Title V Permit, the stream of gas delivered to the flaring system, or delivered to the LFG Facilities, is tested for methane content. The analytical results of this sampling shall be submitted to NJDEP within 30 days of receipt. In addition, the operating temperature at the control flares is continuously monitored to ensure proper gas destruction performance. Monitoring of flare emissions is done by calculation and is reported to the NJDEP on an annual basis.

3.3 Leachate Monitoring

The leachate collection and treatment system will be operated and maintained during the Post Closure Period. It is anticipated that post closure leachate monitoring will be conducted as described in the approved O&M Manual for the SWF, as required by all applicable NJDEP regulations, and in accordance with the conditions of the Industrial Discharge Permit (IDP) issued by the Ocean County Utilities Authority (OCUA). OCLC has been informed by NJDEP that a NJPDES Permit is no longer required because OCLC has an approved IDP from the OCUA.

The leachate monitoring program determines the following:

- Total quantity of leachate collected.
- Chemical characteristics of the leachate.
- Quantity of leachate collected in the secondary leachate collection system.
- Leachate head build-up at less than 12 inches.

The total leachate production during the Post-Closure Period, after final closure of all landfill cells, is expected to decrease over time and eventually reach a steady state. OCLC will continue to compile the leachate flow meter recordings and submit this information on a quarterly basis. Total leachate quantities leaving the leachate treatment facility and pumped through the outfall line to the OCUA trunk line are measured by a run-time recorder or flow meter on a continuous basis using a chart recorder/totalizer unit. OCLC records the leachate flow meter reading on a daily basis, and reviews the charts on a weekly basis. Daily recordings of leachate flow ensure that the system's operation is not impeded.

A sampling manhole is located at the terminal end of the leachate outfall line just before its connection with the OCUA trunk line. Leachate effluent is monitored for various

parameters at the sampling manhole on a monthly, quarterly, or semi-annual basis, depending upon the sampling parameter. The monitoring is performed by collecting either grab or composite type samples, again depending upon the sampling parameters. Results of the monitoring are compiled and submitted to the OCUA monthly, in accordance with the IDP Permit. These reports are prepared by the treatment plant operator who will be responsible for the operation and maintenance of the leachate collection and treatment systems during the Post-Closure Period.

Leachate that is collected in the secondary collection system flows to secondary leachate pumping stations. The quantity of secondary leachate is monitored in the corresponding secondary manholes and is measured on a daily basis by OCLC. The volume of any liquid collected in the secondary collection system manholes is reported to the NJDEP on a quarterly basis by OCLC.

All leak detection risers and containment structures are checked on a regular basis by OCLC personnel for the presence of leachate. A record is kept of the results of each inspection.

3.4 Surface Water Monitoring

It is anticipated that surface water monitoring during the Post-Closure Period will be conducted as described in the approved O&M Manual for the SWF and in accordance with the existing General NJPDES DGW Permit and Site-Specific NJPDES DGW Permit.

In conjunction with the construction of landfill cells, a network of surface water control structures has been or will be installed. These facilities will safely convey surface water away from the landfill to 4 separate stormwater recharge basins as described in Section 2.3. All four of these basins are designed to be recharge basins which will handle stormwater runoff by discharging it back into the groundwater. The design of these basins has been approved as part of the SCS Plan for the SWF.

4 POST-CLOSURE MAINTENANCE ACTIVITIES

Post Closure maintenance activities for the Post Closure Period will be as set-forth in NJAC 7:26-2A.9 and described below.

4.1 Final Cover Maintenance

Final cover maintenance includes the repair and replacement of any topsoil and cover soil lost due to erosion. This condition can occur prior to or after the establishment of self-sustaining vegetative cover. Final cover maintenance is anticipated to continue throughout the Post-Closure Period.

Final cover maintenance will include placement of additional cover soil within areas in need of repair. This material will be spread and fine graded to maintain a minimum thickness of 12 inches. Any drainage pipe which needs to be repaired will be installed to the original design configuration. Topsoil will then be spread over the area as needed to maintain a minimum depth of 6 inches. The area will then be vegetated as described in Section 4.2.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas that require final cover maintenance will be identified and included in the quarterly inspection report. All final cover maintenance will be performed in a timely manner after issuance of the inspection report.

4.2 Vegetative Maintenance

Vegetative maintenance will include the application of seed, lime, fertilizer, and mulch on areas in which self-sustaining vegetative cover has not been fully established. This includes areas where final cover maintenance is needed, or areas in which prior seeding have not been effective. Vegetative maintenance should only be necessary for 11 years after the installation of final cover. This is typically more than enough time to create a well established and sustainable vegetative growth over the area.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas which require vegetative maintenance will be identified and noted in the quarterly inspection report. Vegetative maintenance will be performed during optimum seeding dates as specified in the SCS Plan.

4.3 Settlement Repair

Settlement repair will be required in areas in which settlement of the in-place solid waste has produced depressions in the final cover which cause ponding of surface water or create unstable slope conditions. Settlement repair could include, if necessary, replacement of an

entire final cover section, including subbase material, geomembrane, cover soil and topsoil. Settlement repair is anticipated to continue throughout the Post-Closure Period.

Any areas requiring minimal settlement repair will be maintained as per Section 4.1, Final Cover Maintenance. Areas requiring more extensive settlement repair will have all topsoil and cover soil removed. The existing geomembrane will be cut and removed. Subgrade material will be placed and compacted in the depression until the ground line matches the surrounding grade. Geomembrane will be installed and seamed to the surrounding membrane cap. All seams will be tested to conform to the specifications for geomembrane caps. Cover soil will then be placed and fine graded to a minimum depth of 12 inches. Topsoil will be spread over the area to a minimum depth of 6 inches. The area will then be vegetated.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas which require settlement repair will be identified and noted in the quarterly report. All settlement repairs will be performed in a timely manner after issuance of the inspection report.

4.4 Fertilizing

Fertilizer and lime will be applied to facilitate the establishment of a self-sustaining vegetative cover. Similar to vegetative maintenance, fertilizing is only necessary for the first 11 years after placement of the vegetative cover. These areas will be re-fertilized as needed and at the discretion of OCLC to promote a self-sustaining vegetative cover. Areas requiring re-fertilization will not be identified in the Quarterly Post Closure Inspection Reports. Fertilizing will be performed in accordance with the schedule provided in Section 5.

4.5 Mowing

After final closure, landfill areas will be mowed on a regular basis to prevent the overgrowth of shrubs, trees, and other deep rooted vegetation as well as for aesthetic purposes. It is assumed that mowing will be required three times per year as per the NJDEP Technical Manual for Sanitary Landfill Permits and Approvals.

Mowing will not be identified in the Quarterly Post Closure Inspection Reports. Mowing will be performed in accordance with the schedule provided in Section 5.

4.6 Monitoring Well Maintenance Repair and Replacement

Inspection of groundwater monitoring wells will be conducted semi-annually to ensure that all wells are in good condition. Maintenance work associated with monitoring wells may include brush clearing, lock replacement, cap or protective casing replacement, and grout seal repair. Any wells deemed inoperative or malfunctioning will be replaced.

4.7 Drainage System Cleaning, Repair, and Maintenance

Inspections of all closed landfill areas after the Date of Closure will be conducted quarterly as described in Section 4.12. During these inspections, the surface water management system will be surveyed to check if any structures require cleaning, repair, or maintenance. The results of these inspections will be included in the quarterly report. Necessary maintenance of the surface water management system will be performed in a timely manner after issuance of the inspection report.

Maintenance of the surface water control system will include cleaning accumulated sediment from channels and culverts. Concrete, rip rap or gabion lined channels will be inspected to check the integrity of the channel lining. Any inadequate channel linings will be repaired or replaced. The recharge basins will also be surveyed to determine if sediment has accumulated to the design sediment storage elevation. Sediment will be removed from the basins once this capacity has been reached. The maintenance activities for the surface water management system will occur throughout the Post Closure Period.

4.8 Gas System Operation, Maintenance, and Repair

After final closure of all landfill cells, decomposition of in-place solid waste will continue producing methane gas. This will require continued operation and maintenance of the gas collection and control system during the Post Closure Period.

The gas collection and control system will be staffed on a part time basis to ensure its proper operation and to perform scheduled and unscheduled maintenance. Operation of the gas collection and control system will require electricity, spare parts, and system monitoring. The gas collection and transmission piping within landfill cells will require periodic adjustments to ensure efficient gas collection. The condensate collection and pumping system will also be maintained to provide environmentally safe management of gas condensate.

During the monthly system monitoring outlined in Section 3.2 above, the gas collection system will be checked to ensure proper collection and conveyance of landfill gas to the flares or to the nearby LGE Facilities. Any repairs required will be identified and included in the inspection report. Repairs may include replacement of pipe, fittings, valves, test ports, or cleaning of transmission piping. Unless there is an exceedance of federal New Source Performance Standards (NSPS), the repair will be performed in a timely manner after issuance of the inspection report. If there is an NSPS exceedance, the repair will be performed as soon as practicable to correct the exceedance within the timeframes specified by the NSPS regulations. The location will be re-monitored to verify that the repair was adequate.

4.9 Leachate Collection System Operation, Maintenance, and Repair

As with the landfill gas collection system, the leachate collection and conveyance system will need to be operated and maintained during the 30 year Post Closure Period.

Labor for the operation and maintenance of the leachate system will be provided by the operator of the leachate treatment facility located on site. This will include leak detection monitoring and daily flow recordkeeping and reporting. The operation of the system will also require electricity. Maintenance activities will include cleaning the leachate collection and transmission piping and repair and/or replacement of pumps and controls, piping, fittings, valves, and other manhole appurtenances.

Inspections of the landfill area will be conducted quarterly during the Post Closure Period. During these inspections, the leachate collection system manholes and piping will be checked to ensure proper operation. Any repairs required will be identified and included in the inspection report. All repairs will be performed in a timely manner after issuance of the inspection report.

4.10 Leachate Handling

Leachate collected during the Post Closure Period will be handled in the leachate treatment facility prior to delivery and discharge to the OCUA sewer trunk line. This will require operation and maintenance of the leachate storage lagoons, storage tanks, treatment facility, and outfall line during the Post Closure Period.

The operation of the leachate handling system will require one full time, licensed treatment plant operator. This operator will also have responsibility for the operation and maintenance of the leachate collection system as described in Section 4.9. Duties will include operation of treatment units within the plant to ensure proper performance and compliance with applicable discharge permits. Other operation and maintenance requirements are:

- Electricity to run the treatment facility and pump stations.
- Chemicals used in treatment.
- Funds for payment of OCUA discharge fees.
- Monitoring the treatment facility influent and effluent, and preparation of reports required by regulatory agencies.
- Maintenance and repair and/or replacement of parts such as pumps, meters, piping, fittings, valves, etc.

- Maintenance and cleaning of leachate storage lagoon and treatment units and disposal of accumulated sludges.

The operator will be responsible for performing or contracting for all activities associated with the operation and maintenance of the leachate handling system during the Post Closure Period.

4.11 Facility Access Controls

Access to the OCLC SWF is controlled by fencing. A perimeter chain link fence prevents unauthorized access to the site. Necessary fencing will be maintained during the Post Closure Period. As part of the quarterly site inspection, the fence line will be checked for any breaches and necessary repairs. Any problems will be noted in the quarterly inspection report. All repairs will be performed in a timely manner after issuance of the inspection report.

Access to landfill areas is provided by paved internal access roads. These roadways provide the access to all landfill areas necessary for monitoring and maintenance activities. Any roadway repairs needed will be identified during quarterly site inspections and noted in the quarterly reports. Repairs to roadways will be performed within 3 months of the issuance of the inspection report.

4.12 Inspection and Certification (Engineering Services)

As indicated above, quarterly inspections of the closed landfill will be conducted throughout the Post Closure Period. These inspections will address final cover, vegetation, settlement, surface water management systems, the gas collection system, leachate collection system, and facility access. Any repairs required will be identified and noted in the Quarterly Post Closure Inspection Report. In addition, any areas in need of repair identified in the previous quarterly report will be inspected to ensure that the repairs were completed in accordance with the Post Closure Plan. Where required, all work will be certified by an engineer licensed by the State of New Jersey.

5 IMPLEMENTATION SCHEDULE

5.1 Key Terms and Dates

This section outlines schedules for implementing the Closure and Post-Closure Plan update. As indicated above, this update takes into account the permit renewal elements including the Existing Landfill waste disruption and SLP design as well as the approved final elevation of 185 feet. Therefore, the projected Date of Closure is near the end of 2038 and the 30 year Post Closure Period will run from 2039 through 2068. Certain activities associated with the Closure and Post Closure Plan are currently on going and will continue through the Post Closure Period. In this discussion of implementation schedules, the following terms are utilized:

- **“Closure” or “Date of Closure”** – is the date when waste disposal stops. The Date of Closure for the purposes of this update is projected to be the end of 2038.
- **“Final Cover Construction”** – is the activity associated with the installation of a final cover system as described previously on a portion of the landfill which has achieved design elevations and grades.
- **“Temporary Cover Construction”** – is the activity associated with the installation of a cover system similar to the final cover system on a portion of the landfill which has achieved interim elevations and grades. This system is installed to control odors and manage gas collection pending waste decomposition and the resulting settlement of the in-place waste which enables reclamation of airspace for disposal of additional waste. The temporary cover will be removed to allow overfill operations up to design elevations and grades.
- **“Post-Closure Period”** – is the 30 year period after the Date of Closure. For the purposes of this update, this period is expected to begin in 2039 and extend through 2068.
- **“Post-Closure Activities”** – are monitoring, operation, maintenance, repair, and inspection activities which are required once Final Cover Construction is completed.
- **“Type A Post-Closure Activities”** – are Post-Closure Activities that begin once a landfill area receives final or temporary cover whether before or after the Date of Closure.
- **“Type B Post-Closure Activities”** – are Post-Closure Activities which begin after the Date of Closure.

5.2 Landfill Closure

The landfill operation at the OCLC SWF is being developed and closed incrementally, on a cell or subcell basis. The landfill operation has been divided into 6 remaining operational stages. Final Cover Construction will occur during each of these stages on a portion of the landfill. Final Cover Construction will not occur on portions of the landfill used during the last operational stage until after the Date of Closure. A schedule has been developed for the Final Cover Construction in conjunction with each operational stage of the landfill, subject to change due to fluctuating waste rates and types received, actual waste densities achieved and actual operating conditions encountered. This "Landfill Site Development Plan" is summarized in Figure 1. Final Cover Construction within each operational stage will include the placement of cover materials and the installation of gas collection facilities, surface water control structures, and landfill access facilities.

5.3 Post-Closure Activities

Post-Closure Activities are divided into two main categories: Type A Post Closure Activities, and Type B Post Closure Activities.

The Type A Post Closure Activities are undertaken at closed cells both during the operational stages of the landfill and after the Date of Closure. Once final or temporary cover is installed, Post-Closure Activities must be performed to ensure the integrity of the cover system. Type A Post-Closure Activities are divided into two subcategories. The first includes activities which will be performed for a finite period of time. This includes vegetative maintenance and fertilizing. These activities will be performed for 11 years after Final Cover Construction in each stage of the landfill operation. The second category includes final cover maintenance, settlement repair, mowing and site inspections. These activities will begin once Final Cover Construction is completed, and will continue to the end of the Post Closure Period.

Type B Post Closure Activities are tasks which are also part of regular landfill operations and continue as Post Closure Activities after the Date of Closure. This includes all environmental monitoring and operation and maintenance of the surface water, gas and leachate management systems. These activities will be performed throughout the 30 year Post Closure Period.

All Post Closure Activities are summarized in Table E-3 included in Appendix E.

5.4 Post-Closure Administrative Costs

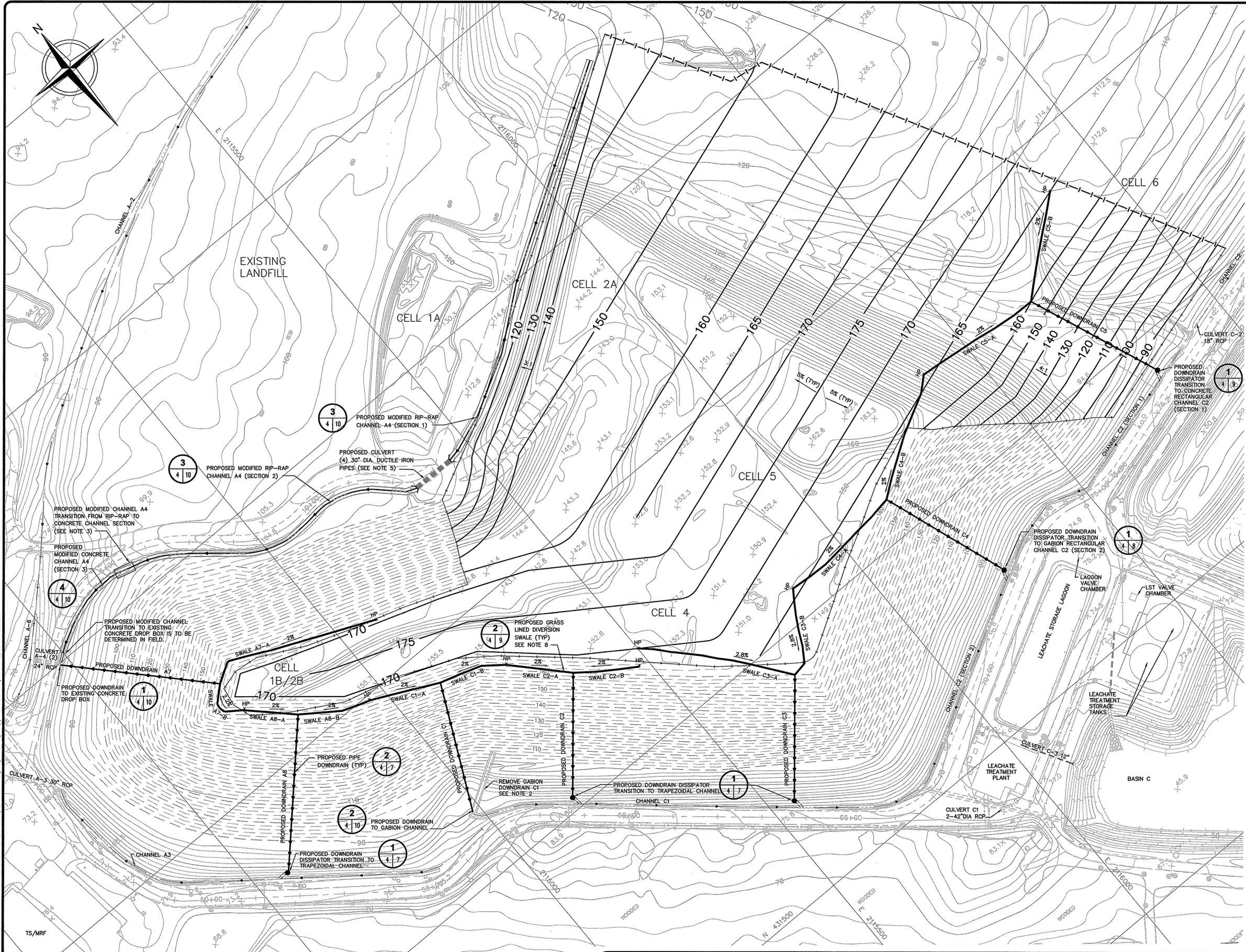
Funds in the Post-Closure Administrative Account (No. 944726) are being accrued for administrative costs that will be incurred during the 30 year Post Closure Period. These costs include annual lease payments pursuant to the post closure lease approved by the NJDEP in an Order dated May 15, 1997. Post Closure administrative costs also include

taxes, expenses for legal and accounting services, and costs for environmental impairment liability insurance coverage.

NOTE:
1. EXISTING TOPOGRAPHY COMPILED BY PHOTOGRAMMETRIC METHODS BY MID-ATLANTIC PHOTOGRAMMETRIC SERVICES, INC. FROM AERIAL PHOTOGRAPHY DATED FEBRUARY 4, 2017.



0 100 200
SCALE IN FEET



LEGEND:

- EXISTING BUILDING/STRUCTURE
- EXISTING FENCE
- EXISTING SPOT ELEVATION
- EXISTING ELECTRIC
- EXISTING WATERMAIN
- EXISTING DRAINAGE CHANNEL
- EXISTING CONTOUR (JANUARY 14, 2010)
- EXISTING CONTOUR (JULY 22, 2010) SEE NOTE 4
- PROPOSED FINAL COVER CONTOUR
- FUTURE PERMITTED FINAL COVER CONTOUR
- PROPOSED DOWNDRAIN
- PROPOSED DRAINAGE CHANNEL
- PROPOSED GRASS LINED DIVERSION SWALE
- PROPOSED CAP TIE-IN
- PROPOSED CAP KEY-IN
- HP
- ENERGY DISSIPATOR AND CULVERT

CROSS SECTIONS:

- 1 - CROSS SECTION/DETAIL I.D.
- 2 - SECTION LINE/DETAIL PLAN SHEET CALL OUT
- 3 - CROSS SECTION/DETAIL SHEET LOCATION

- NOTES:**
1. TOPOGRAPHIC SURVEY WAS PREPARED BY MID-ATLANTIC PHOTO SERVICES, INC. OF CLIFTON, NEW JERSEY, USING PHOTO METHODS FROM AERIAL PHOTOGRAPHY DATED JANUARY 14, 2010.
 2. CONTRACTOR TO REPAIR CAPPING COMPONENTS AS DIRECTED BY OWNER'S ENGINEER AT AREA OF REMOVED DOWNDRAIN C1. MATCH FINAL GRADE WITH EXISTING.
 3. LOCATION OF CHANNEL A4 TRANSITION FROM RIP-RAP TO CONCRETE SECTION MAY VARY DEPENDING ON FIELD CONDITIONS AT TIME OF CONSTRUCTION. LOCATION TO BE DETERMINED IN FIELD BY OWNER'S ENGINEER.
 4. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING CHANNEL DIMENSIONS, CHANNEL LINING, INVERTS AND SLOPES PRIOR TO DRAINAGE FEATURE CONSTRUCTION. CONTRACTOR TO NOTIFY OWNER'S ENGINEER OF ANY DISCREPANCIES.
 5. CONTRACTOR TO VERIFY LOCATION OF PROPOSED CULVERT AND CHANNEL TRANSITIONS PRIOR TO CONSTRUCTION WITH OWNER'S ENGINEER. CONTRACTOR IS TO BUILD UP COVER SOILS AT THE CULVERT PIPES AT THE ACCESS ROAD CROSSING.
 6. CONTRACTOR IS TO PROVIDE AS-BUILT INFORMATION FOR ALL DRAINAGE FEATURE INVERTS AT COMPLETION OF PROJECT.
 7. IF GULLIES DEVELOP ADDITIONAL STABILIZATION MEASURE WILL BE PROVIDED.
 8. SEE SHEET HW11 FOR DIVERSION SWALE PROFILES.

1" = 1/2" 0'

0 100 200
SCALE IN FEET

RICHARD A. PELUSO, P.E.
Richard A. Peluso 12/16/10
N.J.P.E. Lic. No. 19780
Expiration Date - April 30, 2012

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DATE OF ISSUE: DECEMBER 17, 2010
DRAWN BY: [Signature]
DESIGNED BY: [Signature]
CHECKED BY: [Signature]
APPROVED BY: [Signature]

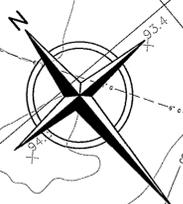
CORNERSTONE
Engineering Group, LLC

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OCEAN COUNTY LANDFILL CORPORATION
CELLS 1B/2B, 4 AND 5 PLATEAU FINAL CAP
MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

DRAINAGE PLAN

SHEET NO.
HW4
PROJECT NO.
100322



LEGEND:

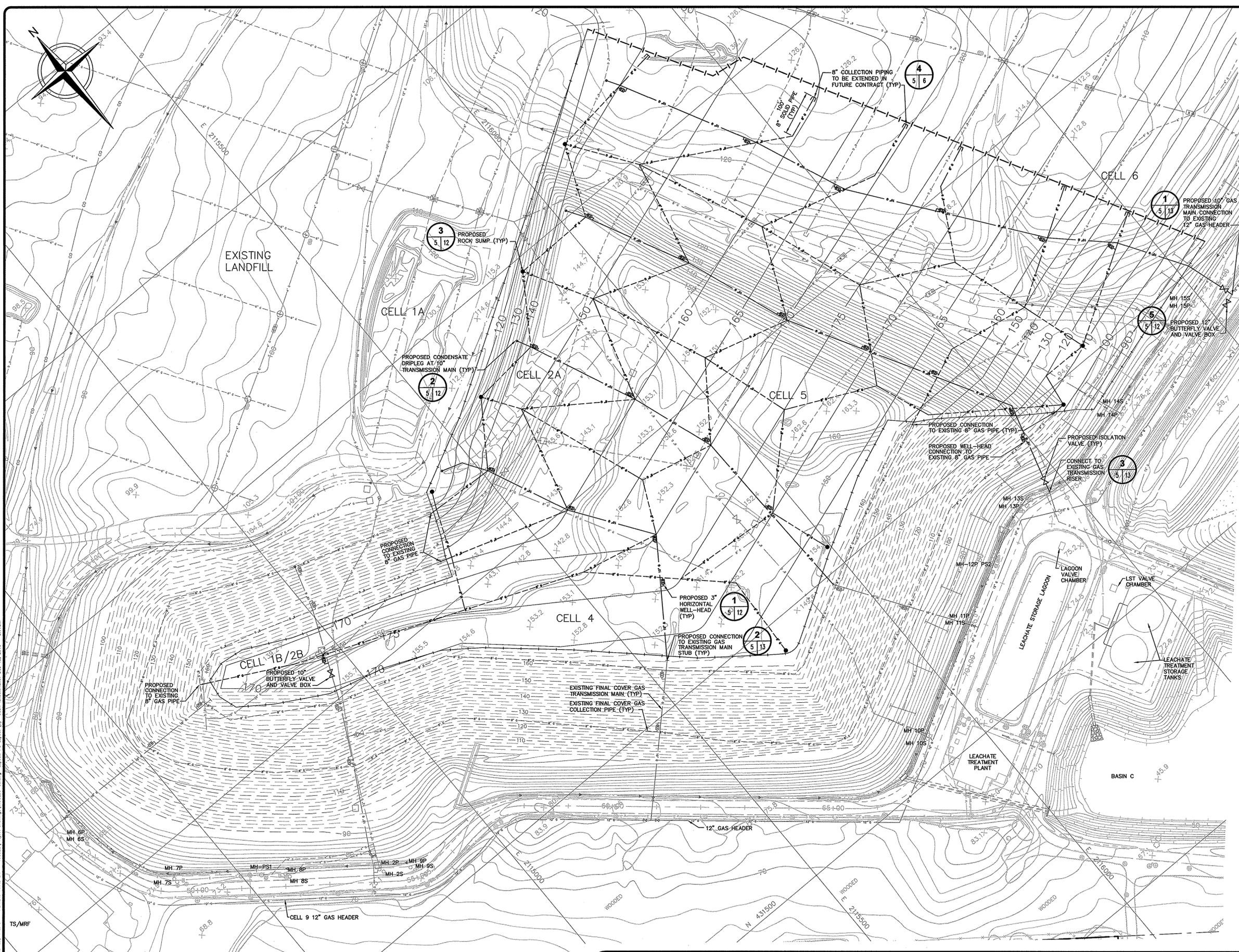
- EXISTING BUILDING/STRUCTURE
- ORIGINAL 8" SLOTTED GAS COLLECTION PIPE
- ORIGINAL 10" GAS TRANSMISSION MAIN
- ORIGINAL 12" PERIMETER GAS HEADER
- EXISTING FINAL COVER GAS TRANSMISSION MAIN
- EXISTING FINAL COVER GAS COLLECTION PIPE
- EXISTING DRAINAGE CHANNEL
- EXISTING ELECTRIC
- EXISTING WATERMAIN
- EXISTING FENCE
- EXISTING SPOT ELEVATION
- EXISTING CONTOUR (JANUARY 14, 2010)
- EXISTING CONTOUR (JULY 21, 2010)
- PROPOSED FINAL COVER CONTOUR
- PROPOSED CAP TIE-IN
- PROPOSED CAP KEY-IN
- PROPOSED 8" SLOTTED GAS COLLECTION PIPE
- PROPOSED 8" SOLID PIPE
- PROPOSED 10" GAS TRANSMISSION MAIN
- PROPOSED 3" HORIZONTAL WELL-HEAD AND WEATHER RESISTANT ENCLOSURE
- PROPOSED ROCK SUMP
- PROPOSED CONDENSATE DRIPLEG



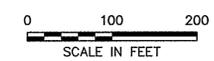
- 1 - CROSS SECTION/DETAIL I.D.
- 2 - SECTION LINE/DETAIL PLAN SHEET CALL OUT
- 3 - CROSS SECTION/DETAIL SHEET LOCATION

NOTES:

1. TOPOGRAPHIC SURVEY WAS PREPARED BY MID-ATLANTIC PHOTO SERVICES, INC. OF CLIFTON, NEW JERSEY, USING PHOTO METHODS FROM AERIAL PHOTOGRAPHY DATED JANUARY 14, 2010.
2. PORTION OF CONTOURS IN THE EXISTING CELLS 1B/2B, 4 AND 5 SIDE SLOPE CAP AREA ARE BASED ON AS-BUILT SURVEY PROVIDED BY ENVIRONMENTAL RESOLUTIONS DATED JULY 21, 2010 AND REPRESENTS TOP OF FINAL COVER.
3. CONTRACTOR TO VERIFY ALL UNDERGROUND UTILITIES AT LOCATIONS OF PROPOSED GAS LINE WORK PRIOR TO EXCAVATION AND INSTALLATION.
4. CONTRACTOR AND SITE ENGINEER TO ORIENTATE VALVE BOXES IN FIELD.
5. EXISTING FINAL COVER GAS FEATURES REPRESENT AS-BUILT CONDITIONS PROVIDED BY ENVIRONMENTAL RESOLUTIONS DATED JULY 21, 2010.
6. ORIGINAL GAS COLLECTION SYSTEM LEFT IN PLACE IN OPERATIONAL AREA.



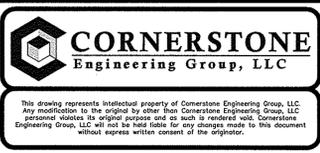
1" = 100'



RICHARD A. PELUSO, P.E.
Richard A. Peluso 12/16/10
 N.J.P.E. Lic. No. 19780
 Expiration Date - April 30, 2012

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

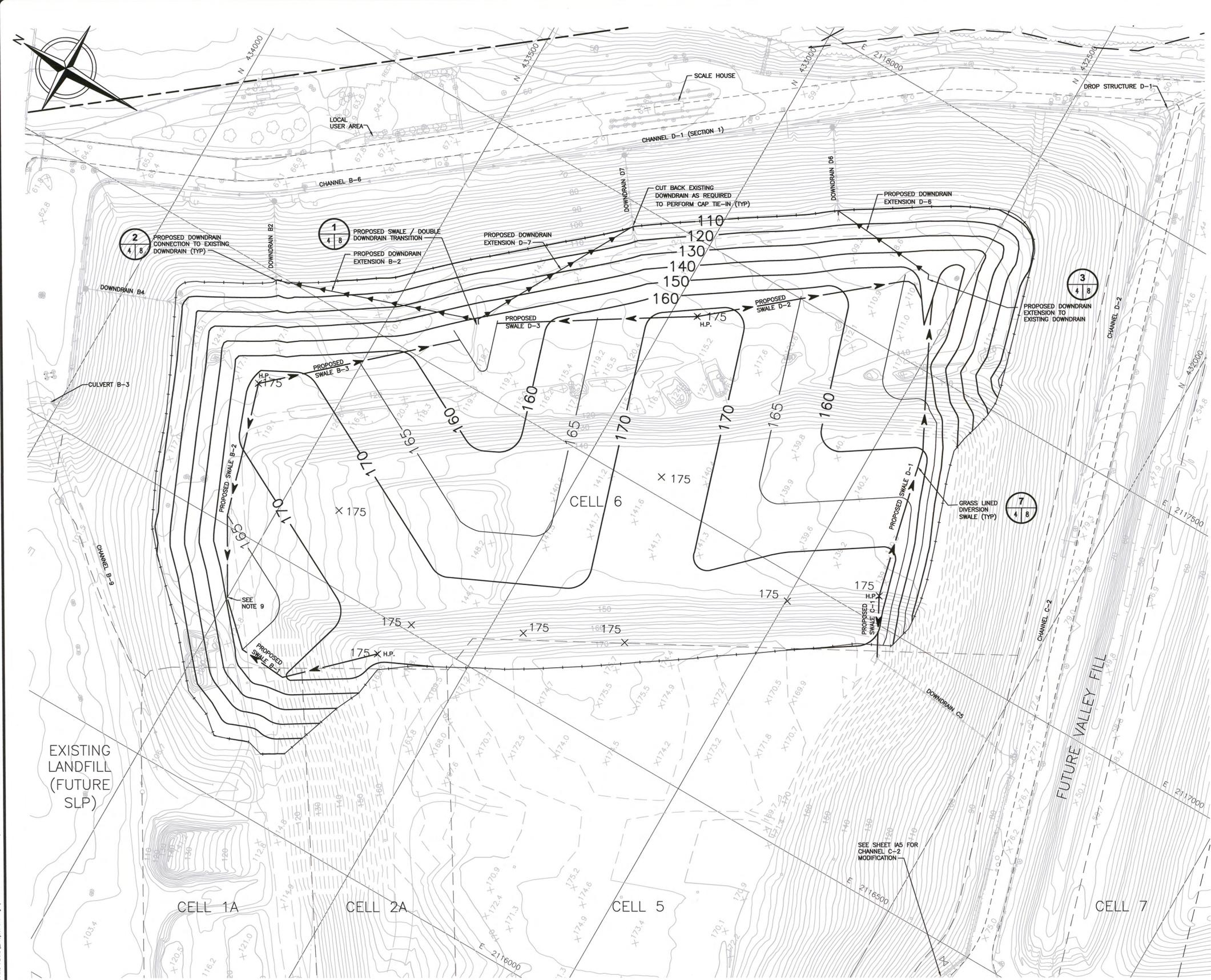
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 DESIGNED BY: [Signature]
 CHECKED BY: [Signature]
 APPROVED BY: [Signature]



OCEAN COUNTY LANDFILL CORPORATION
 CELLS 1B/2B, 4 AND 5 PLATEAU FINAL CAP
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

SHEET NO. **HW5**
 PROJECT NO. 100322

GAS MANAGEMENT PLAN



LEGEND:

- EXISTING BUILDING/STRUCTURE
- EXISTING FENCE
- EXISTING SPOT ELEVATION
- TREES, WOODED AREA
- ROAD
- FACILITY BOUNDARY
- 50' BUFFER LINE
- LIMIT OF CELL AREA
- EXISTING CONTOUR (JANUARY 19, 2013)
- EXISTING CONTOUR (JUNE 4, 2013) (SEE NOTE 2)
- PROPOSED FINAL COVER CONTOUR
- PROPOSED CAP TIE-IN
- EXISTING PERIMETER CHANNEL
- EXISTING DOWNDRAIN
- PROPOSED DOWNDRAIN EXTENSION
- PROPOSED GRASS LINED DIVERSION SWALE

1 - CROSS SECTION/DETAIL I.D.
2 - SECTION LINE/DETAIL PLAN SHEET CALL OUT
3 - CROSS SECTION/DETAIL SHEET LOCATION

- NOTES:**
- TOPOGRAPHIC SURVEY WAS PREPARED BY MID-ATLANTIC PHOTOGRAMMETRIC SERVICES, INC. OF CLINTON, NEW JERSEY, USING PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED JANUARY 19, 2013.
 - PORTION OF CONTOURS IN THE EXISTING CELL 5 CAP AREA PROVIDED BY ENVIRONMENTAL RESOLUTIONS, INC. SURVEY DATED JUNE 4, 2013 AND REPRESENT TOP OF FINAL COVER.
 - EXISTING CELL 5 CAP KEY-IN TRENCH LOCATIONS PROVIDED BY ENVIRONMENTAL RESOLUTIONS, INC. DATED JUNE 4, 2013. EXISTING CELL 6 SIDE SLOPE KEY-IN TRENCH LOCATIONS PROVIDED BY OCLF.
 - EXISTING CHANNEL C-2 AND CELL 6 SIDE SLOPE DOWNDRAINS LOCATIONS AND ELEVATIONS PROVIDED BY ENVIRONMENTAL RESOLUTIONS, INC. SURVEY DATED MAY 13, 2013.
 - PROPOSED GRADING REPRESENTS TOP OF FINAL COVER.
 - CONTRACTOR TO PROVIDE TEMPORARY STORMWATER CONTROLS AS DIRECTED BY OWNER'S ENGINEER.
 - CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING FIELD CONDITIONS.
 - FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO FINAL COVER GRADES. ALTERATIONS MUST BE APPROVED BY OWNER'S ENGINEER.
 - GRASS LINED DIVERSION SWALES B-1 AND B-2 TO DISCHARGE TO TEMPORARY DOWNDRAIN. LOCATION TO BE DETERMINED IN THE FIELD AND APPROVED BY OWNER'S ENGINEER.

1" = 100' SCALE IN FEET
 FILE: X:\PROJECTS\OCEAN COUNTY\130359 - CELL 6 CAPPING PLANS\Project Drawings\130359-01.DWG Layout: CELL 6 User: jansushow Oct 16, 2013 - 4:02pm

0 100 200
SCALE IN FEET

RICHARD A. PELUSO, P.E.
Richard A. Peluso 10/16/13
 N.J.P.E. Lic. No. 19780 Date
 EXPIRATION DATE - APRIL 30, 2014

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
1	OCTOBER 2013	DESIGNED BY	AFK	CHECKED BY	MB	APPROVED BY

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OCEAN COUNTY LANDFILL CORPORATION
 CELL 6 FINAL CAP
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY

STORMWATER MANAGEMENT PLAN

SHEET NO.
IA4

PROJECT NO.
130359

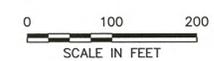


LEGEND:

	EXISTING BUILDING/STRUCTURE
	EXISTING FENCE
	EXISTING SPOT ELEVATION
	TREES, WOODED AREA
	ROAD
	FACILITY BOUNDARY
	50' BUFFER LINE
	LIMIT OF CELL AREA
	EXISTING CONTOUR
	EXISTING CONTOUR (SEE NOTE 2)
	PROPOSED FINAL COVER CONTOUR
	PROPOSED CAP TIE-IN
	1 - CROSS SECTION/DETAIL I.D.
	2 - SECTION LINE/DETAIL PLAN SHEET CALL OUT
	3 - CROSS SECTION/DETAIL SHEET LOCATION
	EXISTING ELECTRIC LINE
	EXISTING WATER LINE
	EXISTING LANDFILL GAS HEADER
	EXISTING LANDFILL GAS COLLECTION PIPE
	EXISTING LANDFILL GAS TRANSMISSION PIPE
	EXISTING PERIMETER CHANNEL
	EXISTING DOWNDRAIN
	EXISTING ROCK SUMP
	EXISTING TRANSMISSION/HEADER VALVE
	EXISTING HORIZONTAL WELLHEAD
	PROPOSED LANDFILL GAS COLLECTION PIPE
	PROPOSED LANDFILL GAS TRANSMISSION/HEADER PIPE
	PROPOSED ROCK SUMP BENEATH CAP
	PROPOSED TRANSMISSION/HEADER VALVE
	PROPOSED HORIZONTAL WELLHEAD
	PROPOSED COLLECTION PIPE VALVE

- NOTES:**
1. TOPOGRAPHIC SURVEY WAS PREPARED BY MID-ATLANTIC PHOTOGRAMMETRIC SERVICES, INC. OF CLINTON, NEW JERSEY, USING PHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED JANUARY 18, 2013.
 2. PORTION OF CONTOURS IN THE EXISTING CELL 5 CAP AREA ARE BASED ON AS-BUILT SURVEY PROVIDED BY ENVIRONMENTAL RESOLUTIONS, INC. DATED JUNE 4, 2013 AND REPRESENT TOP OF FINAL COVER.
 3. EXISTING CELL 5 CAP TIE-IN TRENCH LOCATIONS PROVIDED BY ENVIRONMENTAL RESOLUTIONS INC. DATED JUNE 4, 2013.
 4. PROPOSED GRADING REPRESENTS TOP OF FINAL COVER.
 5. CONTRACTOR IS RESPONSIBLE TO VERIFY ALL EXISTING FIELD CONDITIONS.
 6. PORTIONS OF THE EXISTING LANDFILL GAS COLLECTION AND CONTROL SYSTEM INSTALLED AS PART OF THE CELL 5 AND CELL 6 TEMPORARY CAPPING PROJECTS ARE NOT SHOWN FOR CLARITY. SIDE SLOPE LANDFILL GAS COLLECTION SYSTEM SHOWN FOR INFORMATIONAL PURPOSES.
 7. SEE EXISTING CONDITIONS PLAN, SHEET IA2, FOR EXISTING GCCS LAYOUT.

File: X:\PROJECTS\OCEAN COUNTY\130359-5-GCCS-CD.DWG Layout: SITE PLAN (1) User: ransschow Oct 16, 2013 4:49pm
 1" = 100' SCALE IN FEET



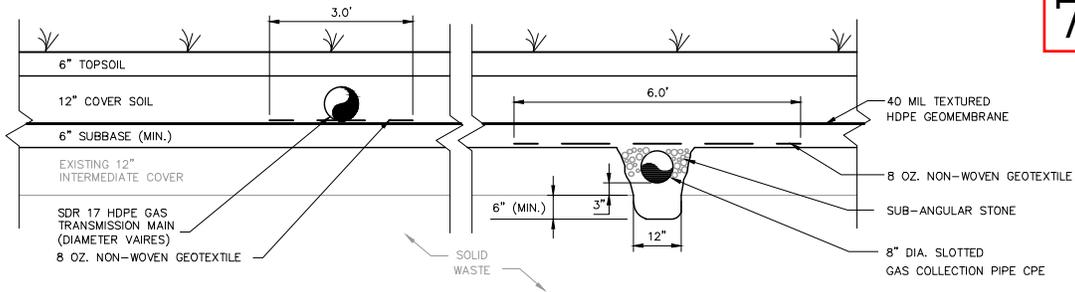
RICHARD A. PELUSO, P.E.
Richard A. Peluso 10/16/13
 N.J.P.E. Lic. No. 19780 Date
 EXPIRATION DATE - APRIL 30, 2014

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

CORNERSTONE
 Engineering Group, LLC
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OCEAN COUNTY LANDFILL CORPORATION
 CELL 6 FINAL CAP
 MANCHESTER TOWNSHIP, OCEAN COUNTY, NEW JERSEY
GAS MANAGEMENT PLAN

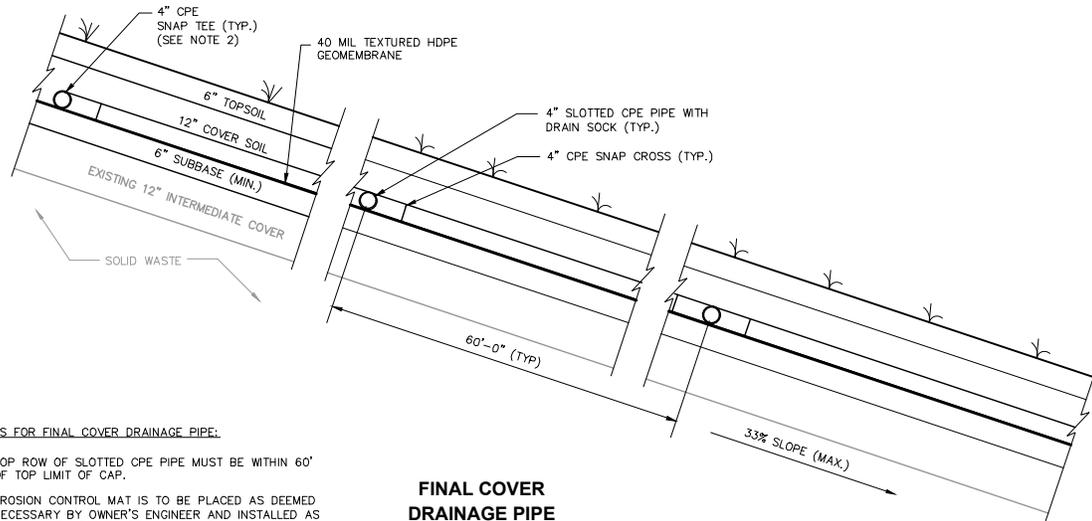
SHEET NO.
IA6
 PROJECT NO.
 130359



FINAL COVER

DETAIL

SCALE: 1" = 2'
130359-X-DETL-01



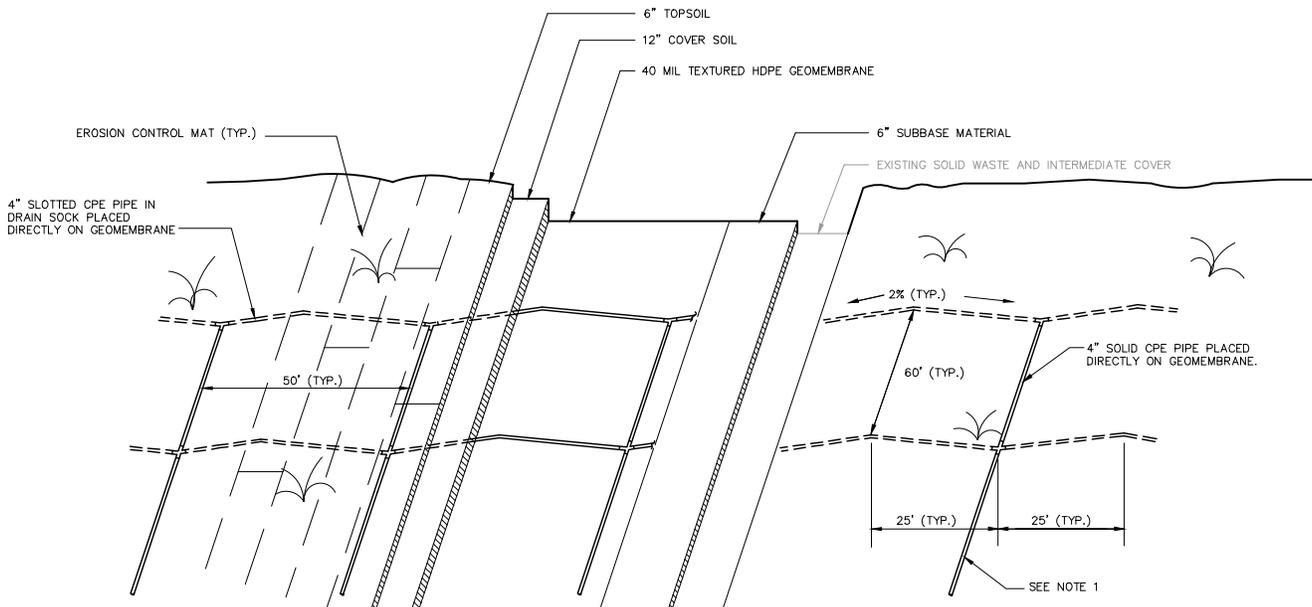
NOTES FOR FINAL COVER DRAINAGE PIPE:

1. TOP ROW OF SLOTTED CPE PIPE MUST BE WITHIN 60" OF TOP LIMIT OF CAP.
2. EROSION CONTROL MAT IS TO BE PLACED AS DEEMED NECESSARY BY OWNER'S ENGINEER AND INSTALLED AS PER MANUFACTURERS RECOMMENDATION.

FINAL COVER DRAINAGE PIPE

DETAIL

SCALE: 1" = 2'
130359-X-DETL-04



FINAL COVER DRAINAGE PIPE

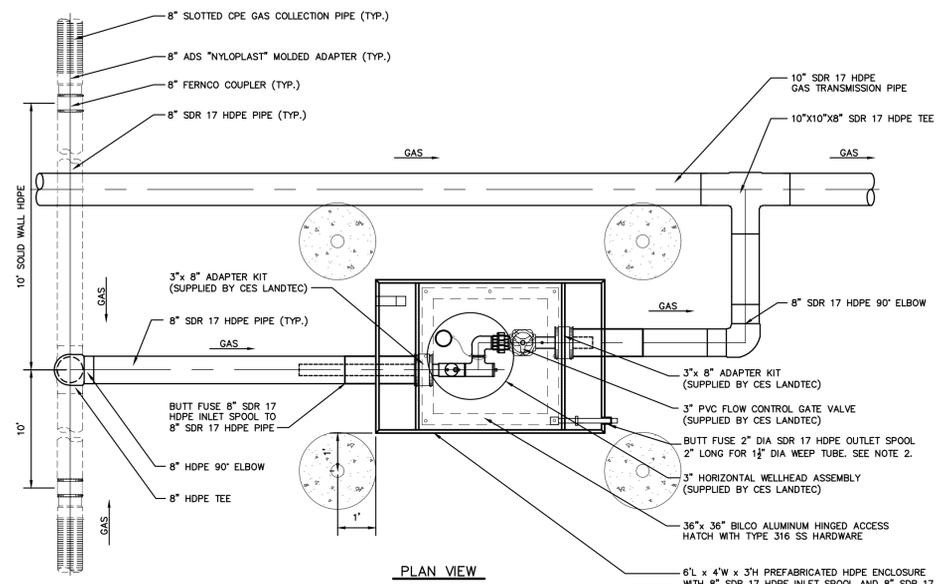
DETAIL

SCALE: N.T.S.
130359-X-DETL-05

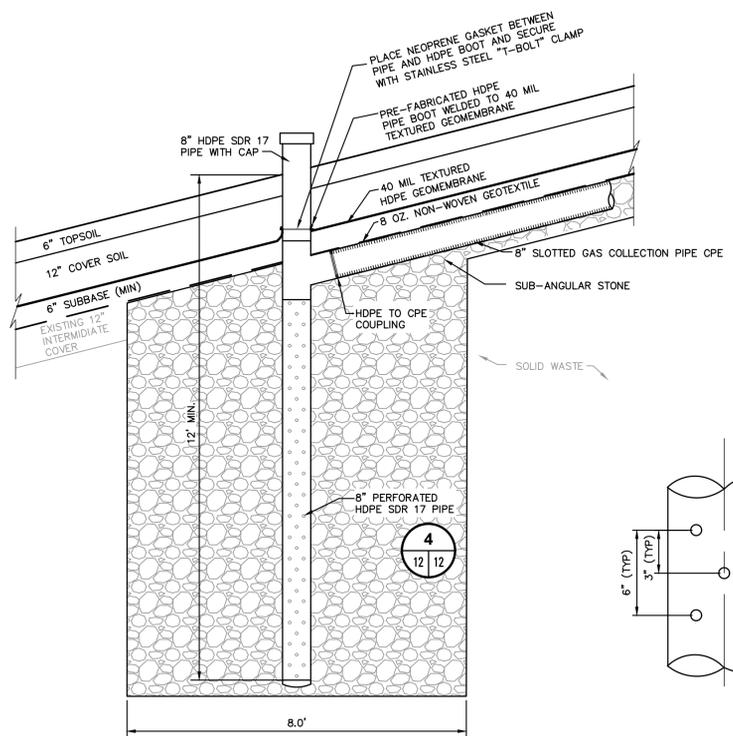


NOTE:

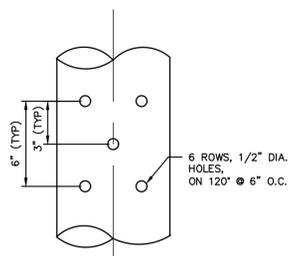
1. CPE PIPE TO TIE-IN TO EXISTING CPE DRAINAGE PIPE OR DAYLIGHT INTO EXISTING DRAINAGE CHANNEL AT PVC PIPE SLEEVE WHERE APPLICABLE.



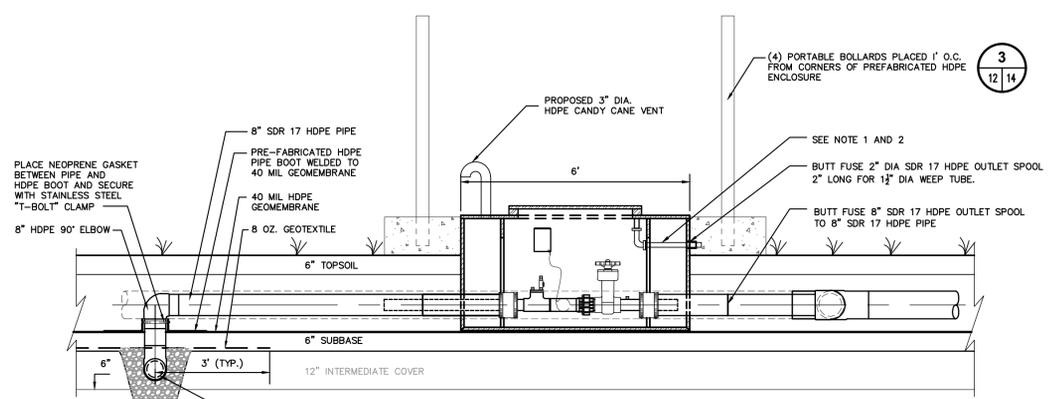
PLAN VIEW



ROCK SUMP
DETAIL 3
SCALE: 1" = 2'
MIOCXDS-26



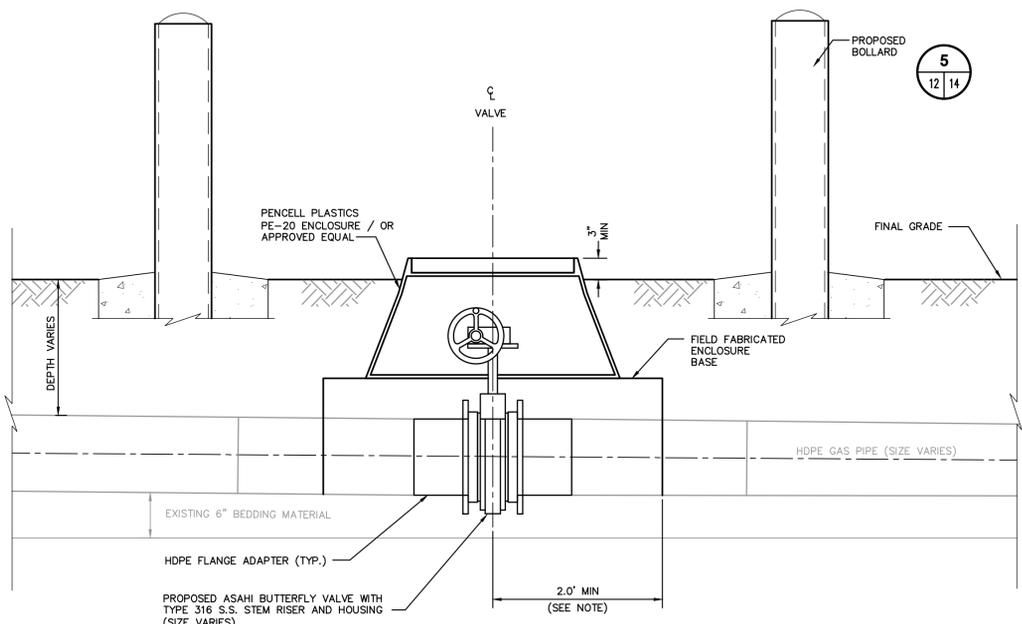
PERFORATED PIPE
DETAIL 4
SCALE: 1" = 6"
MIOCXDS-26



TYPICAL 3" HORIZONTAL WELLHEAD AND WEATHER RESISTANT ENCLOSURE

DETAIL 1
SCALE: N.T.S.
MIOCLXDS-02

- NOTES:
1. CONTRACTOR TO SUPPLY 1 1/2" DIA DRAIN LINE AND ALL NECESSARY ATTACHMENTS TO PROVIDE CONTINUITY BETWEEN HATCH DRAIN COUPLING AND WEEP PIPE.
 2. ENCLOSURE TO BE ORIENTED ON LANDFILL WITH WEEP PIPE DIRECTED DOWNSLOPE. CONTRACTOR TO VERIFY INSTALLATION WITH OWNER'S ENGINEER PRIOR TO PLACEMENT.



BUTTERFLY VALVE AND VALVE BOX

DETAIL 5
SCALE: 1" = 1'
MIOCLXDS-31

- NOTE:
- ENCLOSURE BASE SIZE AND MATERIALS TO BE APPROVED BY OWNER'S ENGINEER PRIOR TO CONSTRUCTION.

File: X:\PROJECTS\OCEAN COUNTY\100332 - CELL 1B-2B, 4 & 5 - PLATEAU FINAL CAP\project drawings\MIOCLXDS-03.dwg Layout: HW12 User: lbruno-cheney May 03, 2017 - 4:04pm



August 23, 2019

Ms. Ruth Foster, Director
Office of Permit Coordination & Project Review
**NEW JERSEY DEPARTMENT OF
ENVIRONMENTAL PROTECTION**
401 East State Street
PO Box 402
Trenton, NJ 08625

RE: Project Description
Ocean County Landfill Solar Project
FPA No. 12530.001

Dear Ms. Foster:

Spano Partners Holdings, LLC and Advanced Solar Products are proposing to construct and operate a solar farm on a 26-acre site owned by the Ocean County Landfill Corporation. The project site is located at 2498 Route 70 in the Township of Manchester, Ocean County.

The project site is located on a closed portion of the 725-acre Ocean County Landfill. The project site is located on portions of Cells 4, 5 and 6 and will be situated on the relatively flat area on the landfill plateau.

Spano Partners Holdings/Advanced Solar Products (Project Team) responded to a Request for Proposals by the Ocean County Landfill Corporation in May 2017. The proposal by the Project Team provides for a 5-MW or greater Photovoltaic system at the project site. The Ocean County Landfill Corporation will lease the property to the Project Team once the financial viability of the project is established. The Project Team is in the process of submitting a grant application to New Jersey Community Solar Energy Pilot Program. The application deadline is September 9, 2019. The NJDEP Permit Readiness Checklist is a requirement of the application.



As a completed section of the landfill, the project site has been capped and vegetated. There are no structures on the project site. The solar farm will not need sewer or water. A review of the NJDEP Geo-Web indicates that there are no streams, no open water bodies, and no freshwater wetlands on the project site. There are no Green Acres encumbered lands or historic/archeological sites within the project site. The project site is within the boundaries of the Coastal Area Facilities Review Act (CAFRA). However a CAFRA permit is not required as a solar array on a sanitary landfill is not considered "development" provided the solar panel is authorized under a solid waste landfill closure and post-closure plan or disruption approval issued by the Department.

French and Parrello Associates has identified two major regulatory approvals needed to bring the solar project to fruition. The property owner, Ocean County Landfill Corporation must obtain a Landfill Disruption Permit from the Division of Solid and Hazardous Waste and the landfill's current Closure and Post-Closure Plan must be amended to include the solar farm. In addition, there is a possibility that air pollution control permits may have to be modified if there are alterations to the methane gas collection system. The applicant will be responsible for obtaining a soil erosion and sediment control plan approval from the Ocean County Soil Conservation District

The following is attached to facilitate your review:

- Completed Permit Readiness Checklist
- Attachment I Summary of Current Closure and Post-closure Plan
- Drawing No. 1 - Site Location Map
- Drawing No. 2 – USGS Topo Map
- Drawing No. 3 – Tax Map
- Drawing No. 4 – Conceptual Site Layout Map

If there is additional information that you require to complete your timely review, please feel free to contact me at 732-312-9815 or 609-216-1869

Sincerely,

FRENCH & PARRELLO ASSOCIATES

A handwritten signature in blue ink that reads "Lawrence Schmidt". The signature is written in a cursive, flowing style.

Lawrence Schmidt

Senior Environmental Specialist

Updated 10/11/16

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF PERMIT COORDINATION AND ENVIRONMENTAL REVIEW

PERMIT READINESS CHECKLIST

FOR PCER OFFICE USE ONLY

DATE RECEIVED ____

PRC ID NUMBER ____

Completion of this form will assist the Department in determining what permits might be needed to authorize a project and to ensure that all appropriate programs attend a pre-application meeting. Please fill out the below form as completely as possible, noting any areas you are not sure of and including any information about the project and the site that might help the Department determine the permitting needs of the project.¹

1. Please complete the following questions if applicable and return to the Department with a **1 to 2 page narrative description of project, its function, and its benefits; as well as a site plan, maps, aerial photos, GIS shape files, etc.**

A. GENERAL INFORMATION

1. Name of Proposed Project **Ocean County Landfill Solar Project**__
2. Consultant/Contact Information (if any) **Larry Schmidt, Senior Environmental Specialist, French and Parrello Associates, 1800 Route 34, Wall NJ. Office Phone: 732-312- 9815, Cell Phone 609-216-1869 E-mail: Lawrence.schmidt@fpaengineers.com**
3. Name/Address of Prospective Applicant **James Spano, Spano Partners Holdings**
Address/tel./fax **516 Route 33, Building #2, Suite #1, Millstone, NJ 08535. Phone 732-792-2212, FAX 732-792-2284**
Company Name **Spano Partners Holdings, LLC (developer) and Advanced Solar Products (contractor)**
Address/tel./fax **Advanced Solar Products, 270 South Main Street, Flemington NJ 08822. Phone 908-7515818** ____
- 3a. Name/Address of the Property Owner: **Ocean County Landfill Corporation, 2498 Route 70, Manchester Township, NJ 08759 (732-323-8528)**

¹ Please be advised that this form is not a permit application. To receive authorization, approval, or a permit to conduct regulated activities, a formal application must be filed and a formal permit or authorization issued by the appropriate Bureau within the Department prior to the conduct of regulated activity. This form is used solely for the Department's preliminary review and discussion of this project to determine what permits or authorizations may be needed to conduct the proposed activity. Any guidance offered to the applicant during this process is not binding on the Department or the applicant and a final response can only be rendered through the actual issuance of permits, approvals, or authorizations.

Please note that Ocean County Landfill Corporation will lease 26 acres to the applicant for the project. The burden for obtaining solid waste permits, air permits and an amendment to the landfill closure plan will be the responsibility of the landfill owner/operator.

4. Does the project have any existing NJDEP ID#s assigned? i.e., Case number, Program Interest (PI)#, Program ID#? **Yes, PI # 133642 Solid Waste Facility**

B. PROPOSED PROJECT LOCATION

Street Address/munic. **2498 Route 70, Manchester Township**
County **Ocean** Zip Code **08759**
Block No. **2** Lots **6,20,21 and 62**
X Coordinate in State Plane (project centroid) **562.752.56**
Y Coordinate in State Plane (project centroid) **433.314.62**

C. PROPOSED ACTIVITY DESCRIPTION AND SCHEDULE

1. Project Type: New Construction
 Other (Solar Energy Production)
- a) Estimated Schedule: Date permits needed or desired by, beginning construction date; construction completion, and operation of facility date: **Project schedule dependent on funding from NJ Community Solar grant program**
- b) Funding Source: Is any Federal Funding being used for this project? **No**
State Funding over 1 million dollars? **No**
Is funding secured at this time? **No** Is funding conditional? **Yes** If so, on what?
Funding from NJ Community Solar Program
- c) Is the project contingent on receiving the identified funding? **Yes**
If yes, explain **Project is not economically feasible without funding**
- d) What DEP permits do you think you need for this project? (The Department will confirm this through the PRC process). **Solid Waste - Landfill Disruption Permit, Amendment to the Landfill Closure Plan, Soil Erosion and Sediment Control**
2. For additional guidance on Department permits, please refer to the Permit Identification Form (PIF) which will be forwarded upon request. The PIF does not need to be filled out or submitted to the Department.
- a) Which Department(s), Bureau(s), and staff have you contacted regarding your proposed project? **None thus far**
- b) Are there any Department permits that will need to be modified as a result of this project. Please explain and identify the project reviewer of the permit to be modified. **Landfill Disruption Permit and an Amendment to the Landfill Closure Plan, possible modification of air permits if methane collection system needs to be adjusted.**
- c) Please identify any pre-permit actions or modifications you have applied for or obtained from the Department or other state agencies for this project:
- 1) Water Quality Management Plan consistency: **N/A**
 - 2) Highlands Consistency **N/A**
 - 3) Wetland Delineation (LOI) **N/A – no wetlands on the project site**
 - 4) Tidelands Conveyance **N/A**

- 5) Flood Hazard Jurisdiction or determinations **N/A – not within a flood hazard area**
- 6) Water Allocation **N/A**
- 7) Site Remediation RAW, Remedial Action Permit – Soil and or Groundwater, NJPDES Discharge to Ground Water, NJPDES Discharge to Surface Water, No Further Action Response Action Outcome. **N/A**
- 8) Landfill Disruption Approval. **Not yet**
- 9) Landfill Closure Plan. **Not yet, however there is a need to amend the closure plan to include the solar array**
- 10) Other. **Possible air pollution control permit – not yet**

3. Please submit this Permit Readiness Checklist form, completed to the extent possible, electronically to Ruth.Foster@dep.nj.gov and Megan.Brunatti@dep.nj.gov and one (1) copy via mail² with the following items if available:

- (a) The completed Permit Readiness Checklist;
- (b) A description of the proposed project;
- (c) Any overarching regulatory or policy call(s) or guidance that the Department must make or make known prior to the receipt of the application to determine the project's feasibility, regulatory, or review process.
- (d) USGS map(s) with the site of the proposed project site boundaries clearly delineated (including the title of the USGS quadrangle sheet from which it was taken)³;
- (e) Aerial photos/GIS information regarding the site;
- (f) A site map including any known environmental features (wetlands, streams, buffers, etc⁴);
- (g) Site plans to the extent available;
- (h) Street map indicating the location of the proposed project;
- (i) Any other information that you think may be helpful to the Department in reviewing this project.
- (j) List of any local or regional governments or entities, their historical involvement in this project or site, identification of conflicts with DEP rules; with contact names and information whose attendance/input would be helpful in facilitating this project, ie Soil Conservation Districts, health departments, local zoning officials, etc.

D. The following are questions by Program to guide the Department in its determination of what permits may be needed to authorize this project. If the questions do not apply to the proposed project please indicate N/A. Please include any other information you think may be helpful for the Department to determine which permits are needed.

² Submit to: New Jersey Department of Environmental Protection
Office of Permit Coordination and Environmental Review
P.O. Box 420, Mail Code 07J
Trenton, New Jersey 08625
Street Location: 401 East State Street, 7th Floor East Wing
Telephone Number:(609) 292-3600
Fax Number: (609) 292-1921

³ USGS maps may be purchased from NJDEP, Maps and Publications, P.O. Box 420, Trenton 08625-0420; (609) 777-1038

⁴ NJGIS information

WATER AND WASTEWATER INFORMATION

DEP Safe Drinking Water Program (609) 292-5550
<http://www.nj.gov/dep/watersupply/>

Is the project located within an existing water purveyor service area? N/A

Will the project affect any land or water controlled by a Water Supply Authority or water purveyor in New Jersey? If so, please identify and explain. No

Does the purveyor have adequate firm capacity and allocation to support project demand? N/A

Do water pipes currently extend to the project location? N/A

If not, is it located within a franchise area? N/A

Does the project have an approved Safe Drinking Water main extension permit? N/A

Will the project affect any land or water controlled by a Water Supply Authority or water purveyor in New Jersey? If so, please identify and explain. No

DEP Water Allocation Program (609) 292-2957
<http://www.nj.gov/dep/watersupply>

Is the project seeking a new ground water allocation or modification? If yes, does the project have all necessary well location and safe drinking water permits? No

Is the project located within an area of critical water supply concern? N/A

Will this project have the capability to divert more than 100,000 gallons per day from a single source or a combination of surface or groundwater sources? No

Will this project draw more than 100,000 gallons per day of ground or surface water for construction or operation? No

WATER POLLUTION MANAGEMENT ELEMENT

DIVISION OF WATER QUALITY

Non-Point Pollution Control (609) 292-0407
http://www.nj.gov/dep/dwq/bnpc_home.htm

The **Bureau of Non-Point Pollution Control** (BNPC) is responsible for protecting and preserving the state's groundwater resources through the issuance of NJPDES Discharge to Groundwater Permits and is responsible for permitting industrial facilities and municipalities under NJPDES for discharges of stormwater to waters of the State.

Groundwater Section (609) 292-0407

This Program does not issue NJPDES-DGW permits for remediation operations.

The following definitions should be used to assist in identifying discharge activities:

Subsurface disposal system is any contrivance that introduces wastewater directly to the subsurface environment, such as, but not limited to: septic systems, recharge beds, trench systems, seepage pits, and dry wells.

Injection/recharge wells are constructed such that they are deeper than they are wide, receive effluent via gravity flow or pumping and include dry wells and seepage pits.

Overland flow is the introduction of wastewater to the ground surface, over which the wastewater travels and eventually percolates or evaporates.

Industrial wastewater is any wastewater or discharge which is not sanitary or domestic in nature, including non-contact or contact cooling water, process wastewater, discharges from floor drains, air conditioner condensate, etc. **Note: The landfill has an NJPDES permit for the collection and treatment of leachate and stormwater. The operation of the permitted system will not be affected by the solar project**

1. Will the project/facility have a sanitary wastewater design flow which discharges to groundwater in excess of 2,000 gallons per day? No
2. Will the project/facility generate a discharge to groundwater of industrial wastewater in any quantity? No
3. Will the project/facility involve the discharge to groundwater by any of the following activities or structures, or include as part of the design any of these activities or structures? No

Please indicate which:

Upland CDF (Dredge Spoils) Spray Irrigation N/A

Overland Flow Subsurface Disposal System (UIC) N/A

Landfill Infiltration/Percolation Lagoon N/A

Surface Impoundment N/A

Please specify the source of wastewater for every structure identified above (e.g., sanitary wastewater to a subsurface disposal system or non-contact cooling water to a dry well): No wastewater discharge associated with this project

Please specify lining materials for each lined structure identified as being used by the proposed project and give its permeability in cm/sec (e.g., 8-inch thick concrete lined evaporation pond at 10⁻⁷ cm/sec): N/A

Does your project/facility include an individual subsurface sewage disposal system design for a facility with a design flow less than 2,000 gallons per day which does not strictly conform to the State's standards? No

Does your project involve 50 or more realty improvements? No

DEP Pretreatment and Residuals program (609) 633-3823

Will the project involve the discharge of industrial/commercial wastewater to a publicly owned treatment works (POTW)? No

If yes, name of POTW: N/A

Volume of wastewater (gpd): N/A

Will/does this project involve the generation, processing, storage, transfer and/or distribution of industrial or domestic residuals (including sewage sludge, potable water treatment residuals and food processing by-products) generated as a result of wastewater treatment. **No** If so, please explain. **N/A**

Stormwater Program (609) 633-7021

<http://www.njstormwater.org/>

http://www.state.nj.us/dep/dwq/ispp_home.html

Will your site activity disturb more than one acre? **Yes**

Will any industrial activity be conducted at the site where material is exposed to the rain or other elements? **No**

Does **the landfill** have an existing NJPDES permit for discharge of stormwater to surface groundwater? **Yes. The landfill has an NJPDES permit for the collection and treatment of leachate and stormwater. The operation of the permitted system is not affected by the solar project**

Is your facility assigned one of the following Standard Industrial Classification (SIC) Codes? **N/A**
(To determine your SIC Code see the box "Industry Code" on your New Jersey Department of Labor Quarterly Contribution Report.

Surface Water Permitting (609) 292-4860

<http://www.nj.gov/dep/dwq/swp.htm>

Will this wastewater facility discharge to Surface Water? **No** _____

If yes, state the name of the proposed receiving stream **N/A**

Describe the proposed discharge of wastewater to Surface Water **N/A**

If no, how is the wastewater proposed to be discharged (e.g., to be conveyed to another STP, Publicly Owned Treatment Works, etc. **N/A**

MUNICIPAL FINANCE AND CONSTRUCTION ELEMENT

Treatment Works Approvals (609) 984-4429

<http://www.nj.gov/dep/dwq/twa.htm>

Will this project include the construction, expansion or upgrade of a domestic or industrial wastewater treatment facility or an off-site subsurface disposal system that generates more than 2,000 gallons per day? **No** If yes, explain **N/A**

Will the project result in a construction design of more than 8000 gallons of water discharge per day? **No**

Office of Water Resources Management Coordination (609)777-4359

<http://www.state.nj.us/dep/wrm>

Sewer Service

Is the project in an approved sewer service area for the type of wastewater service needed? N/A no wastewater will be generated by this project

If yes, what is the name of the sewer service area? Sewer Service provided by the Ocean County Utilities Authority

Has this project received endorsement from the appropriate sewer authority with adequate conveyance and capacity? N/A

Do waste water pipes currently extend to the project location? N/A

Is the project consistent with and in an area covered by an up to date Wastewater Management Plan? N/A

Will an amendment to the existing WQMP be required to accommodate this project? N/A

If tying into an offsite treatment plant, is the capacity and conveyance system currently available? N/A

What is the volume of wastewater that will be generated by the project? No discharge

DEP Land Use Regulation (609) 777-0454

<http://www.nj.gov/dep/landuse>

Does the project involve development at or near, or impacts to the following; describe the type and extent of development in regards to location and impacts to regulated features:

Water courses (streams) No

State Open Waters? No

Freshwater Wetlands and/or freshwater wetland transition areas? No

Flood Hazard areas and/or riparian buffers No

Waterfront development areas No

Tidally Flowed Areas No

Bureau of Tidelands Management: http://www.nj.gov/dep/landuse/tl_main.html

The CAFRA Planning Area? **The project site is in Planning Area 2 – the Suburban Planning Area. The project site is within the CAFRA zone.**

However a CAFRA permit is not required as a solar array on a sanitary landfill is not considered “development” provided the solar panel is authorized under a solid waste landfill closure and post-closure plan or disruption approval issued by the Department pursuant to N.J.A.C. 7:26-2A.8 or 2A.9; or iii.

DEP NATURAL AND HISTORIC RESOURCES

Green Acres Program (609) 984-0631

<http://www.nj.gov/dep/greenacres>

Does the project require a diversion of State property or parkland, lease of same, lifting of a Green Acres of Land Use deed restriction, or work within an existing easement? No Will any activity occur on State owned lands? No If so please describe. _____

Does the project require a diversion of property funded with federal Land and Water Conservation Funding? No. If so, please describe N/A.

Does the project include activities that are under the jurisdiction of the Watershed Property Review Board? No. If so, please describe. N/A Has the Watershed Property Review Board made a jurisdictional determination? _____

Division of Parks and Forestry: State Park Service 609-292-2772

Is the temporary use of State lands administered by the New Jersey State Park Service required for pre-construction, construction and/or post construction activities? No If so, please describe N/A.

Division of Parks and Forestry: State Forestry Services (609) 292-2530

<http://www.nj.gov/dep/parksandforests/forest>

Forest clearing activities/No Net Loss Reforestation Act

Will construction of the project result in the clearing of ½ acres or more of forested lands owned or maintained by a State entity? No

If so, how many acres? N/A

Division of Parks and Forestry: Office of Natural Lands Management (609) 984-1339

<http://www.nj.gov/dep/parksandforests/natural/index.html>

Is the project within a State designated natural area as classified in the Natural Areas System Rules at N.J.A.C. 7:5A? No

If so, please describe. N/A

State Historic Preservation Office – SHPO (609) 292-0061

<http://www.state.nj.us/dep/hpo/index.htm>

Is the site a Historic Site or district on or eligible for the State or National registry? No

Will there be impacts to buildings over 50 years old? No

Are there known or mapped archeological resources on the site? No – per Geo-Web Archeological Site Grid

Dam Safety Program (609) 984-0859

<http://www.nj.gov/dep/damsafety>

Will the project involve construction, repair, or removal of a dam? No

If so, please describe N/A

Fish and Wildlife (609) 292-2965

<http://www.nj.gov/dep/fgw>

Will there be any shut off or drawdown of a pond or a stream? **No**

Threatened and Endangered Species Program

Are there records of any Threatened and Endangered species, plant, or animal in this project area? **No**

Will the proposed development affect any areas identified as habitat for Threatened or Endangered Species? **No**

SITE REMEDIATION PROGRAM (609) 292-1250

<http://www.nj.gov/dep/srp/>

Office of Brownfield Reuse (609) 292-1251

Is the project located on or adjacent to a known or suspected contaminated site? **No - landfills are regulated by the Division of Solid and Hazardous Waste**

<http://www.nj.gov/dep/srp/kcsnj/>

Is the project within a designated Brownfield Development Area? **No**

<http://www.nj.gov/dep/srp/brownfields/bda/index.html>

Has a No Further Action, Response Action Outcome, or Remedial Action Permit been issued for the entire project area? **N/A**

If not, what is the current status of remediation activities? **N/A** Please include remedial phase, media affected and contaminant(s) of concern.

Name of current SRP Case Manager or Licensed Site Remediation Professional and Preferred Identification (PI) Number **N/A**

Is the applicant a responsible party for contamination at the property? **N/A**

Is the project located on a landfill that will be redeveloped for human occupancy? **Yes** If yes, is there an approved Landfill Closure Plan? **Yes - Approved by NJDEP on March 31, 2011**

Please refer to Attachment A – summary of current closure plan.

Dredging and Sediment Technology (609) 292-1250

Does the project involve dredging or disposing of dredged materials? **No**

SOLID AND HAZARDOUS WASTE MANAGEMENT PROGRAM (609) 633-1418

<http://www.nj.gov/dep/dshw/>

Does the project receive, utilize, or transport solid or hazardous wastes? **No**

Will the project involve the disposing of hazardous Substances per 40 CFR part 261 and NJAC 7:26? **No**

Will the project include operation of a solid waste facility according to N.J.A.C. 7:26-1-et seq.? **No**

Is the project a solid waste facility or recycling center? **No**

Is the project included in the appropriate county Solid Waste Management Plan? **N/A** Explain _____

AIR QUALITY PERMITTING PROGRAM

<http://www.nj.gov/dep/daqpp>

Will activity at the site release substances into the air? **No**

Does the project require Air Preconstruction permits per N.J.A.C. 7.27-8.2©1? **No**

Will your project require Air Operating permits (N.J.A.C. 7:27--22.1)? **No**

Will the project result in a significant increase in emissions of any air contaminant for which the area is nonattainment with the national ambient air quality standards (all of NJ for VOC and NOx; 13 counties for fine particulates), thereby triggering the Emission Offset Rule at NJAC7:27-18? **No**

Will the project emit group 1 or 2 TXS toxic substances listed in NJAC 7:27-17? **No**

Will the project emit hazardous air pollutants above reporting thresholds in NJAC7:27 8, Appendix 1? **No**

Will the project result in stationary diesel engines (such as generators or pumps) or mobile diesel engines (such as bulldozers and forklifts) operating on the site? **No** If so, which? **N/A**

RADIATION PROTECTION AND RELEASE PREVENTION (609) 984-5636

www.state.nj.us/dep/rpp

Will the operation receive, store or dispose of radioactive materials? **No**

Will the operation employ any type of x-ray equipment? **No**

DISCHARGE PREVENTION PROGRAM (DPCC) (609) 633-0610

www.nj.gov/dep/rpp

Is this a facility as defined in N.J.A.C. 7:1E in which more than 20,000 gallons of Hazardous substances other than petroleum or greater than 200,000 gallons of petroleum are stored? **No**

TOXIC CATASTROPHE PREVENTION ACT (TCPA) (609) 633-0610

[HTTP://WWW.STATE.NJ.US/DEP/RPP/BRP/TCPA/INDEX.HTM](http://WWW.STATE.NJ.US/DEP/RPP/BRP/TCPA/INDEX.HTM)

Is this a facility that handles or stores greater than a threshold amount of extraordinarily hazardous substances as defined in N.J.A.C. 7:31? **No**

Bureau of Energy and Sustainability (609)633-0538

<http://www.nj.gov/dep/aqes/energy.html>

<http://www.nj.gov/dep/aqes/sustainability.html>

GREEN DESIGN (609) 777-4211

Have you incorporated green design features into this project? Examples of green design features may include: renewable energy, water conservation and use of low impact design for stormwater.

Yes – solar energy production

Will this project be certified by any of the following green building rating systems?

New Jersey Green Building Manual? N/A

<http://greenmanual.rutgers.edu/>

US Green Building Council's LEED (Leadership in Energy and Environmental Design)? N/A

<http://www.usgbc.org/>

ASHRAE Standard 189.1? N/A

<http://www.ashare.org/publications/page/927>

National Green Building Standard ICC 700-2008? N/A

<http://www.nahbgreen.org>

USEPA's ENERGY STAR? N/A

http://www.energystar.gov/index.cfm?c=business.bus_index

INNOVATIVE TECHNOLOGY (609) 292-0125

Is an environmental and energy innovative technology included in this project? **Yes**

Is this technology used for manufacturing alternative fuels? **N/A**

- If yes, what is the non-fossil feedstock(s) used for manufacturing the fuels? **N/A**

Biomass Municipal Solid Waste Other Non-Fossil Feedstocks

-What will be the primary use of the manufactured alternative fuels? **N/A**

CHP System Micro Turbine Fuel Cells

For other innovative technology type, what is the proposed application? **N/A**

Energy Site Remediation Drinking Water Wastewater

For other innovative energy systems, what is the source of energy? **Solar**

Is there independent third-party performance data for the technology? **Yes**

Has the technology been verified by an independent third-party entity? **Yes**

Is this technology in use at any other location at this time? **Yes**
- If yes, please provide location _____

DEP COMPLIANCE AND ENFORCEMENT

Does the applicant have outstanding DEP enforcement violations, and if so, what is the status? **No**

If yes, please identify the case, case manager, program, and phone number. **N/A**

Does the proposed project facilitate compliance where there is a current violation or ACO? **N/A**

COMMUNITY ENGAGEMENT (609)292-2908

The Department is committed to the principles of meaningful and early community engagement in the project's approval process. The Department has representatives available who could discuss community engagement issues with you and we encourage this communication to take place at the earliest possible time.

- (a) What community groups and stakeholders have you identified that may be interested in or impacted by this project? **The Township of Manchester may have an interest.**
- (b) How have you or will you engage community and stakeholders in this project? Please supply individuals or stakeholder groups contacted or who have been identified for community engagement. **The Township of Manchester and the County of Ocean.**
- (c) What are the potential impacts of this project on the community? **On a positive basis, the project will produce clean energy, thus reducing the need for fossil fuels.**
- (d) How do you intend to mitigate these potential impacts? **No adverse environmental impacts have been identified**
- (e) What are the community concerns or potential concerns about this project? **No concerns have been expressed thus far**
- (f) How do you intend to address these concerns? **Concerns, if any, will be addressed as part of the review process of the amendment to the closure plan.**
- (g) As part of this project, do you plan to perform any environmental improvements in this community? **Not needed** If yes, describe.

Please provide the Department with an additional 1 to 2-page narrative description of the project, focusing on its function and its local/regional environmental, social, and economic benefits and impacts. Also, what sensitive receptors are present and how might they be affected by this project?

GENERAL

Is the project subject to:

Highlands Regional Master Plan – Planning or Preservation Area? **No**
http://www.nj.gov/dep/highlands/highlands_map.pdf

Pinelands Comprehensive Management Plan? **No**
<http://www.state.nj.us/pinelands/cmp/>

D&R Canal Commission Standards **No**
<http://www.dandrcanal.com/drcc/maps.html>

Delaware River Basin Commission **No**
(609) 883-9500
<http://www.state.nj.us/drbc/>

US Army Corps of Engineers review? **No**

ATTACHMENT A

1 INTRODUCTION

1.1 Solid Waste Facility Description

The Ocean County Landfill Corporation (OCLC) Solid Waste Facility (SWF) is located in Manchester Township, Ocean County, New Jersey. The SWF encompasses an area of approximately 725 acres, of which 284 acres are currently dedicated for landfill disposal activities and a number of ancillary features; such as, a network of perimeter access roads, truck scales, a leachate storage/treatment system, a gas collection and flaring system, a storm water management system and recharge basins and several screening berms. The SWF also includes a permitted Transfer Station/Materials Recovery Facility (TS/MRF).

Ocean County relies upon OCLC to design, construct and operate a solid waste facility to meet the solid waste disposal needs of its residents and municipalities. OCLC has provided solid waste management services for the residents and municipalities in Ocean County since 1972 and takes pride in operating a technologically advanced, state-of-the-art landfill facility that has an exemplary environmental record. The OCLC SWF is designated in the Ocean County District Solid Waste Management Plan (OCDSMP) for disposal of all non-hazardous solid waste generated in Ocean County that is not recycled or taken to a duly permitted out-of-state facility for disposal. OCLC also holds a Solid Waste Franchise for this purpose. The Franchise was awarded by the New Jersey Department of Environmental Protection (NJDEP) on August 31, 1994.

1.2 Solid Waste Facility Permit

OCLC's current Solid Waste Facility Permit (SWF Permit) was recently renewed by NJDEP and issued on October 6, 2015. A copy of the SWF Permit is included in Appendix A. The most recent permit approved and authorized a final elevation up to 185 feet above mean sea level and includes authorization for the landfill waste disruption project and approval of an engineering design for a Sustainable Landfill Project (SLP).

This Closure and Post Closure Plan is an update of OCLC's current Closure and Post Closure Plan which was approved by the NJDEP by letter dated March 31, 2011. A copy of the approval letter is included in Appendix B. As discussed with NJDEP, it was agreed to delay the subsequent update until after the permit renewal was issued. Relevant correspondence is included in Appendix B. This update has been prepared in accordance with the requirements of NJAC 7:26 2A.9 except for timeframe for the financial model update as discussed above.

The following items are included in this Closure and Post Closure Plan update:

- A closure plan describing the final closure of the facility.

- A post closure environmental monitoring plan which describes the environmental monitoring to be performed during the Post Closure Period.
- A post closure maintenance plan which details the maintenance activities to be conducted during the Post Closure Period.
- A schedule for implementation of all Closure and Post Closure Activities.
- Cost estimates for the activities outlined in the Closure and Post Closure Plan.
- A financial plan which sets forth the anticipated costs and expenses for all identified Closure and Post-Closure Activities and establishes the means for meeting these costs and expenses.
- An Environmental Improvements Financial Plan demonstrating that notwithstanding anticipated withdrawals for on-going environmental improvements at the landfill, sufficient funds are accruing in escrow for closure and post-closure costs not covered by the Statutory Account.

Under the New Jersey Sanitary Landfill Closure and Contingency Fund Act, OCLC collects a \$1/ton surcharge on waste disposed at the landfill for deposit into an escrow account to be used for closure and post closure costs. Referred to herein as the Statutory Account, these funds are currently held by US Bank (Account No. 2572004529). In addition, OCLC maintains three separate escrow accounts held by Bank of New York Mellon which are referred to individually as follows: Environmental Improvements Escrow Account (No. 944727), Closure/Post-Closure Account (No. 944725), and Post-Closure Administrative Account (No. 944726). Funds from the Environmental Improvements Account are used in part for on-going environmental improvements at the landfill and are also used, along with funds from the Closure/Post Closure Account, to fund costs incurred for Closure and Post-Closure Activities during the landfill's operating life. Funds accruing in the Post-Closure Administrative Account are to be used for certain administrative costs incurred during the Post-Closure Period.

Pursuant to the approval of the NJDEP, by Order dated August 22, 2001, the three escrow accounts held by the Bank of New York Mellon can be treated as one fund for the purposes of this filing. They are collectively referred to herein as the Environmental Improvements and Closure/Post Closure (EI and C/PC) Account.

2 CLOSURE PLAN

This Closure Plan describes the Final Cover Construction activities that will occur both before and after waste is no longer being accepted for disposal at the landfill; that is, before and after the landfill's Date of Closure as set forth in Section 5.1. It also describes the use and removal of temporary cover approved by NJDEP.

2.1 Final Cover

Final and temporary cover systems are designed to provide stable, long-term protection against exposure of waste and are intended to limit infiltration and support vegetative growth. These systems are constructed in phases as areas reach permanent or interim final grades, respectively.

Final Cover Construction consists of the following:

- On slopes with less than 7 percent final grade, a 40 mil HDPE geomembrane is used overlain by 18 inches of well drained soil with the upper 6 inches being topsoil. The geomembrane shall be bedded on a minimum thickness of 6 inches of subbase material which is free of rocks, fractured stones, or other debris which could damage the geomembrane.
- On slopes between 7 percent and 33 percent final grade, a textured 40 mil HDPE geomembrane is used, overlain by 18 inches of well drained soil with the upper 6 inches being topsoil. Also, 4 inch stormwater drainage pipes are placed in the drainage layer above the geomembrane.
- The establishment of vegetative cover in accordance with the New Jersey State Soil Conservation Committee Standards.

A temporary cover system is being utilized in select areas to control odors and manage gas collection pending waste decomposition and settlement of the in-place waste which enables reclamation of airspace for disposal of additional waste. The temporary cover system consists of the same components as the final cover system except the topsoil layer is four inches thick instead of six. While the temporary final cover is in place, it will require the same maintenance as final cover. The temporary cover will be removed in phases to allow for future cell development according to the site's operational sequence.

2.2 Vegetative Cover

After placement of the final/temporary cover, the area will be seeded to provide for establishment of a vegetative cover. The primary purposes for immediate establishment of vegetation are as follows:

- Protect slopes from soil erosion.
- Enhance evapotranspiration.
- Improve site aesthetics.

The vegetative cover soil will be prepared and seeded in accordance with the Soil Erosion and Sediment Control (SCS) Plan approved by the Ocean County Soil Conservation District and the Technical Specifications prepared with each capping project. A copy of the current Technical Certification is maintained at the SWF. Conditions of the approved SCS Plan will be adhered to throughout the Post Closure Period

2.3 Surface Water Drainage Controls

The surface water drainage system detailed in the SCS Plan for the landfill incorporates measures to control run off. Surface water is transported by interior and perimeter drainage channels to stormwater Basins A, B, C and D. All basins recharge to groundwater with no discharge to bodies of surface water. Basins A, B, C, and D are existing basins certified under the current SCS Plan. All surface water control structures are designed in accordance with applicable state and federal regulations. Conditions of the approved SCS Plan will be adhered to throughout the Post Closure Period.

2.4 Gas Control

A byproduct of the decomposition of solid waste is landfill gas. The OCLC landfill has an approved active gas collection and flaring system for use in controlling landfill gas (active meaning a vacuum is applied to pipe network to collect the gas).

Active gas collection systems are installed as cells are constructed. This allows landfill gas to be collected from areas while cells are operational. In addition, an active gas collection component is incorporated into both the temporary and final cover systems. Gas collection measures consist of the following:

- Active gas collection at primary manholes.
- Active operational gas collection, if necessary.
- Active gas collection at intermediate grades as temporary cap is constructed.
- Active gas collection at final grades.

Once a cell becomes operational, gas collection is initially performed at primary manholes and through the leachate collection system piping. An operational gas collection system may be constructed during waste placement as needed, and at OCLC's discretion. Its

primary use would be to collect gas before a temporary or final cover gas collection system is constructed.

The gas collection component of a temporary or final cover system consists of slotted polyethylene pipes bedded in stone, installed on approximate horizontal spacing of 200 feet. A vacuum is applied to the collection piping to withdraw the gas from the landfill. The gas collection pipes are connected to solid gas transmission pipes which ultimately route the gas directly or through a network of perimeter gas headers to the OCLC flare station or to one or both of the two nearby independently owned and operated landfill gas to energy (LFGE) Facilities.

The LFGE Facilities and the OCLC flares reduce the concentration of non methane organic compounds present in the landfill gas by at least 98 percent by weight. Any landfill gas not used by the LFGE Facilities is controlled by combustion in one of the OCLC flares. The flares will be maintained and operated during the Post Closure Period as needed. As the gas diminishes, the flare capacity can be reduced. OCLC's Title V Operating Permit BOP 160001 (Title V Permit) includes conditions related to the air emissions from the two enclosed flares, one portable flare, leachate treatment facility, and miscellaneous insignificant other emission sources at the SWF. Its Title V Permit was amended on November 2, 2015 to incorporate the waste excavation screeners and a new emergency generator and more recently on April 5, 2016 to incorporate a minor modification changing the design capacity in the permit to include capacity resulting from final elevations in Cell 8, Cell 7E and Cell 7D approved in the SWF Permit.

2.5 Measures to Conform the Site to the Surrounding Area

Measures taken to conform the closed landfill cells to the surrounding area are concentrated on minimizing their visual impact and establishing final cover vegetation in accordance with the landscaping plan for the site. Final grades provide moderate slopes that grade gently to the surrounding terrain. Good vegetative cover is and will continue to be established to ensure visual compatibility with the surrounding area. Buffer zones and screening berms planted with evergreens currently surround most of the active and closed landfill areas. Plantings necessary to insulate the landfill from the surrounding area will be well established by the commencement of the Post-Closure Period. Required buffer zones and screening berms will be maintained throughout the Post Closure Period.

2.6 Landfill Engineering Services

Engineering services will continue to be required during Final Cover Construction after the Date of Closure. Construction Plans and Technical Specifications will be prepared for the placement of final cover and installation of the gas collection system and surface water control structures that will be required after the Date of Closure. These construction activities will be observed and certified in accordance with the Construction Quality Assurance and Quality Control Plan in place for the SWF. Once completed, a certification

will be prepared by a New Jersey licensed professional engineer. This certification will evaluate the entire landfill to ensure that all areas have been closed in accordance with the approved Closure and Post Closure Plan. This certification will be prepared within 6 months after completion of the final phase of all closure activities.

3 POST-CLOSURE ENVIRONMENTAL MONITORING PLAN

The following items have been included in the Post Closure Environmental Monitoring Plan:

- Groundwater Monitoring.
- Gas Monitoring.
- Leachate Monitoring.
- Surface Water Monitoring.

3.1 Groundwater Monitoring

OCLC has been issued a New Jersey Pollution Discharge Elimination System (NJPDES)/Discharge to Groundwater (DGW) Permit. Groundwater monitoring is currently and is anticipated to continue to be conducted on a semi-annual basis. Monitoring is and will be conducted as described in the approved Groundwater Protection Plan (GWPP) for the SWF and in accordance with the conditions of the NJPDES/DGW Permit. For the purpose of the Financial Plan component of this Closure/Post-Closure Plan update, it is assumed that the current sampling program, with its testing parameters, will be continued throughout the Post-Closure Period. The results of this sampling will be reported to the NJDEP.

3.2 Gas Monitoring

The gas monitoring program consists of a methane gas survey and routine gas quality analysis. It is anticipated that gas monitoring during the Post-Closure Period will be conducted as described in the approved Operations and Maintenance (O&M) Manual for the SWF and as required by OCLC's current Title V Permit.

A methane gas survey will be performed on a quarterly basis within the buffer zone around the perimeter of the landfill areas to assess potential lateral gas migration. The results of the perimeter gas monitoring will be submitted to the NJDEP quarterly, within 60 days of the data collection. The gas survey will also include methane sampling around the perimeter of the buildings, such as the maintenance building, scale house, and leachate treatment facility. The results of the gas monitoring around buildings are retained on-site in OCLC's records.

Routine gas quality analyses will include monthly monitoring of the well field to determine whether air intrusion is occurring by recording landfill gas oxygen content. Landfill gas

temperature and wellhead pressure readings will also be taken to confirm that gas is being extracted safely from the field. In addition, on a quarterly basis, the surface of the landfill will be monitored to verify that methane concentrations above the surface do not exceed 500 ppm and to ensure that gas is being collected at a sufficient extraction rate.

OCLC has installed two enclosed flares to combust gas collected by the landfill gas collection system. Both will continue to be operated, as needed, during the Post Closure Period. As required by OCLC's Title V Permit, the stream of gas delivered to the flaring system, or delivered to the LFG Facilities, is tested for methane content. The analytical results of this sampling shall be submitted to NJDEP within 30 days of receipt. In addition, the operating temperature at the control flares is continuously monitored to ensure proper gas destruction performance. Monitoring of flare emissions is done by calculation and is reported to the NJDEP on an annual basis.

3.3 Leachate Monitoring

The leachate collection and treatment system will be operated and maintained during the Post Closure Period. It is anticipated that post closure leachate monitoring will be conducted as described in the approved O&M Manual for the SWF, as required by all applicable NJDEP regulations, and in accordance with the conditions of the Industrial Discharge Permit (IDP) issued by the Ocean County Utilities Authority (OCUA). OCLC has been informed by NJDEP that a NJPDES Permit is no longer required because OCLC has an approved IDP from the OCUA.

The leachate monitoring program determines the following:

- Total quantity of leachate collected.
- Chemical characteristics of the leachate.
- Quantity of leachate collected in the secondary leachate collection system.
- Leachate head build-up at less than 12 inches.

The total leachate production during the Post-Closure Period, after final closure of all landfill cells, is expected to decrease over time and eventually reach a steady state. OCLC will continue to compile the leachate flow meter recordings and submit this information on a quarterly basis. Total leachate quantities leaving the leachate treatment facility and pumped through the outfall line to the OCUA trunk line are measured by a run-time recorder or flow meter on a continuous basis using a chart recorder/totalizer unit. OCLC records the leachate flow meter reading on a daily basis, and reviews the charts on a weekly basis. Daily recordings of leachate flow ensure that the system's operation is not impeded.

A sampling manhole is located at the terminal end of the leachate outfall line just before its connection with the OCUA trunk line. Leachate effluent is monitored for various

parameters at the sampling manhole on a monthly, quarterly, or semi-annual basis, depending upon the sampling parameter. The monitoring is performed by collecting either grab or composite type samples, again depending upon the sampling parameters. Results of the monitoring are compiled and submitted to the OCUA monthly, in accordance with the IDP Permit. These reports are prepared by the treatment plant operator who will be responsible for the operation and maintenance of the leachate collection and treatment systems during the Post-Closure Period.

Leachate that is collected in the secondary collection system flows to secondary leachate pumping stations. The quantity of secondary leachate is monitored in the corresponding secondary manholes and is measured on a daily basis by OCLC. The volume of any liquid collected in the secondary collection system manholes is reported to the NJDEP on a quarterly basis by OCLC.

All leak detection risers and containment structures are checked on a regular basis by OCLC personnel for the presence of leachate. A record is kept of the results of each inspection.

3.4 Surface Water Monitoring

It is anticipated that surface water monitoring during the Post-Closure Period will be conducted as described in the approved O&M Manual for the SWF and in accordance with the existing General NJPDES DGW Permit and Site-Specific NJPDES DGW Permit.

In conjunction with the construction of landfill cells, a network of surface water control structures has been or will be installed. These facilities will safely convey surface water away from the landfill to 4 separate stormwater recharge basins as described in Section 2.3. All four of these basins are designed to be recharge basins which will handle stormwater runoff by discharging it back into the groundwater. The design of these basins has been approved as part of the SCS Plan for the SWF.

4 POST-CLOSURE MAINTENANCE ACTIVITIES

Post Closure maintenance activities for the Post Closure Period will be as set-forth in NJAC 7:26-2A.9 and described below.

4.1 Final Cover Maintenance

Final cover maintenance includes the repair and replacement of any topsoil and cover soil lost due to erosion. This condition can occur prior to or after the establishment of self-sustaining vegetative cover. Final cover maintenance is anticipated to continue throughout the Post-Closure Period.

Final cover maintenance will include placement of additional cover soil within areas in need of repair. This material will be spread and fine graded to maintain a minimum thickness of 12 inches. Any drainage pipe which needs to be repaired will be installed to the original design configuration. Topsoil will then be spread over the area as needed to maintain a minimum depth of 6 inches. The area will then be vegetated as described in Section 4.2.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas that require final cover maintenance will be identified and included in the quarterly inspection report. All final cover maintenance will be performed in a timely manner after issuance of the inspection report.

4.2 Vegetative Maintenance

Vegetative maintenance will include the application of seed, lime, fertilizer, and mulch on areas in which self-sustaining vegetative cover has not been fully established. This includes areas where final cover maintenance is needed, or areas in which prior seeding have not been effective. Vegetative maintenance should only be necessary for 11 years after the installation of final cover. This is typically more than enough time to create a well established and sustainable vegetative growth over the area.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas which require vegetative maintenance will be identified and noted in the quarterly inspection report. Vegetative maintenance will be performed during optimum seeding dates as specified in the SCS Plan.

4.3 Settlement Repair

Settlement repair will be required in areas in which settlement of the in-place solid waste has produced depressions in the final cover which cause ponding of surface water or create unstable slope conditions. Settlement repair could include, if necessary, replacement of an

entire final cover section, including subbase material, geomembrane, cover soil and topsoil. Settlement repair is anticipated to continue throughout the Post-Closure Period.

Any areas requiring minimal settlement repair will be maintained as per Section 4.1, Final Cover Maintenance. Areas requiring more extensive settlement repair will have all topsoil and cover soil removed. The existing geomembrane will be cut and removed. Subgrade material will be placed and compacted in the depression until the ground line matches the surrounding grade. Geomembrane will be installed and seamed to the surrounding membrane cap. All seams will be tested to conform to the specifications for geomembrane caps. Cover soil will then be placed and fine graded to a minimum depth of 12 inches. Topsoil will be spread over the area to a minimum depth of 6 inches. The area will then be vegetated.

Inspections of areas which have received final cover will be conducted on a quarterly basis as outlined in Section 4.12. During these inspections, any areas which require settlement repair will be identified and noted in the quarterly report. All settlement repairs will be performed in a timely manner after issuance of the inspection report.

4.4 Fertilizing

Fertilizer and lime will be applied to facilitate the establishment of a self-sustaining vegetative cover. Similar to vegetative maintenance, fertilizing is only necessary for the first 11 years after placement of the vegetative cover. These areas will be re-fertilized as needed and at the discretion of OCLC to promote a self-sustaining vegetative cover. Areas requiring re-fertilization will not be identified in the Quarterly Post Closure Inspection Reports. Fertilizing will be performed in accordance with the schedule provided in Section 5.

4.5 Mowing

After final closure, landfill areas will be mowed on a regular basis to prevent the overgrowth of shrubs, trees, and other deep rooted vegetation as well as for aesthetic purposes. It is assumed that mowing will be required three times per year as per the NJDEP Technical Manual for Sanitary Landfill Permits and Approvals.

Mowing will not be identified in the Quarterly Post Closure Inspection Reports. Mowing will be performed in accordance with the schedule provided in Section 5.

4.6 Monitoring Well Maintenance Repair and Replacement

Inspection of groundwater monitoring wells will be conducted semi-annually to ensure that all wells are in good condition. Maintenance work associated with monitoring wells may include brush clearing, lock replacement, cap or protective casing replacement, and grout seal repair. Any wells deemed inoperative or malfunctioning will be replaced.

4.7 Drainage System Cleaning, Repair, and Maintenance

Inspections of all closed landfill areas after the Date of Closure will be conducted quarterly as described in Section 4.12. During these inspections, the surface water management system will be surveyed to check if any structures require cleaning, repair, or maintenance. The results of these inspections will be included in the quarterly report. Necessary maintenance of the surface water management system will be performed in a timely manner after issuance of the inspection report.

Maintenance of the surface water control system will include cleaning accumulated sediment from channels and culverts. Concrete, rip rap or gabion lined channels will be inspected to check the integrity of the channel lining. Any inadequate channel linings will be repaired or replaced. The recharge basins will also be surveyed to determine if sediment has accumulated to the design sediment storage elevation. Sediment will be removed from the basins once this capacity has been reached. The maintenance activities for the surface water management system will occur throughout the Post Closure Period.

4.8 Gas System Operation, Maintenance, and Repair

After final closure of all landfill cells, decomposition of in-place solid waste will continue producing methane gas. This will require continued operation and maintenance of the gas collection and control system during the Post Closure Period.

The gas collection and control system will be staffed on a part time basis to ensure its proper operation and to perform scheduled and unscheduled maintenance. Operation of the gas collection and control system will require electricity, spare parts, and system monitoring. The gas collection and transmission piping within landfill cells will require periodic adjustments to ensure efficient gas collection. The condensate collection and pumping system will also be maintained to provide environmentally safe management of gas condensate.

During the monthly system monitoring outlined in Section 3.2 above, the gas collection system will be checked to ensure proper collection and conveyance of landfill gas to the flares or to the nearby LGE Facilities. Any repairs required will be identified and included in the inspection report. Repairs may include replacement of pipe, fittings, valves, test ports, or cleaning of transmission piping. Unless there is an exceedance of federal New Source Performance Standards (NSPS), the repair will be performed in a timely manner after issuance of the inspection report. If there is an NSPS exceedance, the repair will be performed as soon as practicable to correct the exceedance within the timeframes specified by the NSPS regulations. The location will be re-monitored to verify that the repair was adequate.

4.9 Leachate Collection System Operation, Maintenance, and Repair

As with the landfill gas collection system, the leachate collection and conveyance system will need to be operated and maintained during the 30 year Post Closure Period.

Labor for the operation and maintenance of the leachate system will be provided by the operator of the leachate treatment facility located on site. This will include leak detection monitoring and daily flow recordkeeping and reporting. The operation of the system will also require electricity. Maintenance activities will include cleaning the leachate collection and transmission piping and repair and/or replacement of pumps and controls, piping, fittings, valves, and other manhole appurtenances.

Inspections of the landfill area will be conducted quarterly during the Post Closure Period. During these inspections, the leachate collection system manholes and piping will be checked to ensure proper operation. Any repairs required will be identified and included in the inspection report. All repairs will be performed in a timely manner after issuance of the inspection report.

4.10 Leachate Handling

Leachate collected during the Post Closure Period will be handled in the leachate treatment facility prior to delivery and discharge to the OCUA sewer trunk line. This will require operation and maintenance of the leachate storage lagoons, storage tanks, treatment facility, and outfall line during the Post Closure Period.

The operation of the leachate handling system will require one full time, licensed treatment plant operator. This operator will also have responsibility for the operation and maintenance of the leachate collection system as described in Section 4.9. Duties will include operation of treatment units within the plant to ensure proper performance and compliance with applicable discharge permits. Other operation and maintenance requirements are:

- Electricity to run the treatment facility and pump stations.
- Chemicals used in treatment.
- Funds for payment of OCUA discharge fees.
- Monitoring the treatment facility influent and effluent, and preparation of reports required by regulatory agencies.
- Maintenance and repair and/or replacement of parts such as pumps, meters, piping, fittings, valves, etc.

- Maintenance and cleaning of leachate storage lagoon and treatment units and disposal of accumulated sludges.

The operator will be responsible for performing or contracting for all activities associated with the operation and maintenance of the leachate handling system during the Post Closure Period.

4.11 Facility Access Controls

Access to the OCLC SWF is controlled by fencing. A perimeter chain link fence prevents unauthorized access to the site. Necessary fencing will be maintained during the Post Closure Period. As part of the quarterly site inspection, the fence line will be checked for any breaches and necessary repairs. Any problems will be noted in the quarterly inspection report. All repairs will be performed in a timely manner after issuance of the inspection report.

Access to landfill areas is provided by paved internal access roads. These roadways provide the access to all landfill areas necessary for monitoring and maintenance activities. Any roadway repairs needed will be identified during quarterly site inspections and noted in the quarterly reports. Repairs to roadways will be performed within 3 months of the issuance of the inspection report.

4.12 Inspection and Certification (Engineering Services)

As indicated above, quarterly inspections of the closed landfill will be conducted throughout the Post Closure Period. These inspections will address final cover, vegetation, settlement, surface water management systems, the gas collection system, leachate collection system, and facility access. Any repairs required will be identified and noted in the Quarterly Post Closure Inspection Report. In addition, any areas in need of repair identified in the previous quarterly report will be inspected to ensure that the repairs were completed in accordance with the Post Closure Plan. Where required, all work will be certified by an engineer licensed by the State of New Jersey.

5 IMPLEMENTATION SCHEDULE

5.1 Key Terms and Dates

This section outlines schedules for implementing the Closure and Post-Closure Plan update. As indicated above, this update takes into account the permit renewal elements including the Existing Landfill waste disruption and SLP design as well as the approved final elevation of 185 feet. Therefore, the projected Date of Closure is near the end of 2038 and the 30 year Post Closure Period will run from 2039 through 2068. Certain activities associated with the Closure and Post Closure Plan are currently on going and will continue through the Post Closure Period. In this discussion of implementation schedules, the following terms are utilized:

- **“Closure” or “Date of Closure”** – is the date when waste disposal stops. The Date of Closure for the purposes of this update is projected to be the end of 2038.
- **“Final Cover Construction”** – is the activity associated with the installation of a final cover system as described previously on a portion of the landfill which has achieved design elevations and grades.
- **“Temporary Cover Construction”** – is the activity associated with the installation of a cover system similar to the final cover system on a portion of the landfill which has achieved interim elevations and grades. This system is installed to control odors and manage gas collection pending waste decomposition and the resulting settlement of the in-place waste which enables reclamation of airspace for disposal of additional waste. The temporary cover will be removed to allow overfill operations up to design elevations and grades.
- **“Post-Closure Period”** – is the 30 year period after the Date of Closure. For the purposes of this update, this period is expected to begin in 2039 and extend through 2068.
- **“Post-Closure Activities”** – are monitoring, operation, maintenance, repair, and inspection activities which are required once Final Cover Construction is completed.
- **“Type A Post-Closure Activities”** – are Post-Closure Activities that begin once a landfill area receives final or temporary cover whether before or after the Date of Closure.
- **“Type B Post-Closure Activities”** – are Post-Closure Activities which begin after the Date of Closure.

5.2 Landfill Closure

The landfill operation at the OCLC SWF is being developed and closed incrementally, on a cell or subcell basis. The landfill operation has been divided into 6 remaining operational stages. Final Cover Construction will occur during each of these stages on a portion of the landfill. Final Cover Construction will not occur on portions of the landfill used during the last operational stage until after the Date of Closure. A schedule has been developed for the Final Cover Construction in conjunction with each operational stage of the landfill, subject to change due to fluctuating waste rates and types received, actual waste densities achieved and actual operating conditions encountered. This "Landfill Site Development Plan" is summarized in Figure 1. Final Cover Construction within each operational stage will include the placement of cover materials and the installation of gas collection facilities, surface water control structures, and landfill access facilities.

5.3 Post-Closure Activities

Post-Closure Activities are divided into two main categories: Type A Post Closure Activities, and Type B Post Closure Activities.

The Type A Post Closure Activities are undertaken at closed cells both during the operational stages of the landfill and after the Date of Closure. Once final or temporary cover is installed, Post-Closure Activities must be performed to ensure the integrity of the cover system. Type A Post-Closure Activities are divided into two subcategories. The first includes activities which will be performed for a finite period of time. This includes vegetative maintenance and fertilizing. These activities will be performed for 11 years after Final Cover Construction in each stage of the landfill operation. The second category includes final cover maintenance, settlement repair, mowing and site inspections. These activities will begin once Final Cover Construction is completed, and will continue to the end of the Post Closure Period.

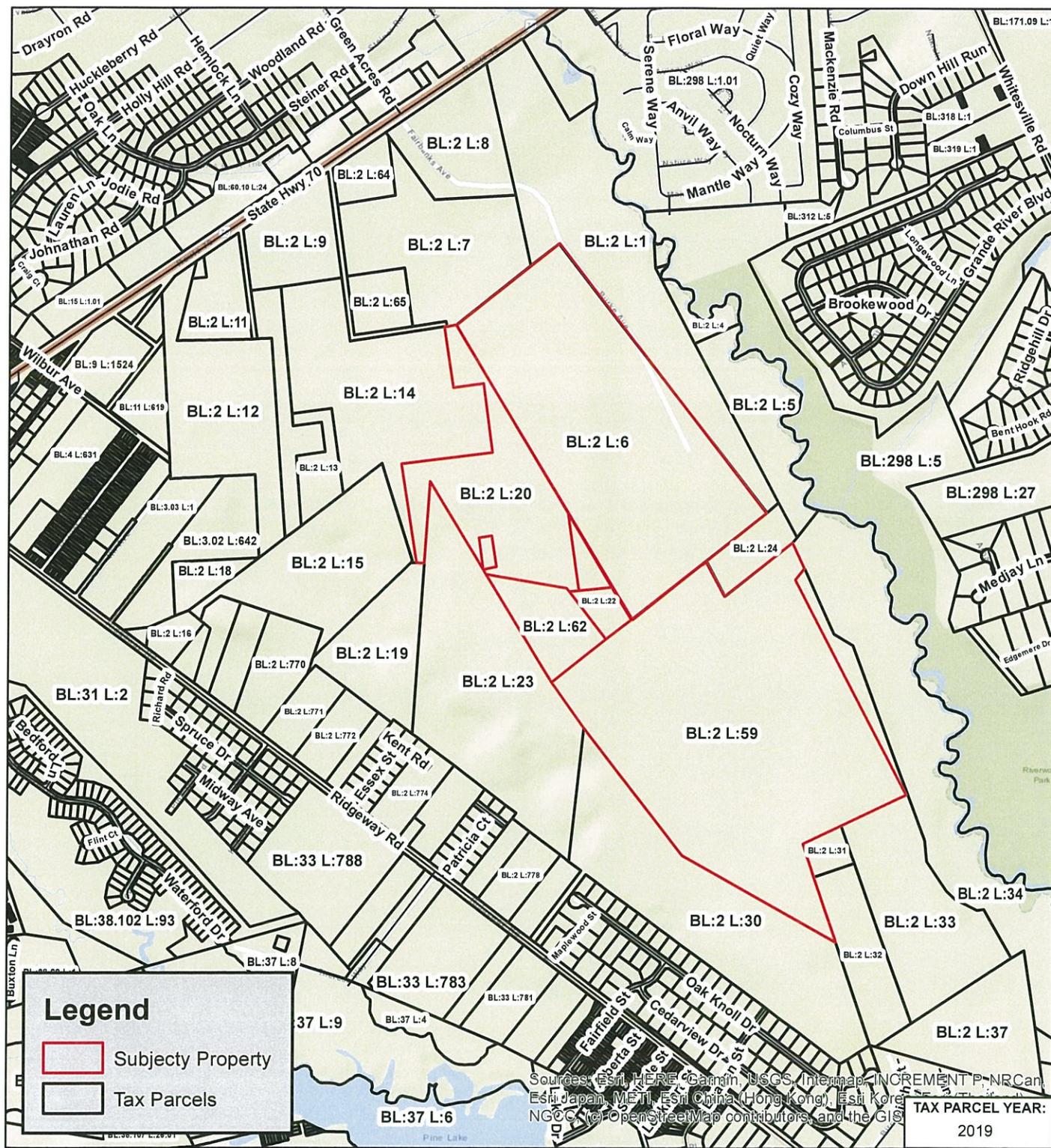
Type B Post Closure Activities are tasks which are also part of regular landfill operations and continue as Post Closure Activities after the Date of Closure. This includes all environmental monitoring and operation and maintenance of the surface water, gas and leachate management systems. These activities will be performed throughout the 30 year Post Closure Period.

All Post Closure Activities are summarized in Table E-3 included in Appendix E.

5.4 Post-Closure Administrative Costs

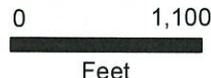
Funds in the Post-Closure Administrative Account (No. 944726) are being accrued for administrative costs that will be incurred during the 30 year Post Closure Period. These costs include annual lease payments pursuant to the post closure lease approved by the NJDEP in an Order dated May 15, 1997. Post Closure administrative costs also include

taxes, expenses for legal and accounting services, and costs for environmental impairment liability insurance coverage.



TAX PARCEL YEAR:
2019

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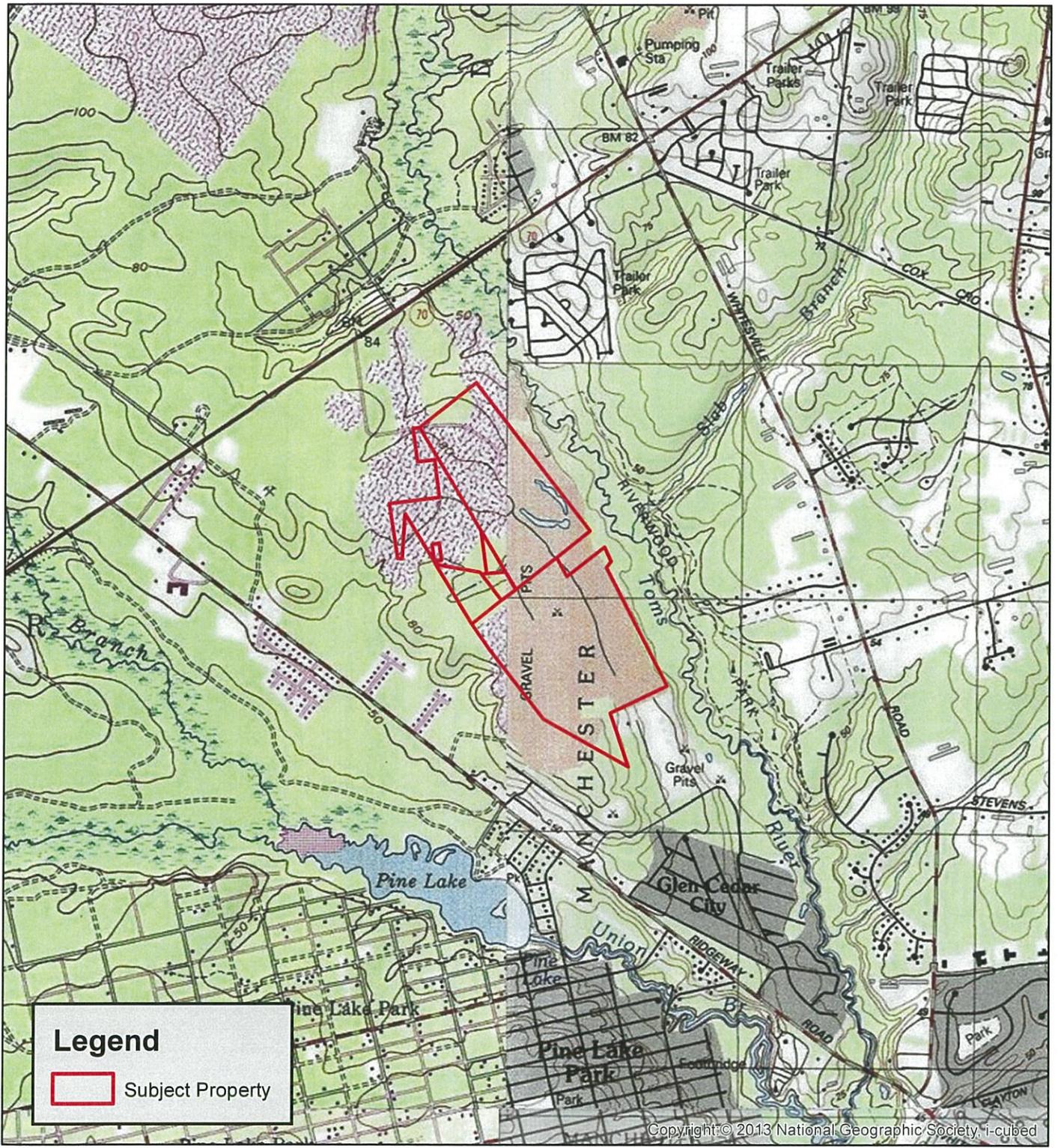
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**OCEAN COUNTY LANDFILL
SOLAR PROJECT**
2498 ROUTE 70, MANCHESTER TWP
OCEAN COUNTY, NEW JERSEY

SITE LOCATION MAP

SCALE: 1" = 1,100'	BLOCK: 2	LOT: 6, 20, 21, 22, 24, 59, 62	DRAWING # 1
DATE: 08/22/2019	DRAWN BY: N.L.	PROJECT NUMBER: 12530	

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 Subject Property

NOTE: USE THIS NOTE TEXT IF REQUIRED.

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**OCEAN COUNTY LANDFILL
SOLAR PROJECT**
2498 ROUTE 70, MANCHESTER TOWNSHIP
OCEAN COUNTY, NEW JERSEY

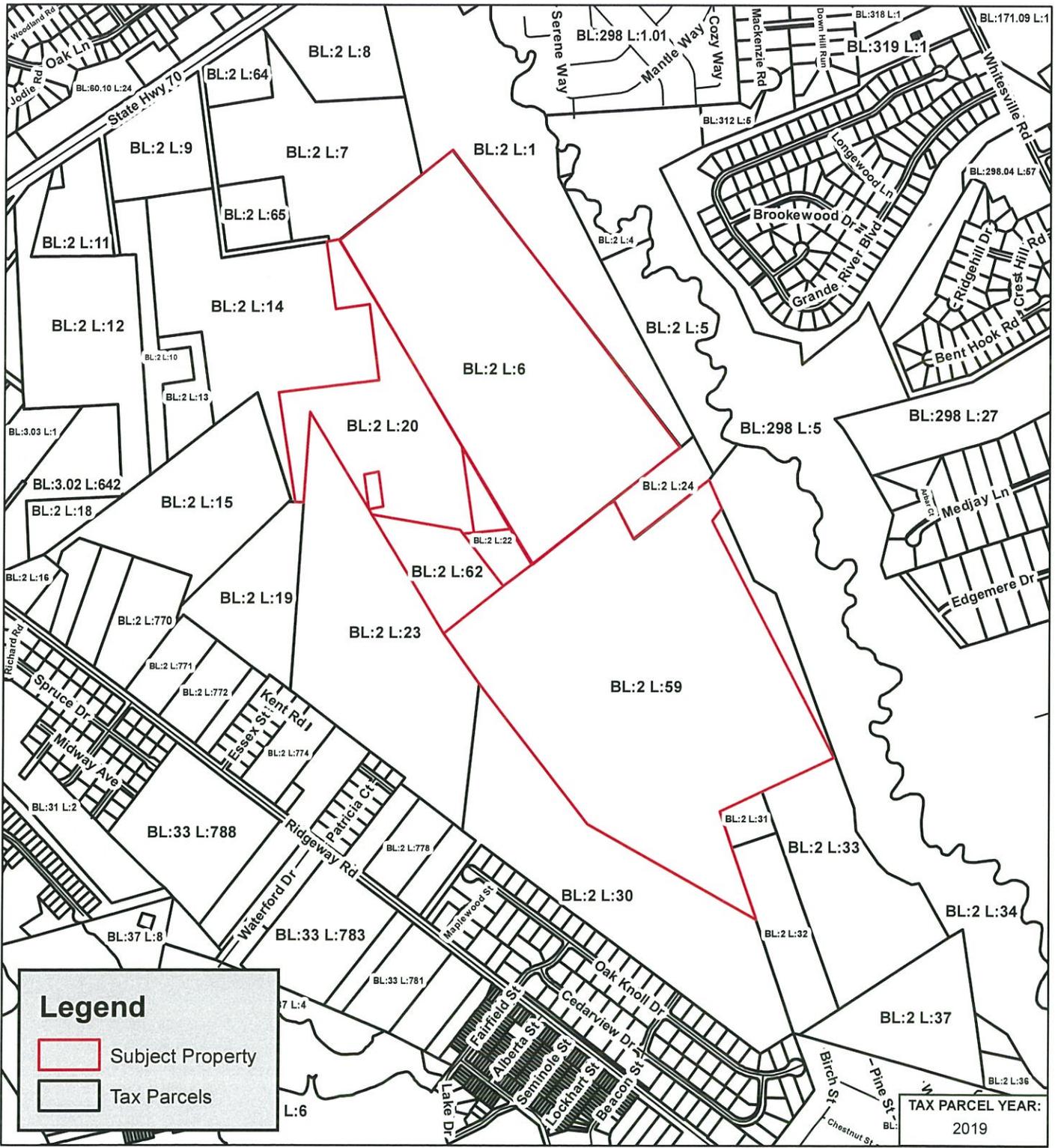
TOPOGRAPHIC MAP
LAKEWOOD QUADRANGLE

SCALE: 1" = 2,000'	CONTOUR INTERVAL 10'	PHOTO REVISED 2018	DRAWING # 2
DATE: 08/22/2019	DRAWN BY: N.L.	PROJECT NUMBER: 12530	

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**OCEAN COUNTY LANDFILL
 SOLAR PROJECT**
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 OCEAN COUNTY, NEW JERSEY

TAX PARCEL MAP

SCALE: 1" = 1,000'	BLOCK: 2	LOT: 6, 20, 21, 22, 24, 59, 62	DRAWING # 3
DATE: 08/22/2019	DRAWN BY: N.L.	PROJECT NUMBER: 12530	

Document Path: C:\12\10125001\2530_OC_Landfill_Solar\CAD\GIS\12530_DWG_4 SITE LAYOUT- CONCEPTUAL SITE PLAN MAP.mxd
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Legend

- Proposed Solar Area
- Subjecty Property
- Tax Parcels

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

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CONCEPTUAL SITE LAYOUT MAP

SCALE: 1" = 800'	BLOCK: 2	LOT: 6, 20, 21, 22, 24, 59, 62	DRAWING # 4
DATE: 08/22/2019	DRAWN BY: N.L.	PROJECT NUMBER: 12530	

Amjed Ibrahim

Email suffice as meeting with PCER page: 3

From: Brunatti, Megan <Megan.Brunatti@dep.nj.gov>
Sent: Friday, September 6, 2019 11:56 AM
To: Lawrence Schmidt
Cc: Nolan, Katherine; Keith B. Smith; Dudley Warner
Subject: REVISED: Ocean County Landfill Community Solar - DEP Comments

See below for revised comment from Division of Solid & Hazardous Waste:

Dear Larry,

The Office of Permit Coordination and Environmental Review distributed project information to various programs within the Department for the proposed Ocean County Community Solar project located in Manchester, Ocean County. Below are preliminary comments of possible permits and action items this project may require (but not limited to) based on the information that was submitted on August 23, 2019: ** this is neither a comprehensive nor a technical summary **

Division of Land Use Regulation

Based on the information provided, permits are not required from the Division of Land Use Regulation.

Division of Solid and Hazardous Waste: MaryAnn Goldman: Maryanne.Goldman@dep.nj.gov

This Community Solar Project proposal calls for the installation of a solar energy facility (solar panels and appurtenances) on the Ocean County Landfill (OCLF). The proposal will generate 5 MW of electricity or more. The project will be located on portions of Cells 4, 5 and 6. These cells are no longer accepting waste and have been closed with impermeable caps in accordance with the approved Closure/Post-Closure Plan (Plan) for the landfill.

As an operating landfill, OCLF's Plan has been approved as part of the Solid Waste Facility Operating Permit. Therefore, the Applicant will have to apply for a modification of the Solid Waste Facility Operating Permit for this solar project. Municipal Site Plan Approval from Manchester Township will also be required.

No penetrations of the landfill's impermeable cap are permitted. The Applicant should bear this in mind during the design the solar project.

Bureau of Energy & Sustainability- Erin Hill: Erin.Hill@dep.nj.gov or (609) 633-1120

- The Community Solar Energy Pilot Program Application window opened April 9, 2019 and closes September 9, 2019 <https://www.bpu.state.nj.us/bpu/pdf/boardorders/2019/20190329/8E%20-%20Community%20Solar%20Energy%20Pilot%20Program%20Application%20Form.pdf>
- The proposed array is located on a landfill which is identified as "preferred" per the Solar Siting Analysis
- Visit the BES solar siting webpage & NJ Community Solar Siting Tool <https://www.state.nj.us/dep/ages/solar-siting.html>

Division of Fish and Wildlife- Joseph Corleto: Joseph.Corleto@dep.nj.gov or (609)292-9451

There were no specific plans submitted to indicate where the solar panels will be installed. The DFW assumes the applicant will be installing the solar panels in the open cells of the landfill.

Based on the potential of ground nesting birds and habitats in the immediate vicinity of this project, the DFW would recommend any ground clearing or site preparation be done outside the nesting season (4/1 to 8/31) to avoid impact to ground nesting birds.

Should any unanticipated tree clearing become necessary, around the perimeter of the landfill, a general timing restriction on trimming or removal of trees from (4/1 to 8/31) is recommended to protect nesting birds covered under the Non-game Species Conservation Act.

Additionally, the contractor should instruct all employees and sub contractors to avoid any animals and, if possible, move any turtles to the closest suitable habitat outside the work zone and **release unharmed**.

County Soil Conservation District BMP's for prevention of sediment movement should be used at all times and maintained for function.

The DFW relies on the NJDEP Office of Natural Lands Management, Natural Heritage Program (NHP) for location and protective comment on floral threatened and endangered species. This review is specifically for faunal threatened and endangered species. The applicant will need to consult with the NHP for a complete listing of the threatened and endangered species within the project vicinity.

Historic Preservation Office – Jesse West-Rosenthal: Jesse.West-Rosenthal@dep.nj.gov

Based upon the documentation submitted, there are no buildings, structures, sites, objects, or historic districts on or adjacent to the project location that are listed on, or that have been identified as eligible for listing on the New Jersey or National Registers of Historic Places. Although the project setting is sensitive for archaeological sites, based upon information on file at the HPO, the project only has a low potential for archaeological remains. Consequently, the HPO does not recommend further consideration prior to permit issuance

Stormwater: Eleanor Krukowski (Eleanor.Krukowski@dep.nj.gov)

Construction projects that disturb 1 acre or more of land, or less than 1 acre but are part of a larger common plan of development that is greater than 1 acre, are required to obtain coverage under the Stormwater construction general permit (5G3). Applicants must first obtain certification of their soil erosion and sediment control plan (251 plan) from their local soil conservation district office. Upon certification, the district office will provide the applicant with two codes process (SCD certification code and 251 identification code) for use in the DEPonline portal system application. Applicants must then become a registered user for the DEPonline system and complete the application for the Stormwater Construction General Authorization. Upon completion of the application the applicant will receive a temporary authorization which can be used to start construction immediately, if necessary. Within 3-5 business days the permittee contact identified in the application will receive an email including the application summary and final authorization.

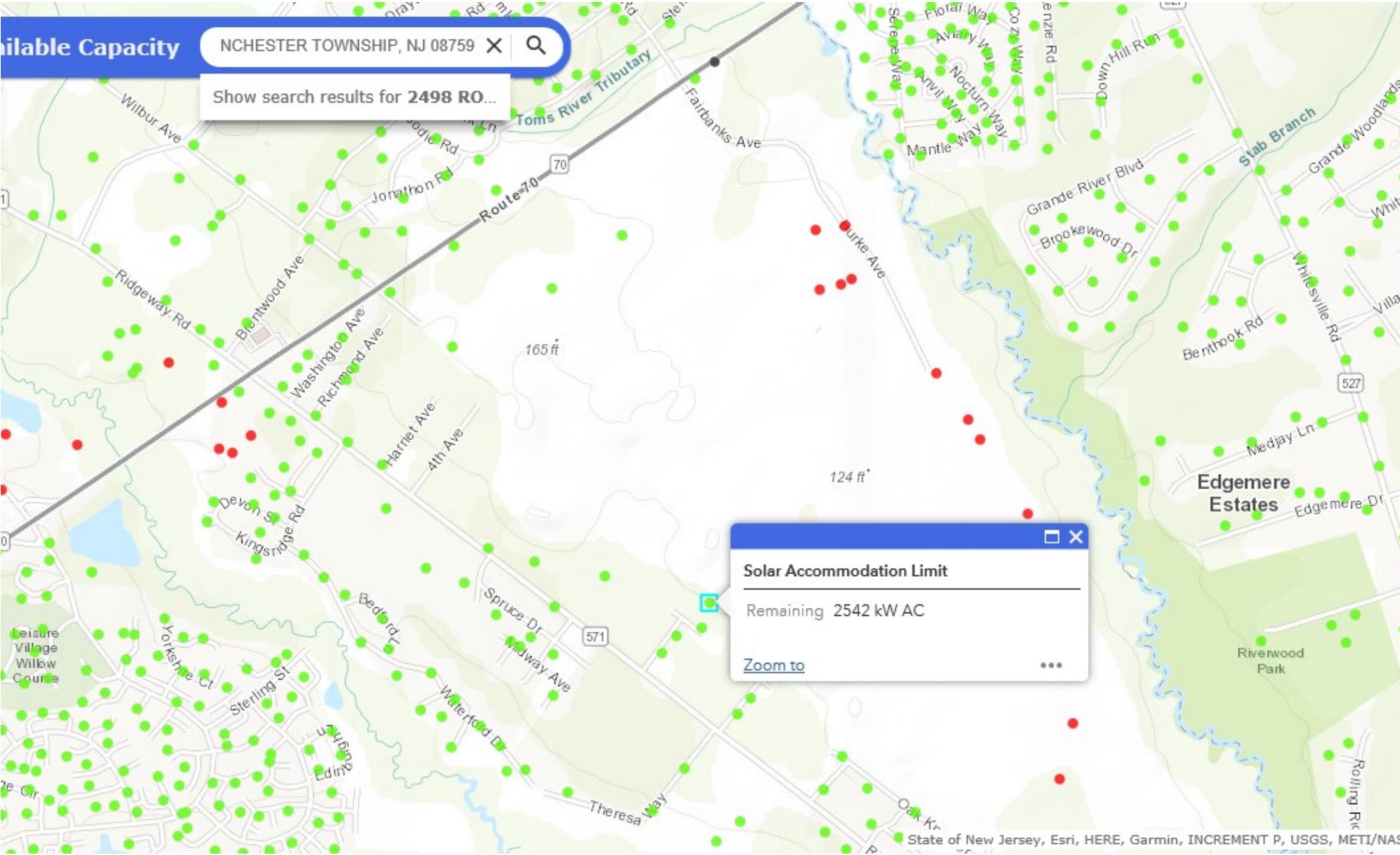
Please consult with the Department in the future, regarding the possible need to modify air permits as plans are finalized.

Should circumstances or conditions become different than what was set forth in the information that was provided to the NJDEP, the comments and regulatory requirements provided above are subject to change and may no longer apply to this project. Statements made within this email do not represent a decision by the DEP on whether the proposed project will be permitted.

If upon review of the comments provided, you would like to contact the programs directly, we ask that you keep Permit Coordination copied on any correspondence so we may update our records. This email shall serve to satisfy the Community Solar Pilot Program application requirement that the Applicant shall meet with PCER.

Thank You,

Megan Brunatti
Office of Permit Coordination & Environmental Review
(609)292-3600



Available Capacity

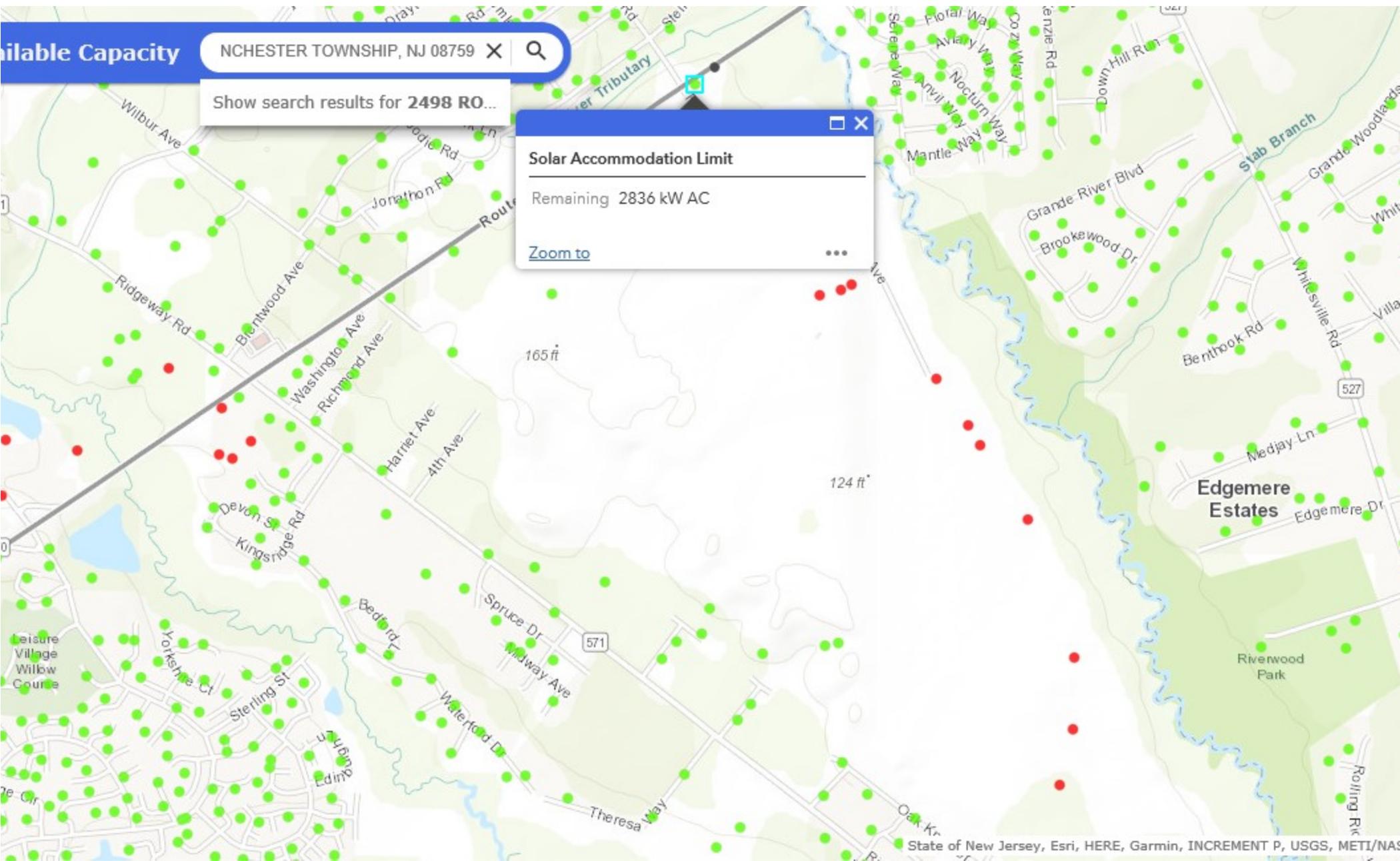
NCHESTER TOWNSHIP, NJ 08759

Show search results for 2498 RO...

Solar Accommodation Limit

Remaining 2836 kW AC

[Zoom to](#)





**MANCHESTER
TOWNSHIP**
OCEAN COUNTY, NEW JERSEY

ADVANCED SOLAR PRODUCTS
Dedicated to Building a Sustainable Future



Greener by Design

September 6, 2019

New Jersey Board of Public Utilities
44 South Clinton Avenue
7th Floor
P.O. Box 350
Trenton, NJ 08625-0350
Attention: Office of Clean Energy

**SUBJECT: Community Solar Energy Pilot Program Application Package
Manchester Township Letter Supporting Community Solar Partnership**

Dear Office of Clean Energy Staff,

As Mayor of Manchester Township, I would like to submit this letter of Township support as part of the Ocean County Landfill Corp. ("OCLC") Community Solar Energy project application submitted for the Pilot Program, Program Year 1. The proposed community solar project would serve to use a privately owned landfill to benefit the Township's taxpayers and our low- and middle-income residents while helping us to further realize the Township's renewable energy goals.

Following a competitive RFP process, OCLC, working with Greener By Design ("GbD") as its energy consultant, selected the Project Team of Advanced Solar Products, Inc. ("ASP") and Spano Partners Holdings, LLC ("SPH") to develop, design, construct, finance and own a solar array as part of the BPU's Community Solar Program. The Township, GbD and the Project Team have discussed on several occasions a strategy to implement this project and to create a substantially permit-ready project for inclusion in the CS Program Year 1 application pool. Collaboration between the parties is evidenced by:

- Letter of Intent – OCLC issued an award in the form of a Letter of Intent to move forward with the project with the Project Team of ASP/SPH on August 14, 2019.
- Property – OCLC has provided the parcel known as the "Ocean County Landfill Corporation (OCLC) Solid Waste Facility (SWF)" site as a host site for the community solar project.
- Meetings – OCLC, GbD and the Project Team have met on several occasions, both in person and via regular conference calls, to discuss roles and responsibilities for each party with respect to the community solar array and application process.



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- Regular status calls took place every week as we further developed the landfill solar project.
- Joint outreach – The Township, in conjunction with the Project Team, will hold community outreach events to inform potential customers of the opportunity to participate in this community solar project. Outreach efforts will be organized to include Township-wide meetings soon after the project is approved by the NJBPU. A notification of the opportunity will also be put on the Township's website.
- Electricity Offtakers – The Township is considering participating in purchasing solar power from the community solar project and will aid in identifying low and middle-income housing authorities and special needs housing offtakers that can benefit from the lower electric rates provided by the community solar project.

Please do not hesitate to contact me with any questions or if you would like to discuss the Township's support of this project further.

Regards,
Manchester Township

A handwritten signature in black ink, appearing to read "K. Palmer".

Kenneth T. Palmer
Mayor

cc:

Lawrence C. Hesse, President, Ocean County Landfill Corporation
Adam Zellner, President, Greener By Design
Lyle K. Rawlings, President, Advanced Solar Products, Inc.
James Spano, Managing Partner, Spano Partners Holdings, LLC
Manchester Township Town Council Members
Jerry Dasti, Esq., Attorney, Manchester Township

 <small>Dedicated to Renewing - Sustaining - Future</small>	Ocean County Landfill Corporation Community Solar Project	
System Parameters		
Array Type	Ballasted	
# of stings	496	
Panels/string	28	
Number of Panels	13,888	
Panel Size (in W DC)	360	
Total PV system size (in kW DC)	4,999.68	
Array Tilt (in degrees)	25	
Array Azimuth (in degrees)	180	
Total PV system size (in kW AC)	3,600	
Estimated initial year production (in kWh)	6,999,552	
Production ratio (kWh/kW)	1,400	
Interconnection Voltage	26 kV	
DC/AC Ratio	1.389	
Inverters (in kW AC)	2 @ 1800	
System voltage (VDC)	1,500	
Inverter Type	Central	
	\$	\$/W
Cost Elements		