STREAM BUFFER MANAGEMENT PLAN

SWEETBRIAR AVENUE
Block 1581, Lot 27
Township of Hamilton, Mercer County, New Jersey
Hamilton Township Application #16-05-012

December 8, 2018

Prepared For
SYNNERGY, LLC.
23 Oakwood Drive
Medford, N.J. 08055

Prepared by
Trenton Engineering Company, Inc.
2193 Spruce Street
Ewing, N.J. 08638
609-882-0616

Joseph Mester, P.E. & L.S. #19462
The following Stream Buffer Management Plan has been prepared in support of a Site Plan for Synnergy, LLC. The Plan was prepared in accordance with Section 583-10 of the Land Development Ordinance of the Township of Hamilton.

A. Within any SBCZ, no construction, development use activity or encroachment shall be permitted unless the effects of such development are accompanied by preparation, approval and implementation of a stream buffer management plan.

By definition, there are two (2) Category Two (C2) waters and one (1) Intermittent Stream which require (SBCZ) limits to be shown on our project site. The first stream is known as the “Assunpink Creek”, which is located across from and to the north of “Sweetbriar Avenue” in front of our project. It flows from east to west and approximated parallel to the road. The second steam is known as “Miry Run”, which is located near the center of our site and flows from a culvert under the railroad on the south through the culvert on the north at “Sweetbriar Avenue” and intercepts the Assunpink at a confluence. Miry Run will remain on the undisturbed easterly half of our site. The unnamed “Tributary to the Assunpink Creek” is a manmade channel created to carry the flow from the properties on the southerly side of the railroad through a culvert on the north at “Sweetbriar Avenue” to the “Assunpink Creek”. It is located on the westerly side of our site between the proposed two (2) sections. The primary influence of the “Assunpink Creek” on our site is by the backup through the culvert into the “Tributary”.

There are two (2) classifications of the (SBCZ) which affect this site. The first is the seventy-five (75) foot limit from the top of bank of the two streams and from the centerline of the intermittent stream. The second is the outer limit of the 100-year flood plain as established by the “Federal Emergency Management Agency” (FEMA) maps. The elevation datum shown for the two streams is based upon (NAVD 88). Our engineering plan elevations are based upon (NGVD 29) datum. The elevation conversion in this area is +1.07 feet. There is a ridge line between the two streams which occurs near the middle of Section 2D. The “Assunpink Creek” 100-year flood plain elevation for the westerly side of the ridge is 49.57 (NGVD 29). The “Miry Run” 100-year flood plain elevation for the easterly side of the ridge is 49.75 (NGVD 29). The 100-year flood plain is greater than the seventy-five (75) foot limit in both cases.

Our plan for development of this project impacts the SBCZ. We are submitting this “Stream Buffer Management Plan” to mitigate the effects of this development so that it can be implemented as submitted with the approval of the “Hamilton Township Planning Board”. The object of the project is to construct 11,532 solar panels within two (2) sections on the westerly half of the site to provide electrical power to the Ewing-Lawrence Sewerage Authority site to the north of this location.
B. The landowner, applicant or developer shall submit to the administrative officer or an
appointed representative a stream buffer management plan prepared by an
environmental professional, professional engineer or other qualified professional,
which fully evaluates the effects of any proposed uses on the SBCZ. The steam buffer
management plan shall identify the existing conditions, including:
The owners and applicants of this property have appointed me, Joseph Mester, as a licensed
Professional Engineer in the State of New Jersey, to prepare this “Stream Buffer
Management Plan”. Specifics of the plan are outlined in item (7) below.

(1) **Existing Vegetation:**
Except for the two state open waters on the site and the single existing entrance, the
entire site being, 38.305 acres in area, is forested and covered with brush and trees, as
shown on “Plan of Tree Locations of Lot 27 Block 1581 for Synnergy, LLC in
Township of Hamilton, Mercer County, New Jersey” prepared by Trenton Engineering
Company, Inc. dated June 19, 2018. The two waterways shown on the submitted
engineering plans are known as the “Miry Run” and a “Tributary to the Assunpink
Creek”. The existing entrance, being a stone drive and parking area and remnants of a
building encompass 0.265 acres of land. This is the only impervious area existing on
the site.

(2) **Field delineated streams, wetlands and the one-hundred year floodplain:**
The elevations and locations of the delineated streams, wetlands and one hundred year
floodplains were all field located, as shown on survey entitled “Plan of Topographic
Survey of Lot 27 Block 1581 for Synnergy, LLC in Township of Hamilton, Mercer
County, New Jersey” prepared by Trenton Engineering Company, Inc. dated June 19,
2018. As shown on the “Disturbed Areas Plan”, sheet #DST-1, dated 5/15/17 and last
revised on 9/13/17, of the submitted engineering plans and Appendix G, herein, no
portion of the proposed project is located within the stream corridors or the flagged
delineated wetlands. Except for the ten (10) foot wide outlet pipe easements for
the detention basins, there is also no impact on the fifty (50) foot wide stream riparian
zones or wetlands buffers. General permits for these easement areas, in conjunction
with the “Fresh Water Wetlands General Permits Plan”, sheet #FWGP-1, dated 5/15/17
and last revised 8/08/17, of the submitted engineering plans and Appendix G, herein,
have been obtained and approved by the New Jersey Department of Environmental
Protection (NJDEP). All information and maps pertaining to the NJDEP approvals
have been submitted to the Township as requested. These disturbed areas will be
restored to the existing grades with grass cover as approved on the engineering plans
submitted to the Mercer County Soil Conservation District (MCSCD).

(3) **Mapped Soils:**
The soil mapping information for the site was obtained from the Natural Resources
Conservation Service “Web Soil Survey”. All soils information has been submitted
to the Township and the soils maps are included, herein, in Appendix C. Please refer to
the enclosed letter to the (MCSCD) dated September 20, 2017 and sheets # SE-1A, SE-
1B and SE-2 of the submitted engineering plans, dated 5/01/17 and last revised 9/21/17.
All soil conservation and sediment control measures shown on the submitted plans have
been approved by the (MCSCD). Except for the two (2) stone covered maintenance
drives and entrance areas, the entire disturbed area within the project will be grass covered with native grasses after construction is completed in conformance with the approved (MCSCD) application.

(4) **Existing subdrainage area of site:**
The existing subdrainage areas on site have been depicted on the submitted engineering plans, entitled “Existing Drainage Area Map Section 1D and 2D”, dated 8/05/16 and last revised 8/08/17 and are included, herein, in Appendix D.

(5) **Slopes in each subdrainage area segmented into sections of slopes less than or equal to 10%, 11% to 19% and 20% to 25%;**
The above referenced existing and proposed subdrainage area maps include the contours within the site. Except for the areas near the streams, all slopes are less than 20%. The areas from the top of bank to the bottom are in excess to 20%.

(6) **All proposed activities:**
All proposed activities are shown on sheet #2A of the submitted engineering plans entitled “Site Plan”, dated 3/21/16 and last revised 6/19/18 and are included, herein, in Appendix E.

**PROJECT DISTURBANCE:**
There are two (2) primary areas of disturbance designated on our submitted engineering plans. They are Sections 1D & 2D. The total area of disturbance in Section 1D is 5.900 acres. The total area of disturbance in Section 2D is 6.407 acres. This will impact 32.1% of the entire Lot 27. The existing trees, brush, fill and cut areas from previous uses, deposited junk and debris as well as the remnants of the building and parking area will be removed from the entire project area. Upon final removal of the tree stumps, the site will be re-graded as a smooth grass cover landscape with two (2) twelve (12) foot wide stone covered access and maintenance driveways around the boundaries of the solar panel areas. There will be two (2) ingress/egress access points from Sweetbriar Avenue with two (2) parking areas having two (2) spaces each. There are also four (4) detention basins proposed within the access driveways. Buffering of the front areas is also proposed.

(7) **A mitigation plan that demonstrates how the loss of value afforded by the existing buffer will be compensated for:**
As shown on the above referenced “Plan of Tree Locations”, this project will remove a total of approximately 820 tress of caliper ten (10) inches or larger from the project area. Compensation for the tree removal will be given to the Township by agreement with the property owners to replace the trees in various locations within the Township of Hamilton as they deem necessary.

**BUFFER DETERMINATION:**
We are incorporating into the engineering plans and Appendix G, herein, two (2) sheets displaying the disturbed (SBCZ) areas within the proposed project for the two (2) sections on the site. They are the “Stream Buffer Conservation Zone Plan”, sheets #SCBZ-1 and #SCBZ-2, dated 10/16/18 and last revised 10/24/18. There are five (5) separate areas in Section 1D which lie below the 100-year flood plain elevation for the “Assunpink Creek”. Four (4) of these areas are depressions that remained after previous uses on the site were abandoned or construction on the adjacent westerly lot
helped trap the water. These areas are now a source of mosquito infestation. They have been obscured after years of subsequent growth of trees, brush, dumping and filling. Therefore, mosquito control has probably not been attempted in these areas. The total area of (SBCZ) disturbance within Section 1D is 3.023 acres. There are two (2) separate areas in Section 2D which lie below the 100-year flood plain elevation for the “Assunpink Creek” and one (1) which lies below the 100-year flood plain elevation for “Miry Run”. Two (2) areas within Section 2D also fall within the low lying problem category. The total area of (SBCZ) disturbance in Section 2D is 2.892. This total 5.915 acres area of (SBCZ) disturbance is only 15.4% of the entire lot. The entire portion of the site to the east of the “Miry Run” will remain undisturbed by this project. It contains 14.575 acres of the (SBCZ) or 38.0% of the entire site. The undisturbed (SBCZ) portion of the site between the two sections is 4.563 acres or 11.9% of the entire site. The entire undisturbed (SBCZ) portion of the site is 19.773 acres or 51.6% of the lot.

**REGULATION INTENT:**
We have made every effort possible to be consistent with the intent and objectives of this ordinance and use accepted conservation practices in preserving as much of the on site (SBCZ) as we could and still make it possible to achieve a reasonable goal. We have managed to preserve over 50% of the original lot area within the (SBCZ) in its undisturbed forested condition. We have reduced the original project from three (3) sections to two (2) sections by eliminating the use of the land to the east of “Miry Run”. We have left the entire wetlands on the site intact and only disturbed the wetland transition areas and riparian zones with four (4) small six (6) inch diameter outlet pipes from the detention basins. This has made it possible to preserve the canopy of trees over the most sensitive and important regions of the (SBCZ) and to provide natural organic material such as fallen leaves and twigs and large woody debris so that sufficient food and protection for the habitat and aquatic organisms which remain primarily in and close to the waters of the streams. These vegetated buffer areas are also the most important for optimizing filtration, deposition, absorption, biodegradation and plant uptake.

**SITE SPECIFIC CHANGES:**
Because the forested area to the east of “Miry Run” will remain intact and the trees along Sweetbriar Avenue will remain as a buffer and any existing gaps filled in with proposed landscaping as shown on the submitted “Landscape Plan”, dated 3/14/18 and last revised 6/19/18 and the existing railroad spur is elevated above the site, there will be no visible change from the surrounding area. The major portion of the project will be maintained native grass cover. Screening will be provided across the outlet pipes. Any branches falling from remaining trees will normally remain outside of the project area. The few that will blow into the basin areas and any debris will be removed during maintenance. Since the grass will not be treated with pesticides, there will be no impact from excessive nutrients or sediment. The stability of the existing stream banks will also remain intact and erosion will be greatly diminished or eliminated. The natural features within the crucial seventy-five (75) feet of the stream banks will remain unchanged. Trenton Engineering Co., Inc. will prepare easement descriptions as necessary. The easement locations shall be determined by an agreement between the applicant and the township professionals and deed restrictions shall be spelled out by the applicants’ attorney. No future impact will be allowed within the SBCZ without township approval.
C. The plan shall be reviewed by the Township Engineer in consultation with the Environmental Commission as part of the subdivision and land development process. The plan has been submitted for review.

D. The stream buffer management plan should include management provisions in narrative and/or graphic form, specifying:

1. The manner in which the SBCZ will be owned and by whom it will be managed and maintained.
   The portion of the SBCZ on the property in question will be owned, managed and maintained by Synnergy. LLC.

2. The conservation and/or land management techniques and practices that will be used to conserve and protect the SBCZ, as applicable.
   The conservation and/or land management techniques that are to be used for the vegetative aspects are outlined in item (B) (7) above.

REGULATION OF STORMWATER:
I believe that one of the major reasons for the establishment of the (SBCZ) was to control the stormwater runoff which is conveyed through the vegetated buffer as a stable, distributed sheet flow prior to reaching the receiving waters. In an attempt to achieve this fact, we have obtained an approved individual permit for steam encroachment and stormwater maintenance from the New Jersey Department of Environmental Protection (NJDEP) along with the necessary wetlands permits for the construction of this project. A portion of the approval required that the proposed flood plain storage volume for the project be at least equal to or above the existing flood plain storage volume. The “Excavation Report” calculations indicate an increase in flood storage volume for the 100-year storm event for both sections. The increase is 4,992 cubic yards for section 1D and 552 cubic yards for Section 2D. The volume requirement does not allow for detention basins within the “Flood Hazard Area”. Therefore, the necessary detention basin volume to control all of the storms up to and including the 100-year storm event is in addition to the cut and fill calculations submitted. The detention basins have been designed to control the outflow from the proposed project for the minimum impact on the stream corridor. At the present time, the stormwater runoff from all storms flows directly to the streams. Any existing excessive nutrients, sediment, organic matter, biocides, debris or other pollutants near the streams are washed directly into the flood waters. The basins will hold the entire 100-year storm volume for up to seventy two (72) hours after a major storm. Any of the necessary environmental provisions mentioned in the above sections are not impacted by non-stable flow. Because infiltration was not included in the calculations, the only outflow from the each basin is through the small six (6) inch pipe provided for minimal outflow. During the holding period, the grassed bottoms of the basins are continuously providing infiltration into the groundwater system, but the downstream residents do not feel any impact from the project area itself. The impact from the undisturbed areas on the site will remain the same.

3. The professional and personnel resources that are expected to be necessary in order to maintain and manage the SBCZ.
A site maintenance staff under the direction of the owners of Synnergy, LLC shall be appointed to maintain stability and vegetative cover over all portions of the final easement surrounding the SBCZ areas. The normal employees hired to maintain the solar panel equipment shall be responsible to prevent any impacts from their repair of equipment, trucks or debris between visits from the site maintenance staff.

(4) A revegetation plan, if applicable, that includes three layers of vegetation, including herbaceous plants that serve as ground cover, understory shrubs, and trees that form an overhead canopy. Vegetation selected must be native and consistent with the soil, slope and moisture conditions of the site. The revegetation plan shall be prepared by a qualified professional, such as a landscape architect or engineer, and shall be subject to the approval of the Municipal Engineer, in consultation with the Environmental Commission.

Revegetation will be grass cover for the entire site with native grasses and consistent with the soil, slope and moisture conditions of the site. The applicants professionals shall meet with the Township Planner and Environmental Commission to determine the specific ground cover to be used.

(E) A steam buffer management plan is not required where the SBCZ is not being disturbed and conservation easement/deed restrictions applied to ensure there will be no future clearing or disturbance of the SBCZ.

The SBCZ is being disturbed by this project. Conservation easement/deed restrictions will be applied. Specifics of the area and limits of the easements necessary to satisfy the ordinance will be implemented.

IMPACT:
Because of the above referenced efforts to mitigate the (SBCZ) as much as possible and the overall improvement to some of the conditions on this site, the applicant, Synnergy, Inc., believes that the consequential impact that this project imposes on the (SBCZ) is manageable. They are asking for an administrative waiver to discuss an agreeable compromise to comply with some of the strict requirements.

If there are any questions or additional recommendations or requirements, please do not hesitate to contact our office.
APPENDIX A

TOPOGRAPHIC SURVEY
APPENDIX B

FLOOD HAZARD AREA VERIFICATION PLAN
APPENDIX C

SOILS MAP
Soils Map

Applicant: Synnergy LLC. Location: Sweetbriar Avenue

Hamilton Township Application #16-05-012

Source: United States Department of Agriculture Natural Resources Conservation Service
Soils Map Legend

**Applicant:** Synnergy LLC.  **Location:** Sweetbriar Avenue

**Hamilton Township Application #16-05-012**

**Source:** United States Department of Agriculture Natural Resources Conservation Service

# Map Unit Legend

<table>
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<tr>
<th>Map Unit Symbol</th>
<th>Map Unit Name</th>
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<tbody>
<tr>
<td>BHSGB</td>
<td>Birdsboro gravelly solum variant soils, 0 to 6 percent slopes</td>
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<tr>
<td>GadB</td>
<td>Galestown loamy sand, 0 to 5 percent slopes</td>
</tr>
<tr>
<td>GASB</td>
<td>Galloway variant soils, 0 to 5 percent slopes</td>
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<tr>
<td>GKAWOB</td>
<td>Glassboro and Woodstown sandy loams, 0 to 5 percent slopes</td>
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<tr>
<td>MbaAt</td>
<td>Marsh, fresh water, 0 to 2 percent slopes, frequently flooded</td>
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<tr>
<td>PmmA</td>
<td>Plummer sandy loam, 0 to 2 percent slopes</td>
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<tr>
<td>UdstB</td>
<td>Udorthents, stratified substratum, 0 to 8 percent slopes</td>
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APPENDIX D

EXISTING DRAINAGE AREA PLAN
APPENDIX E

SITE PLANS
APPENDIX F

SITE PHOTOS
#1 On Sweetbriar looking south

#2 In site looking at culvert crossing Sweetbriar Avenue from ditch
#3 Just off site looking south. Headwall towards Railroad from ditch

#4 On Sweetbriar looking south
#5 Just off site looking southeast. Miry Run under Railroad

#6 Looking northwest. Miry Run onto site from Railroad
Photo #7

#7 On Sweetbriar between Trinity Avenue and Vetterlein Avenue looking south

Photo #8

On site looking east towards Miry Run going under Sweetbriar
Photo #11 On site looking south at ditch towards railroad

Photo #12 On site looking west at ditch towards vegetation
APPENDIX G

STREAM BUFFER CONSERVATION ZONE PLANS
DISTURBED AREAS PLAN
FRESHWATER WETLANDS GENERAL PERMIT PLAN
APPENDIX H

PERMIT APPROVALS
In accordance with the laws and regulations of the State of New Jersey, the Department of Environmental Protection hereby grants this permit to perform the activities described below. This permit is revocable due cause and is subject to the limitations, terms and conditions listed below and on the attached pages. For the purpose of this document, “permit” means “approval, certification, registration, authorization, waiver, etc.” Violation of any term, condition or limitation of this permit is a violation of the implementing rules and may subject the permittee to enforcement action.

<table>
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<tr>
<th>Permit Number(s):</th>
<th>Type of Approval(s):</th>
<th>Enabling Statute(s):</th>
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<td>1103-04-0011.1 FHA160001</td>
<td>Flood Hazard Area Individual Permit</td>
<td>NJSA 58:16A-50 et seq.</td>
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<tr>
<td>1103-04-0011.1 FHA160002</td>
<td>Flood Hazard Area Verification</td>
<td>NJSA 58:10A-1 et seq.</td>
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<tr>
<td>1103-04-0011.1 FWW170001</td>
<td>Freshwater Wetlands General Permit #11</td>
<td>NJSA 58:11A-1 et seq.</td>
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<td>1103-04-0011.1 FWW170002</td>
<td>Freshwater Wetlands General Permit #10A</td>
<td>NJSA 13:9B-1 et seq.</td>
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<td>NJSA 13:1D-29 et seq.</td>
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<td>NJSA 13:1D-1 et seq.</td>
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**Permittee:**
Synergy, LLC

/o Steven Durst

23 Oakwood Drive

Medford, NJ 08055

**Site Location:**
Block(s) & Lot(s): [1581, 27]
Municipality: Hamilton Township
County: Mercer

**Description of Authorized Activities:**

This permit authorizes the construction of 11,532 solar panels and associated arrays and equipment in the flood plain/riparian zone of the Assunpink Creek, Miry Run, and an unnamed tributary to Assunpink Creek, as shown on the plans referenced on the last page of this permit. This also authorizes the placement of gravel for two access/maintenance drives onsite.

This permit authorizes the permanent riparian zone disturbance of **550 square feet (0.013 acres)** to accommodate the construction of a 12-foot wide stone driveway under N.J.A.C. 7:13-11.2(h), and the total permanent riparian zone disturbance of **896 square feet (0.021 acres)** to construct two stormwater outfalls, pipes, headwalls, and scour holes associated with detention basins under N.J.A.C. 7:13-11.2(j).

**Prepared by:**

[Signature]

Erin Signor

**Received and/or Recorded by County Clerk:**

If the permittee undertakes any regulated activity authorized under a permit, such action shall constitute the permittee’s acceptance of the permit in its entirety as well as the permittee’s agreement to abide by the permit and all conditions therein.

This permit is not valid unless authorizing signature appears on the last page.
FLOOD HAZARD SPECIAL CONDITIONS:

1. Any new, reconstructed, enlarged, or elevated structure within a flood hazard area shall be secured to resist flotation, collapse, and displacement due to hydrostatic and hydrodynamic forces from floodwaters.

2. The regulated activity shall not adversely affect low-flow aquatic passage in any regulated water.

3. The regulated activity shall not expose unset or raw cement to flowing water within any channel or regulated water during construction.

4. The applicant shall adhere to the maintenance plan for the stormwater management measures incorporated into the design of the major development in accordance with N.J.A.C. 7:8-5.8 and the guidelines of the New Jersey Stormwater Best Management Practices Manual.

5. The Department has determined that this project meets the requirements of the Stormwater Management rules at N.J.A.C. 7:8. Any future expansion or alteration of the approved stormwater management system, which would affect water quality, increase the rate or volume of stormwater leaving the site, affect the infiltration capacity on the site, or alter the approved low impact site design, shall be reviewed and approved by the Department prior to construction. This includes any proposed changes to the discharge characteristics of any basin, the construction of new inlets or pipes that tie into the storm sewer network and/or the replacement of existing inlets or pipes with structures of different capacity.

6. The Department has determined that the riparian zone onsite along Miry Run, Assumpink Creek, and the unnamed tributary to Assumpink Creek is 50 feet. Therefore, vegetation within 50 feet of the top of the bank shall only be disturbed in the areas specifically shown on the approved drawings and upon completion of the project, all temporarily disturbed areas shall be replanted with indigenous, non-invasive vegetation in accordance with N.J.A.C. 7:13-11.2(z).

7. This permit authorizes the permanent riparian zone disturbance of **550 square feet (0.013 acres)** to accommodate the construction of a 12-foot wide stone driveway under N.J.A.C. 7:13-11.2(h), and the total permanent riparian zone disturbance of **896 square feet (0.021 acres)** to construct two stormwater outfalls, pipes, headwalls, and scour holes associated with detention basins under N.J.A.C. 7:13-11.2(j). Any additional disturbance of riparian zone shall be considered a violation of the Flood Hazard Area Control Act Rules (FHACAR) unless a permit is obtained prior to the start of the disturbance from the Division of Land Use Regulation.

8. The permittee must comply with all requirements under the Flood Hazard Area (FHA) Permit-By-Rule at N.J.A.C. 7:13-7.36 to install a transmission line beneath the unnamed tributary to Assumpink Creek onsite. Compliance with this section includes: no disturbance to the regulated channel except for temporary disturbance associated with soil borings necessary for the project, no trees are cleared, cut, and/or removed in the riparian zone, the top of the utility line is placed at least four feet below the channel invert and remains horizontal at this depth for at least ten feet beyond the top of each bank, the utility line is sealed to ensure there is no leakage or discharge in regulated areas, no manhole is constructed within 10 feet of any top of bank, and any manhole in the flood hazard area must have a watertight cover and the top must be flush with the ground if within a floodway, or where feasible within a flood fringe. In addition, upon completion of this regulated activity, all disturbed areas in the flood hazard area must be restored to their original topography, and any vegetation temporarily disturbed within the riparian zone must be replanted.
with indigenous, non-invasive species. Should additional construction activities or tree clearing occur, a separate FHA approval may be required.

9. In order to protect warm water fish within Miry Run, the unnamed tributary of Miry Run, and the unnamed tributary to Assumpink Creek, any proposed grading, excavation, or construction activities within the banks of the stream onsite are prohibited between May 1 and July 31 of each year. In addition, any activity within the 100-year floodplain, flood hazard area, or riparian zone of these watercourses which does not minimize the introduction of sediment into said streams or which could cause more than a minimum increase in the natural level of turbidity, is also prohibited anytime but especially during this period. The Department reserves the right to require additional soil conservation measures if it becomes evident that additional soil conservation measures are required to protect State regulated resources or to suspend all regulated activities onsite should it be determined that the applicant has not taken proper precautions to ensure continuous compliance with this condition.

10. The applicant is responsible for installing and maintaining a sediment/turbidity barrier around all soils disturbed by construction, which are sufficient to prevent the sedimentation of all streams, and all remaining wetlands and transition area onsite. All sediment barriers and other soil erosion control measures, shall be installed prior to commencing any grading, excavation, or construction onsite, and shall be maintained daily in proper working condition throughout the duration of the project.

11. All excess excavated material, dredged spoils, and removed structures shall be disposed of in a lawful manner outside of any regulated flood hazard area, riparian zone, open water, freshwater wetlands and adjacent transition area, and in such a way as to not interfere with the positive drainage of the receiving area.

12. Construction equipment shall not be stored, staged or driven within any channel, riparian zone, freshwater wetland, or transition area, unless expressly approved by this permit and/or described on the approved plans.

13. In order to minimize impacts to vegetation onsite, the permittee is responsible for avoiding impacts to mature trees around the work area to the greatest extent practicable.

FRESHWATER WETLANDS CONDITIONS:

14. Provisions of the Freshwater Wetlands General Permit Nos. 10A and 11
This portion of the permit authorizes the permanent disturbance of 0.149 acres (6,468 square feet) of transition area associated with offsite exceptional resource value freshwater wetlands located north of the site, to construct two 12-foot stone driveways to provide access to the site under a General Permit No. 10A, and the permanent disturbance of 0.046 acres (1,995 square feet) of transition area associated with intermediate resource value freshwater wetlands onsite to construct four stormwater outfalls, headwalls, and scour holes associated with detention basins under a General Permit No. 11. In addition, this permit includes the Department's approval of a Water Quality Certificate for these activities.

15. The wetlands affected by this permit authorization are of Intermediate and Exceptional resource value and the standard transition area or buffer required adjacent to these wetlands is 50 and 150 feet, respectively. Any additional disturbance of freshwater wetlands, transition area, or State open waters shall be considered a violation of the Freshwater Wetlands Protection Act unless the
activity is exempt or a permit is obtained prior to the start of the disturbance from the Division of Land Use Regulation. Please refer to the Freshwater Wetlands Protection Act (N.J.S.A. 13:9B-1 et seq.) and implementing rules for additional information.

16. All excavation within freshwater wetlands transition area onsite shall be backfilled to preexisting elevations with the uppermost 18 inches backfilled with original topsoil material, and replanted with indigenous species, as shown on the approved plans. Back-filling activities shall not interfere with the natural hydraulic characteristics of the wetland, such as flow characteristics of the groundwater onsite.

17. The applicant shall be responsible for preserving and minimizing vegetation disturbances within the wetlands and transition area onsite. All temporary disturbances around the proposed construction shall be replanted with native herbaceous and woody vegetation where applicable, as shown on the approved plans.

18. This authorization for General Permits is valid for a term not to exceed five years from the date of this letter. If the permittee wishes to continue an activity covered by the permit after the expiration date of the permit, the permittee must apply for and obtain a permit extension or a new permit, prior to the permit's expiration. If the term of the authorization exceeds the expiration date of the general permit issued by rule, and the permit upon which the authorization is based is modified by rule to include more stringent standards or conditions, or is not reissued, the applicant must comply with the requirements of the new regulations by applying for a new General Permit authorization or an Individual permit.

19. If the permittee, before or during the work authorized, encounters a possible historic property, as described at N.J.A.C. 7:7A-19.5(l), that is or may be eligible for listing in the New Jersey or National Register, the permittee shall preserve the resource, and immediately notify the Department and proceed as directed.

STANDARD CONDITIONS:

1. The issuance of a permit shall in no way expose the State of New Jersey or the Department to liability for the sufficiency or correctness of the design of any construction or structure(s). Neither the State nor the Department shall, in any way, be liable for any loss of life or property that may occur by virtue of the activity or project conducted as authorized under a permit.

2. The issuance of a permit does not convey any property rights or any exclusive privilege.

3. The permittee shall obtain all applicable Federal, State, and local approvals prior to commencement of regulated activities authorized under a permit.

4. A permittee conducting an activity involving soil disturbance, the creation of drainage structures, or changes in natural contours shall obtain any required approvals from the Soil Conservation District having jurisdiction over the site.

5. The permittee shall take all reasonable steps to prevent, minimize, or correct any adverse impact on the environment resulting from activities conducted pursuant to the permit, or from noncompliance with the permit.

6. The permittee shall immediately inform the Department by telephone at (877) 927-6337 (Warn DEP Hotline) of any noncompliance that may endanger the public health, safety, and welfare, or
the environment. In addition, the permittee shall inform the Division of Land Use Regulation by telephone at (609) 777-0454 of any other noncompliance within two working days of the time the permittee becomes aware of the noncompliance, and in writing within five working days of the time the permittee becomes aware of the noncompliance. Such notice shall not, however, serve as a defense to enforcement action if the project is found to be in violation of this chapter. The written notice shall include:

a. A description of the noncompliance and its cause;

b. The period of noncompliance, including exact dates and times;

c. If the noncompliance has not been corrected, the anticipated length of time it is expected to continue; and

d. The steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

7. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the authorized activity in order to maintain compliance with the conditions of the permit.

8. The permittee shall employ appropriate measures to minimize noise where necessary during construction, as specified in N.J.S.A. 13:1G-1 et seq. and N.J.A.C. 7:29.

9. The issuance of a permit does not relinquish the State’s tidelands ownership or claim to any portion of the subject property or adjacent properties.

10. The issuance of a permit does not relinquish public rights to access and use tidal waterways and their shores.

11. The permittee shall allow an authorized representative of the Department, upon the presentation of credentials, to:

a. Enter upon the permittee’s premises where a regulated activity is located or conducted, or where records must be kept under the conditions of the permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the permit; and

c. Inspect at reasonable times any facilities, equipment, practices, or operations regulated or required under the permit. Failure to allow reasonable access under this paragraph shall be considered a violation of this chapter and subject the permittee to enforcement action under.

12. The permittee and its contractors and subcontractors shall comply with all conditions, site plans, and supporting documents approved by the permit. Any noncompliance with a permit constitutes a violation of this chapter and is grounds for enforcement action under, as well as, in the appropriate case, suspension and/or termination of the permit.

13. All conditions, site plans, and supporting documents approved by a permit shall remain in full force and effect so long as the regulated activity or project, or any portion thereof, is in existence, unless the permit is modified.

14. For Coastal Permits, Flood Hazard Permits and Flood Hazard Verifications, the permittee shall record the permit, including all conditions listed therein, with the Office of the County Clerk (the Registrar of Deeds and Mortgages, if applicable) of each county in which the site is located. The permit shall be recorded within 30 calendar days of receipt by the permittee, unless the permit authorizes activities within two or more counties, in which case the permit shall be recorded
within 90 calendar days of receipt. Upon completion of all recording, a copy of the recorded permit shall be forwarded to the Division of Land Use Regulation at the address set forth in the rules.

15. If any condition or permit is determined to be legally unenforceable, modifications and additional conditions may be imposed by the Department as necessary to protect public health, safety, and welfare, or the environment.

16. A copy of the permit and all approved site plans and supporting documents shall be maintained at the site at all times and made available to Department representatives or their designated agents immediately upon request.

17. A permit shall be transferred to another person only in accordance with the regulations.

18. A permit can be suspended or terminated by the Department for cause.

19. The submittal of a request to modify a permit by the permittee, or a notification of planned changes or anticipated noncompliance, does not stay any condition of a permit.

20. Where the permittee becomes aware that it failed to submit any relevant facts in an application, or submitted incorrect information in an application or in any report to the Department, it shall promptly submit such facts or information.

21. The permittee shall submit written notification to the Bureau of Coastal and Land Use Compliance and Enforcement, 401 East State Street, 4th Floor, P.O. Box 420, Mail Code 401-04C, Trenton, NJ 08625, at least three working days prior to the commencement of regulated activities.

22. The permittee shall not cause or allow any unreasonable interference with the free flow of a regulated water by placing or dumping any materials, equipment, debris, or structures within or adjacent to the channel while the regulated activity(ies) is being undertaken. Upon completion of the regulated activity(ies), the permittee shall remove and dispose of in a lawful manner, all excess materials, debris, equipment, and silt fences and other temporary soil erosion and sediment control devices from all regulated areas.

23. The regulated activity shall not destroy, jeopardize, or adversely modify a present or documented habitat for threatened or endangered species, and shall not jeopardize the continued existence of any local population of a threatened or endangered species.
APPROVED PLANS:

The drawings hereby approved are eleven (11) sheets prepared by Trenton Engineering Co., Inc., dated March 21, 2016, last revised August 8, 2017, unless otherwise noted, entitled:

"LOT 27 BLOCK 1581 for SYNNERGY, LLC in TOWNSHIP OF HAMILTON; MERCER CO., NEW JERSEY":

"SITE PLAN", Sheet 2A,
"SITE PLAN", Sheet 2B,
"DETAIL SHEET", Sheet 4, dated February 18, 2016,
"PLAN OF TOPOGRAPHIC SURVEY", Sheet 6A, dated August 31, 2015,
"PLAN OF TOPOGRAPHIC SURVEY", Sheet 6B, dated August 31, 2015,
"OUTLET PIPES", Sheet 7, dated July 6, 2017,
"FLOOD HAZARD AREA VERIFICATION PLAN", Sheet FHA-1, dated May 15, 2017,
"FLOOD HAZARD AREA VERIFICATION PLAN", Sheet FHA-2, dated May 15, 2017,
"DISTURBED AREAS PLAN", Sheet DST-1, dated May 15, 2017, last revised September 13, 2017,
"FRESH WATER WETLANDS GENERAL PERMITS PLAN", Sheet FWGP-1, dated May 15, 2017,
"PROPOSED DETENTION BASINS SECTION 2D", Sheet PB, dated August 5, 2016, and
"PROPOSED DETENTION BASINS SECTION 1D", Sheet PBA, dated August 5, 2016

In accordance with the applicable regulations, any person who is aggrieved by this decision or any of the conditions of this permit may request an adjudicatory hearing within 30 calendar days after public notice of the decision is published in the DEP Bulletin. This request must include a completed copy of the Adjudicatory Hearing Request form. The DEP Bulletin is available through the Department’s website at http://www.nj.gov/dep/bulletin and the form is available through the Division’s website at http://www.nj.gov/dep/landuse/download/lur_024.pdf. In addition to requesting a hearing, a request may be filed with the Department’s Office of Dispute Resolution to determine whether the matter is suitable for mediation. Information concerning the dispute resolution process is available at www.nj.gov/dep/odr.

If you need clarification on any section of this permit or conditions, please contact the Division of Land Use Regulation’s Technical Support Call Center at (609) 777-0454.

Approved By:

[Signature]
Dennis Contois,
Division of Land Use Regulation

Date
2-7-2018

Original sent to Agent to record

c: Permittee
Construction Official
Date: September 20, 2017

To: Mercer County Soil Conservation District
590 Hughes Drive
Hamilton Square, NJ 08690

Attn: Mr. Paul Schiariti, P.E., District Manager

Re: Synergy, LLC
Sweetbriar Avenue
Block 1581, Lot 27, Sheets 32 & 33
Hamilton Township Tax Map
MCSD #2017-5455-H

Dear Paul:

This is a response letter to your August 31, 2017 review letter pertaining to the above referenced project. I will address the items as follows:

Item 1. A combined report entitled “Hydraulic & Hydrologic Data Base Summary forms and Sediment Basin Calculations Sections 1D & 2D”, dated today, is enclosed.

Item 2. The fifty (50) foot long paved section has been added to both entrances, as requested.

Item 3. The typical topsoil and sub-soil stockpile locations have been added, as requested. Since there is a decrease of over five thousand (5,000) cubic feet of soil on the site, I believe they will remove most of the sub-soil immediately.

Item 4. A combined report entitled “Hydraulic & Hydrologic Data Base Summary forms and Sediment Basin Calculations Sections 1D & 2D”, dated today, is enclosed.

Items 5, 6 & 7. The “Sequence of Construction” has been revised, as requested.

Item 8. The scour hole detail from sheet 4 of the “Engineering Plans” has been copied to the “Soil Erosion” details.

Items 9, 10 & 13. All of the required hydrologic elements have been included in the report entitled “Stormwater Management Report Sections 1D & 2D Del-Mar-Va Hydrographs”, revised September 14, 2017.

Item 11. The existing sump areas were treated as mini detention basins. Stage vs. storage tables are included in the SWM report. Only the overflow was considered in the existing site runoff.

Item 12. A revised “Conduit Outlet Protection” detail and associated table has been added, as requested.

I believe that we have complied with all of your requested requirements and concerns. If there are any questions or additional information necessary, please call me to discuss as soon as possible.

Joseph Mester, PE, PLS, PP, Project Engineer
SOIL EROSION AND SEDIMENT CONTROL PLAN
CERTIFICATION

Date: 10/5/17
Application: #2017-5455-H
Block(s): 1581 Lots(s): 27

THE FOLLOWING APPLICATION:

Project Name: Synnergy, LLC

Project Address: Sweetbriar Avenue

Owner's Name: Synnergy, LLC

Owner's Address: 930 Feneral Ave., Franklinville, NJ 08322

Engineer/Architect: Trenton Engineering Co., Inc.

For Soil Erosion and Sediment Control has been APPROVED by the Mercer County Soil Conservation District. Certification is effective on the 5th day of October, 2017. This Certification will expire on the 5th day of April, 2021.

W. Scott Ellis
Chairman

Owner - Original
County Planning Board
Municipal Planning Board
Municipal Engineer
Municipal Construction Official
Contractor
Engineer/Architect Firm
File

Please note: It is the owner or the owner's representatives responsibility to distribute the certified plans to the appropriate party.
APPLICATION FOR SOIL EROSION AND SEDIMENT CONTROL PLAN CERTIFICATION

The enclosed soil erosion and sediment control plan and supporting information are submitted for certification pursuant to the Soil Erosion and Sediment Control Act, Chapter 251, P.L. 1987, c. 306 amended (N.J.S.A. 13:25-13 et. seq.). An application for certification of a soil erosion and sediment control plan shall include the items listed on the reverse side of this form.

<table>
<thead>
<tr>
<th>Name of Project</th>
<th>Project Location/Municipality</th>
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<tr>
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<td>Hamilton Township</td>
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<thead>
<tr>
<th>Project Street Address</th>
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<td>SYNERGY LLC</td>
<td>215-669-7620</td>
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<tr>
<td>2193 Spruce Street</td>
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<td>930 FEMALE AVE</td>
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<tr>
<th>Total Area of Project Acres</th>
<th>Total Area or Land to be Disturbed (Acres)</th>
<th>No. Dwelling or other Units</th>
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<td>38.3</td>
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<td>$5,130.00</td>
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<th>Phone</th>
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<tbody>
<tr>
<td>Joseph Mester, Trenton Engineering Co., Inc.</td>
<td>609-882-0616</td>
<td>609-882-6444</td>
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<tr>
<th>engineer Responsible During Construction</th>
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<tbody>
<tr>
<td>Steve Durbt, Synergy</td>
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Applicant hereby certifies that all soil erosion and sediment control measures are designed in accordance with current Standards for Soil Erosion and Sediment Control in New Jersey. The plan shall be installed in accordance with those Standards and the plan as approved by the Soil Conservation District and approved as follows:

1. To allow District agents to go upon project lands for inspection.
2. That any conveyance of the project or portion thereof prior to its completion will transfer full responsibility for compliance with the certified plan to any subsequent owners.
3. To comply with all terms and conditions of this application and certified plan, including payment of all fees prescribed by the district fee schedule herein incorporated by reference.

Applicant hereby acknowledges that structural measures contained in the Soil Erosion and Sediment Control Plan are reviewed for adequacy to reduce soil erosion and sedimentation and not by adequacy of structural design. The applicant shall retain full responsibility for any damages that may result from any construction activity.

Applicant Certification:

Applicant Certification

Applicant Certification

Applicant Certification

Applicant Certification

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