



November 26, 2019

Via UPS Ground

Town of Hackettstown Zoning Board of Adjustment
Municipal Building
215 Stiger Street
Hackettstown, New Jersey 07840

Attn.: Ms. Shannon Drylie
Land Use Board Secretary

Re.: Town of Hackettstown, County of Warren, State of New Jersey
700 High Street
M&M Mars Trailer Parking Lot
Our File No.: SCE-R08719.074

Dear Ms. Drylie:

SUBURBAN CONSULTING ENGINEERS, INC. (SCE) has received the completeness review letter from the Hackettstown Engineer dated April 18, 2019 regarding the above referenced project. SCE, representing Mars North America, is making a resubmission to address the completeness items; revised documents included in this submission are as follows:

- 18 Copies of Preliminary and Final Site Plans, last revised November 12, 2019, Revision B
- 18 Copies of Highlands Council Consistency Determination and Exemption
- 18 Copies of Revised Application Checklists
- 18 Copies of MS4 – NJPDES Permit Major Development Stormwater Summary Sheet

Please note that 2 copies of all documents listed above have also been delivered directly to the office of Maser Consulting.

In addition, please see SCE's responses to each comment **in bold** below:

Completeness Comments

General Comments

1. The checklists furnished with the application are on outdated forms. The most current checklists are dated October 2018 and can be found in the Land Development Ordinance (LDO) on the Town's website. All checklists need to be revised and resubmitted to be on the October 2018 forms.

All checklists are revised to be on the October 2018 forms and have been resubmitted as part of this application.



2. The applicant was required under the June 19, 2018 resolution to commence demolition of the wastewater pre-treatment plant that was approved in 1992 prior to March 31, 2019. The Board must determine from the applicant if the demolition has commenced. If not, the applicant should address if it is seeking under this application to extend the timeframe for the demolition of the prior wastewater pre-treatment plant.

Mars has completed abatement for the demolition of the prior wastewater pre-treatment plant. Further, structural inspections, utility verification and additional investigations have occurred to allow for Mars to solicit contractors for the demolition. The sludge removal began the week of 11/17/2019 and is ongoing. Additional testimony can be provided by Mars regarding the subject.

Variance Checklist

1. Based upon a review of the submission vs the checklist, the following deficiencies were identified:
 - a. A certificate from the Tax Collector indicating that tax payments are current on Lot 1 in Block 4 was not furnished (Page 2).
The certificate has been provided under separate cover.
 - b. A sixty-year title search was not furnished (Page 2).
The sixty-year title search has been provided under separate cover.

The above deficiencies must be addressed by the applicant.

2. The applicant has requested the following submission waiver:
 - a. The location of existing and proposed property lines (with bearings and distances), streets, structures (with their numerical dimensions and an indication as to whether existing structures will be retained or removed), parking spaces, loading areas, driveways, watercourses, railroads, bridges, culverts, drain pipes, any natural features such as wetlands and treed areas, both within the tract and within one hundred (100) feet of the property boundary (Page 2).

The applicant is seeking a partial waiver of the above checklist item since the project is proposed within a limited area within the overall 60.18± acre tract.

The Board must obtain testimony from the applicant and its professional representatives to augment the information included in the Waiver Request Statement.

The partial waiver request appears reasonable based upon our review given the limited area of the Mars' facility that is affected by this project.

Testimony can be provided.

Preliminary Major Site Plan Checklist

1. Based upon a review of the submission vs. the checklist, the following deficiencies were identified:
 - a. A certificate from the Tax Collector indicating that tax payments are current on Lot 1 in Block 4 was not furnished (Page 3).
The certificate has been provided under separate cover.
 - b. A consistency determination from the Highlands Council indicating that the project is consistent with the Highlands Regional Master Plan and the Town's approved Highlands petition was not furnished (Page 4).



The Highlands Council revisited the prior exemption provided for the new wastewater treatment plant project and determined to modify the prior approval in conjunction with this project. Therefore, included in this application is a Consistency Determination for the new wastewater treatment plant and an Exemption for the subject trailer parking lot project.

- c. A sixty-year title search was not furnished (Page 4).

The sixty-year title search has been provided under separate cover.

- d. A "Major Development Stormwater Summary Sheet" was not completed and submitted for the proposed subsurface stormwater management facility (Page 4).

A Major Development Stormwater Summary Sheet is included in the resubmission. As portions of this form are dependent upon construction, the form will be updated upon completion and resubmitted to the Town.

The above deficiencies must be addressed by the applicant.

2. The applicant has requested the following full waivers and partial waivers from the submission requirements:

- a. The proposed location of proposed plantings (Page 2).

Plantings have been added to the proposed plan set (see Sheet 8, Landscape and Lighting Plan). The checklist is revised to no longer request a waiver.

- b. A screening and buffering plan (Page 3).

Plantings have been added to the proposed plan set (see Sheet 8, Landscape and Lighting Plan). The checklist is revised to no longer request a waiver.

- c. The location of existing utility structures on the tract and within 200 feet of the boundaries (Page 3).

Waiver still requested; testimony to be provided, if required.

- d. The proposed number of shifts to be worked, the maximum number of employees on each shift, and the hours of operation (Page 3).

The trailer parking lot project is to provide on-site dedicated storage for mostly empty tractor trailers. The trailers are left empty until finished product (wrapped candy) is ready to be shipped at which point, a yard jockey is used to move the trailer to the loading docks. Typically, the loaded trailer will then leave the site, but occasionally, a loaded trailer will be parked in the subject lot until it is ready for shipment.

To support the two (2) twelve-hour operational shifts at Mars which run from 7:30-7:30, there are and will continue to be one to two yard jockeys on staff 24/7. The proposed project projects no change in staffing, rather all trailers will be on site in one location versus throughout the site and at an off-site location.

- e. The submission of an Environmental Impact Statement (Page 4).

Waiver still requested, testimony to be provided if required.

The Board must obtain testimony from the applicant and its professionals to justify the full and partial submission waivers that have been requested.

With respect to the waiver summarized in Comment 2d above, the Board may want to have information in advance of the hearing on the use and operation of the truck and trailer parking lot since there is an



established residential neighborhood immediately to the west and the facility is proposed to be located within the front yard of the property.

Similarly, the Board may want to have some of the information required in an environmental impact statement (traffic, noise) submitted in advance of the hearing given the facility's location and the fact that the Town has been contacted regarding noise from trucks on this site already.

Currently, Mars stores empty trailers in various locations throughout their site and at Rogers Rentals, on Route 46 in Hackettstown. The empty trailers are stored until finished product is ready to be loaded and usually, immediately following loading, the tractor trailer leaves the site. Tractor trailers will continue to leave the site from the northern exit as they do today. This project will not increase the amount of tractor trailers being used as part of the operation of the Hackettstown site, and therefore, it is not anticipated to have any traffic impact.

Mars will review the noise complaints and determine if operational changes can be made to reduce the noise to the adjacent residents. Trucks are required to be loaded 24/7 to support the operation at the site, but with the storage of the trailers at the subject site, there should be less running truck noise when compared to storing them offsite. Further, Mars is reviewing their policies to determine if back-up beepers can be reduced or turned off if the trailers are in an isolated lot with access only by the jockey. Additional testimony can be provided regarding the operation of the site.

3. The application has indicated that the following checklist items are "not applicable":

- a. NJDEP report on stream alterations (Page 2).
- b. Watercourse cross-sections (Page 2).
- c. The location and extent of drainage and conservation easements (Page 2).
- d. Plans, typical cross-sections, and details of existing and proposed streets (Page 3).
- e. The location and width of existing and proposed utility easements (Page 3).
- f. Proposed monuments (Page 3).
- g. HMUA application forms (Page 3).
- h. Historic Impact Statement (Page 4).
- i. Planned development information (Page 4).

We agree with the "not applicable" designations indicated by the applicant for the above noted checklist items.

Final Major Site Plan Checklist

1. Based upon a review of the submission vs. the checklist, the following deficiencies were identified:

- a. A certificate from the Tax Collector indicating that tax payments are current on Lot 1 in Block 4 was not furnished (Page 1).

The certificate has been provided under separate cover.

- b. A consistency determination from the Highlands Council indicating that the project is consistent with the Highlands Regional Master Plan and the Town's approved Highlands petition was not furnished (Page 1).

The Highlands Council revisited the prior exemption provided for the new wastewater treatment plant project and determined to modify the prior approval in conjunction with this project.



Therefore, included in this application is a Consistency Determination for the new wastewater treatment plant and an Exemption for the subject trailer parking lot project.

- c. A "Major Development Stormwater Summary Sheet" was not completed and submitted for the proposed subsurface stormwater management facility (Page 1).

A Major Development Stormwater Summary Sheet is included in the resubmission. As portions of this form are dependent upon construction, the form will be updated upon completion and resubmitted to the Town.

The above deficiencies must be addressed by the applicant.

- 2. The applicant has requested the following waivers from the submission requirements:
 - a. Letters from utility companies regarding utility service (Page 1).
 - b. Certification from the applicant that either the proposed improvements have been installed or a performance guarantee was posted to ensure that the improvements will be constructed in accordance with the approved plans (Page 1).
 - c. The submission of a statement from the Town Engineer indicating that all installed improvements have been inspected (Page 1).

The Board must obtain testimony from the applicant and its professional representatives to justify the waiver requests.

Testimony can be provided.

Please be advised that we have no objections to the above noted waiver requests since the area is already served by utilities and no construction has commenced on the improvements.

At this time, it is our understanding that this letter addresses all of your comments. If you require any additional information or have any questions, please do not hesitate to contact our office. Thank you.

Very truly yours,
SUBURBAN CONSULTING ENGINEERS, INC.

A handwritten signature in cursive script, reading 'Erin B. Abline', is positioned above the typed name.

Erin B. Abline, PE
Project Manager/Department Manager

mrh/

Enclosures

::::CHECK LIST::::
Details required for
Preliminary Major Subdivision Plats
and
Preliminary Major Site Plans


Note: See Section 804 of the Hackettstown Land Development Ordinance for further details of submission requirements and procedures.

- X Application Form(s) and Checklist(s) (20 copies).
- X Plats or Plans (20 copies) signed and sealed by a N.J. Professional Engineer and folded into eighths with title block revealed.
- X Protective Covenants, Easements and/or Deed Restrictions (20 copies).
- X Scale of not less than 1" = 100' on one of four of the following standard sheet sizes (8½" x 13"; 15"x 21"; 24"x 36"; or 30" x 42")
- X Key map at not more than 1"=1000'.
- X Title block:
- X Name of subdivision or development, Town of Hackettstown, Warren County, with each sheet specifically titled with appropriately descriptive words;
- X Name, title, address and telephone number of subdivider or developer; Name, title, address and license number of the professional or professionals who prepared the plot or plan;
- X Name, title and address of the owner or owners of record; North arrow;
- X Scale (written and graphic);
- X Date of original preparation and of each subsequent revision thereof and a list of specific revisions entered on each sheet; and
- X Names and addresses of partners or stockholders as required by Ordinance.
- X Certification of ownership or authorization to file application.

- X Approval signature lines.
- X Acreage to the nearest tenth of an acre (both with and without areas within public rights-of-way).
- X The names and lot and block numbers of all property owners within 200 feet of the extreme limits of the tract as shown on the most recent tax list prepared by the Clerk of the Planning Board or Clerk of the Zoning Board of Adjustment, as the case may be.
- X Existing tax sheet number(s) and existing block and lot number(s) of the lot(s) to be subdivided or developed as they appear on the Town Tax Map, and proposed block and lot numbers as provided by the Town Tax Assessor upon written request.
- X Tract boundary line (heavy solid line).
- X Zoning districts, affecting the tract, including district names and all area and bulk requirements, with a comparison to the proposed development.
- X The location of natural features such as wetlands and treed areas, both within the tract and within 100 feet of its boundary.
- X The proposed location of all proposed plantings, with a legend listing the botanical and common names, the sizes at time of planting, the total quantity of each plant, and the location of each plant keyed to the plan or plat.
- X Existing and proposed watercourses with required information:
 - N/A When a stream is proposed for alteration, improvement or relocation or when a drainage structure or fill is proposed over, under, in or along a running stream, a report on the status of review by the State Department of Environmental Protection, Division of Water Resources;
 - X Cross-sections of watercourses and/or drainage swales at an appropriate scale showing the extent of flood plain, top of bank, normal water levels and bottom elevations at locations required by the Town Engineer;
 - X The location and extent of drainage and conservation easements and stream encroachment lines; and
 - X The location and type of adequate drainage provisions to reasonably reduce and minimize exposure to flood damage.
- X Existing and proposed contours as required by Ordinance.
- X Proposals for soil erosion and sediment control as required by N.J.S.A. 4:24-39 et seq.
- X The location of all existing structures as required by Ordinance.
- X Size, height and location of all proposed structures and buildings.

- X All dimensions necessary to confirm conformity to the Ordinance requirements.
- X The proposed location, direction of illumination, power and type of proposed outdoor lighting, including details and luminaries.
- X The proposed screening, buffering and landscaping plan, with the information required by Ordinance.
- X The location and design of any off-street parking area, showing size and location of bays, aisles and barriers.
- X All means of vehicular access or egress to and from the site onto public streets, with the information required by Ordinance.
- X Plans and computations for any storm drainage systems as required by the Town Engineer.
- W The location of existing utility structures on the tract and within 200 feet of its boundaries.
- X Plans of proposed improvements and utility layouts as required by Ordinance; and required letters from appropriate State and County agencies granting approval for the extension of utility service(s).
- N/A Plans, typical cross sections and construction details, horizontal and vertical alignment of the centerline of all proposed streets and of existing streets abutting the tract as required by Ordinance.
- X A copy of any protective covenants or deed restrictions applying to the land being developed or an indication of them on the submitted plat or plan.
- X The location and width of all existing and proposed utility easements, the use(s) for which they are intended to be limited, and the manner in which the easements will be controlled.
- N/A Proposed permanent monuments.
- X The proposed number of shifts to be worked, the maximum number of employees on each shift, and the hours of operation.
- X Five (5) copies of a certificate from the Town Tax Collector indicating that all taxes and assessments are paid to date.
- X Five (5) copies of the completed application to the Warren County Planning Board, if applicable.
- N/A Five (5) copies of the completed application to the Hackettstown Utilities Authority, if applicable.
- X All preliminary major subdivision and/or preliminary major site plan applications shall be accompanied by a grading plan in accordance with Section 804B.37 of this Ordinance.

- W All preliminary major subdivision and/or preliminary major site plan applications shall be accompanied by an Environmental Impact Statement in accordance with Section 804 C. of this Ordinance.
- N/A An Historic Impact Statement, if applicable, in accordance with Section 806 E. of this Ordinance.
- X A sixty-year title search dated within 6 months of the application date including copies of all deeds, easements, covenants, restrictions and other items affecting title to the property.
- N/A In the case of any subdivision or site plan submission of a planned development, all of the required information for all of the properties comprising the planned development.
- X The Board reserves the right to acquire additional information before granting preliminary approval when unique circumstances affect the tract and/or when the application for development poses special problems for the tract and the surrounding area. Such information may include, but not be limited to, drainage calculations and traffic analyses, provided however that no application shall be declared incomplete for lack of such additional information.
- X Highlands Consistency Determination or, in the alternative, documentation per Section 807 of the Land Development Ordinance entitled "Highlands Area Exemption Ordinance" that shows that the application is exempt from the Highlands Act.
- X A "Major Development Stormwater Summary Sheet" shall be submitted when a stormwater management basin is proposed on a project.


Signature and Title of person who prepared check list.

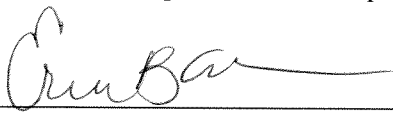
11-25-19
Date

::::CHECK LIST::::
Details required for
Variance Applications

Note: See Section 802 C. of the Hackettstown Land Development Ordinance for further details of submission requirements and procedures.

- X Application Form(s) and Checklist(s)(20 copies).
- X Plats or Plans (20 copies) signed and sealed by a N.J.P.L.S. or N.J.P.E., as required, and folded into eighths with title block revealed.
- X Scale of not less than 1" = 100' on one of four of the following standard sheet sizes (8 1/2" x 13"; 15" x 21"; 24" x 36"; or 30" x 42").
- X Key map at less than 1"=1000'.
- X Title block:
- X Name of subdivision or development, Town of Hackettstown, Warren County, with each sheet specifically titled with appropriately descriptive words;
- X Name, title, address and telephone number of subdivider or developer;
- X Name, title, address and license number of the professional or professionals who prepared the plot or plan;
- X Name, title and address of the owner or owners of record;
- X North arrow;
- X Scale (written and graphic);
- X Date of original preparation and of each subsequent revision thereof and a list of specific revisions entered on each sheet; and
- X Names and addresses of partners or stockholders as required by Ordinance.
- X Acreage figures (both with and without areas within public rights-of-way).
- X Approval signature lines.
- X Existing block and lot number(s) of the lot(s) to be subdivided or developed as they appear on the Town Tax Map, and proposed block and lot numbers as provided by the Town Tax Assessor upon written request.

- X Tract boundary line (heavy solid line).
- X The location of existing and proposed property lines (with bearings and distances), streets, structures (with their numerical dimensions and an indication as to whether existing structures will be retained or removed), parking spaces, loading areas, driveways, watercourses, railroads, bridges, culverts, drain pipes, any natural features such as wetlands and treed areas, both within the tract and within one hundred feet (100") of its boundary.
- X The location and width of all existing and proposed utility easements, the use(s) for which they are intended, and the manner in which the easements will be controlled.
- X Zoning districts affecting the tract, including district names and all area and bulk requirements, with a comparison to the proposed development.
- X Proposed buffer and landscaped areas.
- X Delineation of flood plains, including both floodway and flood fringe areas. Contours as shown on the U.S.G.S. topographic sheets.
- X Marshes, ponds and land subject to flooding within the tract and within one hundred feet (100') thereof.
- X The names of all adjacent property owners as they appear on the most recent tax list prepared by the Clerk of the Planning Board or Clerk of the Zoning Board of Adjustment, as the case may be.
- X Five (5) copies of a certification from the Town Tax Collector indicating that all taxes and assessments are paid to date.
- N/A Concerning subdivisions only, existing and proposed monuments.
- N/A Road right-of-way dedication and improvement, as applicable.
- N/A Sight triangle easements, as applicable.
- N/A Deed descriptions (including metes and bounds), easements, covenants, restrictions, and roadway dedications.
- X A sixty-year title search dated within 6 months of the application date including copies of all deeds, easements, covenants, restrictions and other items affecting title to the property.
- X Highlands Consistency Determination or, in the alternative, documentation per Section 807 of the Land Development Ordinance entitled "Highlands Area Exemption Ordinance" that shows that the application is exempt from the Highlands Act.
- X A "Major Development Stormwater Summary Sheet" shall be submitted when a stormwater management basin is proposed on a project.


Signature and Title of person who prepared check list

11-25-19
Date

::::CHECK LIST::::
Details required for
Final Major Subdivision Plats and
Final Major Site Plans

Note: See Section 805 of the Hackettstown Land Development Ordinance for further details of submission requirements and procedures.

- X Application Form(s) and Checklist(s)(20 copies).
- X Plats or Plans (20 copies) signed and sealed by a N.J.P.L.S. or N.J.P.E., as required, and folded into eighths with title block revealed.
- X Scale of not less than 1" = 100' on one of four of the following standard sheet sizes (8 1/2" x 13"; 15" x 21"; 24" x 36"; or 30" x 42").
- X All details stipulated in Subsection 804 B. of the Ordinance.
- X All additional details required at the time of preliminary approval.
- X A section or staging plan, if proposed.
- X Detailed architectural and engineering data as required by Ordinance.
- X Certification from the Town Tax Collector indicating that all taxes and assessments are paid up-to-date.
- N/A Letters directed to the Chairman of the Board and signed by a responsible official of all utility companies, etc., providing service to the tract as required by Ordinance.
- W Certification in writing from the applicant to the Board that the applicant has:
- (a) Installed all improvements in accordance with the requirements of the Ordinance; and/or,
- (b) Posted a performance guarantee in accordance with Section 902 of the Ordinance.
- W A statement from the Town Engineer indicating that all installed improvements have been inspected.
- X Highlands Consistency Determination or, in the alternative, documentation per Section 807 of the Land Development Ordinance entitled "Highlands Area Exemption Ordinance" that shows that the application is exempt from the Highlands Act.
- X A "Major Development Stormwater Summary Sheet" shall be submitted when a stormwater management basin is proposed on a project.



Signature and Title of person who prepared check list

11-25-19
Date

Attachment D – Major Development Stormwater Summary

General Information			
1. Project Name: Mars North America - Trailer Parking			
2. Municipality: Hackettstown	County: Warren	Block(s): 4	Lot(s): 1
3. Site Location (State Plane Coordinates – NAD83):		E: 402,244.466	N: 739,666.485
4. Date of Final Approval for Construction by Municipality: Date of Certificate of Occupancy:			
5. Project Type (check all that apply): Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Other (please specify) _____			
6. Soil Conservation District Project Number: 19039			
7. Did project require an NJDEP Land Use Permit? Yes <input checked="" type="radio"/> No <input type="radio"/> Land Use Permit #: 2108-19-0002.1 - 190001			
8. Did project require the use of any mitigation measures? Yes <input type="radio"/> No <input checked="" type="radio"/> If yes, which standard was mitigated? _____			


Site Design Specifications	
1. Area of Disturbance (acres): 2.86	Area of Proposed Impervious (acres): reduction of 0.15 acres
2. List all Hydrologic Soil Groups: Udorthents-Urban Land	
3. Please Identify the Amount of Each Best Management Practices (BMPs) Utilized in Design Below: Bioretention Systems _____ Constructed Wetlands _____ Dry Wells _____ Extended Detention Basins _____ Infiltration Basins _____ Combination Infiltration/Detention Basins _____ Manufactured Treatment Devices _____ Pervious Paving Systems _____ Sand Filters _____ Vegetative Filter Strips _____ Wet Ponds _____ Grass Swales _____ Subsurface Gravel Wetlands _____ Other _____	

Storm Event Information	
Storm Event - Rainfall (inches and duration):	2 yr.: (3.3in, 24hr) 10 yr.: (4.9in, 24hr) 100 yr.: (7.8in, 24hr) WQDS: (1.25in, 2hr)
Runoff Computation Method: NRCS: Dimensionless Unit Hydrograph <input checked="" type="checkbox"/> NRCS: Delmarva Unit Hydrograph <input type="checkbox"/> Rational <input type="checkbox"/> Modified Rational <input type="checkbox"/> Other: _____	

Basin Specifications (answer all that apply) *If more than one basin, attach multiple sheets*	
1. Type of Basin: Detention	Surface/Subsurface (select one): Surface <input type="radio"/> Subsurface <input checked="" type="radio"/>
2. Owner (select one): <input type="radio"/> Public <input checked="" type="radio"/> Private: If so, Name: Mars North America	Phone number: 1-908-914-5118
3. Basin Construction Completion Date:	
4. Drain Down Time (hr.):	
5. Design Soil Permeability (in./hr.): .006-.018	
6. Seasonal High Water Table Depth from Bottom of Basin (ft.): 2 feet	Date Obtained: 1/28/2019
7. Groundwater Recharge Methodology (select one): 2 Year Difference <input type="radio"/> NJGRS <input checked="" type="radio"/> Other <input type="radio"/> NA <input type="radio"/>	
8. Groundwater Mounding Analysis (select one): Yes <input type="radio"/> No <input checked="" type="radio"/> If, Yes Methodology Used:	
9. Maintenance Plan Submitted: Yes <input type="radio"/> No <input checked="" type="radio"/> Is the Basin Deed Restricted: Yes <input type="radio"/> No <input type="radio"/>	

Comments:

Name of Person Filling Out This Form: Erin B Abline, PE

Signature: 

Title: Department Manager

Date: 11-25-19

2/2/2018



PHILIP D. MURPHY
Governor

SHEILA Y. OLIVER
Lt. Governor

State of New Jersey

Highlands Water Protection and Planning Council
100 North Road (Route 513)
Chester, New Jersey 07930-2322
(908) 879-6737
(908) 879-4205 (fax)
www.highlands.state.nj.us



CARL J. RICHKO
Chairperson

LISA J. PLEVIN
Executive Director

August 9, 2019

Shannon Drylie, Land Use Board Clerk
Town of Hackettstown
215 W Stiger Street
Hackettstown, New Jersey 07840

Peter D. Chandler, PE
96 US Highway 206
Suite 101
Flanders, New Jersey 07836

Re: Consistency Determination #CD19-007
Mars Inc. - Trailer Parking and Wastewater Treatment Facility
Town of Hackettstown, Warren County
Finding: Exempt and Consistent Subject to Specified Conditions

Dear Ms. Drylie and Mr. Chandler:

The Highlands Council is in receipt of the above-referenced application for a Consistency Determination. The application was received by the Highlands Council on July 19, 2019. The proposed project, located in the Planning Area of the Town of Hackettstown, consists of a new wastewater treatment facility and reconfigured impervious surface for tractor-trailer parking.

In November of 2014, the applicant applied for and received a Highlands Planning Area Exemption # 4 to build a wastewater treatment facility with impervious surface of 40,289 square feet accompanied by a removal of 68,109 square feet of impervious surface. The removal of impervious surface did not occur and is now a component of this application. Because the removal of impervious surface did not occur, the Highlands Council recognizes that the findings of the November 2014 exemption have changed and therefore rescinds the granted exemption. Based on these facts the Highlands Council has bifurcated its review to consider the consistency determination application for the wastewater treatment plant, and the proposed tractor-trailer parking under Highlands Planning Area Exemption # 4.

Highlands Council staff has completed the review of the proposed project for consistency with the Highlands Act, the Regional Master Plan, and the Town of Hackettstown Draft Highlands Area Land Use Ordinance. **Attached please find our Consistency Determination, which finds the wastewater treatment plant is "Consistent Subject to Specified Conditions" and the tractor-trailer parking project is exempt.** Please be advised that Highlands Council conditions shall be incorporated into any

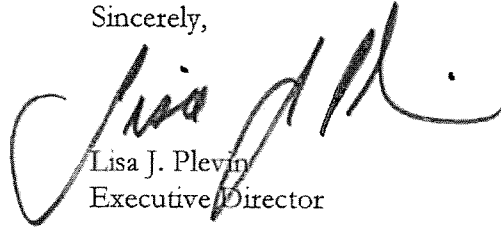
August 9, 2019

Page 2

action taken by the Land Use Board regarding this project; however, the Land Use Board may modify the wording of condition(s), as long as the spirit and intent of the condition(s) remains. Final planning documents must include all required design modifications and/or provide other appropriate information as to the mechanisms by which all Highlands Council conditions will be satisfied.

Should you have any questions regarding this Consistency Determination, please do not hesitate to contact Corey Piasecki, at corey.piasecki@highlands.nj.gov or 908-879-6737 ext. 129.

Sincerely,

A handwritten signature in black ink, appearing to read "Lisa J. Plevin". The signature is fluid and cursive, with a large initial "L" and "P".

Lisa J. Plevin
Executive Director

Enclosure

c: Al Camporini, Land Use Board Chair
Paul Sterbenz P.E., Township Engineer



State of New Jersey
Highlands Water Protection and Planning Council
CONSISTENCY DETERMINATION



Mars Chocolate North America CD#2019-007

August 6, 2019

700 High Street

Block 4 Lot 1

Town of Hackettstown, Warren County

Applicant:

Mars Chocolate North America, LLC

700 High Street

Hackettstown, NJ 07840

PROJECT INFORMATION

Highlands
LUCM:

Existing Community Zone

Highlands
Area:

Planning Area

Project Summary: Develop a new wastewater treatment facility.

Information Received on 7/19/19:

1. One (1) completed Application for Consistency Determination;
2. One (1) completed copy of the Highlands Council Standards for Digital Plan Submissions;
3. One (1) copy of Preliminary and Final Site Plan set of drawings, dated 4/3/2015;
4. One (1) signed copy of Town of Hackettstown ZBA Resolution Memorialization of Application number ZB 14-05 memorialized June 19, 2018;
5. One (1) copy of Town of Hackettstown ZBA Resolution Memorialization of Application Number Z-14-05 memorialized December 16, 2014
6. One (1) copy of Town of Hackettstown ZBA Resolution of Memorialization, memorialized January 21, 1992;

Supplemental Information:

1. AutoCAD drawing files
2. Municipal Communications (various dates)

Finding: Consistent with Conditions

PROJECT REVIEW

Highlands Resources:

- A. **Highlands Open Waters/Protection Area:** An unnamed wetland north of the site creates a Highlands Open Water Protection Area within the site. The Highlands Open Water Protection Area is previously disturbed.
- B. **Carbonate Rock:** The entirety of the site lies within a mapped carbonate rock area. The applicant will follow local requirements for geotechnical investigation and remediation of karst features.

Stormwater Review:

Proposed stormwater facilities consist of a new retention basin. The basin will be located off the northern edge of the project area and will provide stormwater management and emergency containment for the treatment plant. The geologic characteristics of the wastewater management plant area and required spill/pollution containment features of the basin make infiltration and mitigation of stormwater runoff through native plantings impractical. Mitigation will be accomplished through site design and stormwater management planning in the vicinity of the associated, exempt tractor-trailer parking.

CONDITIONS

Condition #1: A Stormwater Management Report and Stormwater Management Facilities Operation & Maintenance Manual for the tractor-trailer parking site shall be provided to the Highlands Council for review. The applicant shall incorporate low impact development/green infrastructure strategies for stormwater management on the site to the maximum extent practicable.

Basis for Condition:

RMP Objective 2G5b: Require Low Impact Development and other Best Management Practices standards for stormwater management to minimize the discharge of stormwater-entrained pollutants to ground and surface waters.

RMP Objective 6N2a: Implementation of on-site stormwater management features that maintain, restore and enhance the pre-existing natural drainage patterns of the site.

RMP Objective 6N2d: Minimum requirements that stormwater management systems employ a “design with nature” approach.

Condition #2: A Landscape Plan shall be prepared for the tractor-trailer parking site which includes plantings in support of proposed green stormwater infrastructure efforts. The final Landscape Plan shall be provided to the Highlands Council for review and approval. (Please find the Highlands Council Draft Recommended Native Plantings list for Warren County for appropriate plant species attached to this document.)

Basis for Condition:

RMP Objective 6N1d: Minimum requirements for water conservation measures in site layout and structures, including but not limited to water efficient landscaping (including use of native and drought-tolerant plant species), rain collection systems, use of gray water, and water-efficient landscape irrigation.

RMP Site Design and Development Guidelines: A landscape plan shall be submitted with each project which incorporates native, drought-tolerant, disease-resistant plant species and does not include invasive plant species. Natural landscaping shall be considered for use when feasible.

Non-native and invasive species disrupt local ecosystems and can prevent regeneration of indigenous plant species. Use of native, drought-tolerant species should minimize watering needs while increasing chances of achieving hardier, longer-lasting landscaping elements, by taking advantage of plant adaptations to local conditions including climate, soils, insects, fauna, etc.

Condition #3: Copies of the final approved site plans (one digital copy), supporting documents, and approving resolution shall be submitted to the Highlands Council.

Basis for Condition: As required under the Hackettstown Town Highlands Referral Ordinance (Ordinance #2012-02, adopted March 8, 2012) amending submission requirements for applications for development, no Application for Development may be considered by the Township land use board until the project has been deemed consistent by the Highlands Council. The Highlands Council seeks to ensure that any conditions placed on a finding of consistency are properly incorporated into the local approval process, and if/when such projects are approved by the local board, that all relevant conditions are addressed.

Table 1G – Recommended Native Plants – Warren County
Trees & Shrubs

Scientific Name	Common Name	Growth Habit	Wetland Status ¹	Height (ft.)	Legal Status	Drought Tolerant	NJ Stormwater BMP Manual	NRCS Riparian Forest Buffer Conservation Practice Std.
<i>Acer rubrum</i>	red maple	Tree	FAC	40-60		X	X	X
<i>Acer saccharinum</i>	silver maple	Tree	FACW	50-70			X	
<i>Acer saccharum</i>	sugar maple	Tree, Shrub	FACW	90				X
<i>Alnus serrulata</i>	hazel alder	Tree, Shrub	OBL	to 20			X	
<i>Amelanchier canadensis</i>	Canadian serviceberry	Tree, Shrub	FAC	20-30		X		X
<i>Arctostaphylos uva-ursi</i>	Bearberry	Subshrub, Shrub	UPL	0.5		X		
<i>Betula lenta</i>	sweet birch	Tree	FACU	50-55				
<i>Betula nigra</i>	river birch	Tree	FACW	80			X	X
<i>Betula populifolia</i>	gray birch	Tree	FAC	20-25		X	X	
<i>Carpinus caroliniana</i>	American hornbeam	Tree, Shrub	FAC	40-60		X	X	
<i>Carya glabra</i>	pignut hickory	Tree	FACU-	80-135			X	
<i>Ceanothus americanus</i>	New Jersey tea	Subshrub, Shrub	--	3		X		
<i>Celtis occidentalis</i>	common hackberry	Tree, Shrub	FAC	40-60		X	X	X
<i>Cephalanthus occidentalis</i>	common buttonbush	Tree, Shrub	OBL	8			X	X
<i>Chamaedaphne calyculata</i>	leatherleaf	Shrub	OBL	4				
<i>Cornus florida</i>	flowering dogwood	Tree, Shrub	FACU-, FACU	20-40			X	
<i>Cornus sericea</i>	redosier dogwood	Tree, Shrub	FACW+	6-10			X	X
<i>Dasiphora fruticosa</i> ssp. <i>floribunda</i>	shrubby cinquefoil	Shrub	--	2.5				
<i>Diospyros virginiana</i>	common persimmon	Tree	FAC-	35-60				
<i>Fagus grandifolia</i>	American beech	Tree	FACU	50-70			X	
<i>Fraxinus americana</i>	white ash	Tree	FACU	50-70		X	X	X
<i>Fraxinus pennsylvanica</i>	green ash	Tree	FACU	40-60		X	X	X
<i>Hamamelis virginiana</i>	American witchhazel	Tree, Shrub	FAC	15-20		X	X	X
<i>Ilex opaca</i>	American holly	Tree, Shrub	FACU	15-20		X		X
<i>Ilex verticillata</i>	common winterberry	Tree, Shrub	FACW+	6-10				X
<i>Juniperus virginiana</i>	eastern redcedar	Tree	FACU+	40-50		X	X	
<i>Lindera benzoin</i>	northern spicebush	Tree, Shrub	FACW	6-12				X
<i>Liriodendron tulipifera</i>	tuliptree	Tree	FACU	70-90			X	
<i>Morella pensylvanica</i>	northern bayberry	Tree, Shrub	FAC	5-12				

Table 1G – Warren County con't.

Scientific Name	Common Name	Growth Habit	Wetland Status ¹	Height (ft.)	Legal Status	Drought Tolerant	NJ Stormwater BMP Manual	NRCS Riparian Forest Buffer Conservation Practice Std.
<i>Nyssa sylvatica</i>	blackgum	Tree	FAC	60			X	X
<i>Photinia pyrifolia</i>	red chokeberry	Shrub	FACW	5				
<i>Pinus rigida</i>	pitch pine	Tree	FACU	40-80			X	X
<i>Pinus virginiana</i>	Virginia pine	Tree	FACU	70		X	X	
<i>Platanus occidentalis</i>	American sycamore	Tree	FACW	80			X	X
<i>Prunus serotina</i>	black cherry	Tree, Shrub	FACU	50-60			X	
<i>Quercus alba</i>	white oak	Tree	FAC+	50-70		X	X	X
<i>Quercus coccinea</i>	scarlet oak	Tree	UPL	40-50		X	X	
<i>Quercus ilicifolia</i>	bear oak	Tree, Shrub	--	3-12				
<i>Quercus palustris</i>	pin oak	Tree	FAC, FACW	50-70		X	X	X
<i>Quercus prinus</i>	chestnut oak	Tree	UPL	60-70		X	X	
<i>Quercus rubra</i>	northern red oak	Tree	FACU-	50-70		X	X	X
<i>Quercus stellata</i>	post oak	Tree	UPL	30-40			X	
<i>Quercus velutina</i>	black oak	Tree	UPL	50-60		X		
<i>Rhamnus alnifolia</i>	alderleaf buckthorn	Shrub	OBL	3				
<i>Rhus glabra</i>	smooth sumac	Tree, Shrub	UPL	20-30				
<i>Ribes americanum</i>	American black currant	Shrub	FACW	3				
<i>Ribes lacustre</i>	prickly currant	Shrub	FACW	3				
<i>Ribes triste</i>	red currant	Shrub	OBL	2				
<i>Salix discolor</i>	pussy willow	Tree, Shrub	FACW	20-40			X	
<i>Salix nigra</i>	black willow	Tree	FACW+	50-100			X	X
<i>Sassafras albidum</i>	sassafras	Tree, Shrub	FACU-	30-60		X	X	
<i>Spiraea alba</i>	white meadowsweet	Shrub	FACW	3				
<i>Spiraea tomentosa</i>	steeplesbush	Shrub	FACW	4			X	
<i>Symphoricarpos albus</i>	common snowberry	Subshrub, Shrub	FACU	3				
<i>Symphoricarpos orbiculatus</i>	coralberry	Shrub	FACU	2				
<i>Taxus canadensis</i>	Canada yew	Shrub	FAC	5			X	
<i>Tilia americana</i>	American basswood	Tree	FACU	50-70			X	
<i>Vaccinium angustifolium</i>	lowbush blueberry	Subshrub, Shrub	FACU	2		X	X	
<i>Viburnum dentatum</i>	southern arrowwood	Shrub	FACW-	6-15		X		X
<i>Viburnum lentago</i>	nannyberry	Tree, Shrub	FAC	15-20			X	

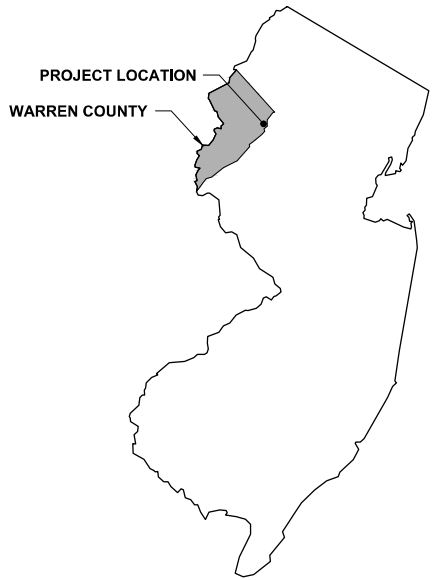
Table 1G – Warren County con't.

Scientific Name	Common Name	Growth Habit	Wetland Status ¹	Height (ft.)	Legal Status	Drought Tolerant	NJ Stormwater BMP Manual	NRCS Riparian Forest Buffer Conservation Practice Std.
Viburnum nudum	possumhaw	Tree, Shrub	OBL	6-8			X	
Viburnum prunifolium	blackhaw	Tree, Shrub	FACU	15-20		X	X	

1. See Table 8, pg 33, for Wetland Status Indicator code explanations.

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PRELIMINARY AND FINAL MAJOR SITE PLAN FOR
MARS INCORPORATED
PROPOSED TRAILER PARKING LOT
BLOCK 4, LOT 1
TOWN OF HACKETTSTOWN
COUNTY OF WARREN, STATE OF NEW JERSEY



STATE OF NEW JERSEY

INDEX OF DRAWINGS

SHEET	TITLE	REVISION
1	COVER SHEET	B
2	LEGEND, GENERAL NOTES AND ZONING	B
3	OVERALL ZONING MAP	B
4	EXISTING CONDITIONS AND DEMOLITION PLAN	B
5	SITE LAYOUT PLAN	B
6	SITE GRADING PLAN	B
7	SITE UTILITY PLAN	B
8	LANDSCAPE AND LIGHTING PLAN	B
9	SOIL EROSION AND SEDIMENT CONTROL PLAN	B
10	SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	B
11	CONSTRUCTION DETAILS I	B
12	CONSTRUCTION DETAILS II	B
13	CONSTRUCTION DETAILS III	B
14	CONSTRUCTION DETAILS IV	B

UTILITIES LIST

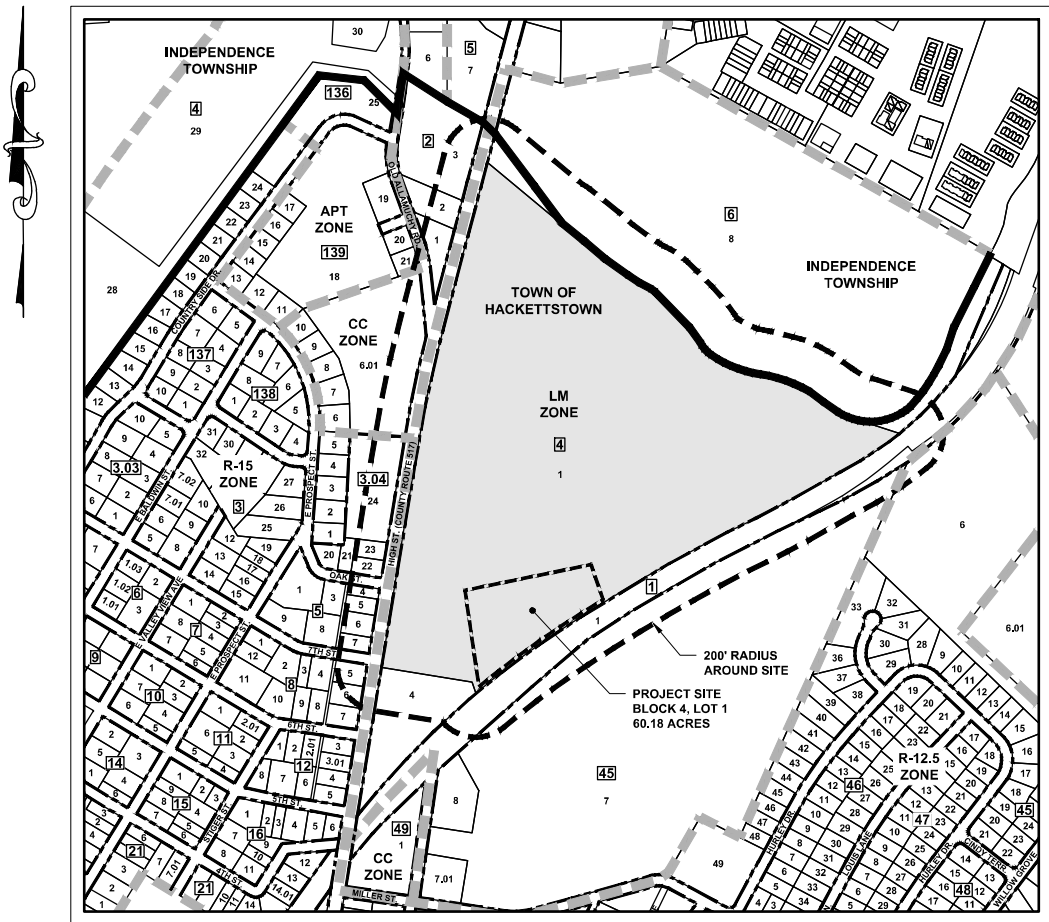
GPU ENERGY
300 MADISON AVENUE
MORRISTOWN, NJ 07962

ELIZABETHTOWN GAS CO.
RD 2, BOX 373
EDISON ROAD
STEWARTSVILLE, NJ 08886

HACKETTSTOWN MUNICIPAL UTILITY AUTHORITY
P.O. BOX 450
HURLEY DRIVE
HACKETTSTOWN, NJ 07840

COMCAST CABLEVISION
155 PORT MURRAY ROAD
PORT MURRAY, NJ 07865

VERIZON-NJ, INC.
900 CLINTON AVENUE
FLOOR 2
IRVINGTON, NJ 07111
ATTN: MIKE DEDIO



SOURCES: CURRENT TAX MAP OF THE TOWN OF HACKETTSTOWN SHEET 9.
WARREN COUNTY GIS DEPARTMENT.
HACKETTSTOWN ZONING MAP, LAST REVISED APRIL 2007.

KEY MAP AND ZONING



SCALE: 1" = 400'

HACKETTSTOWN ZONING DISTRICTS

- R-30 SINGLE-FAMILY RESIDENTIAL (30,000 SF)
R-15 SINGLE-FAMILY RESIDENTIAL (15,000 SF)
R-12.5 SINGLE-FAMILY RESIDENTIAL (12,500 SF)
APT APARTMENTS (10 DU/AC)
CC COMMUNITY COMMERCIAL
LM LIMITED MANUFACTURING

LEGEND

- LOT BOUNDARY
200' RADIUS AROUND SITE
ZONE BOUNDARY
BLOCK BOUNDARY
TOWN BOUNDARY

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 248037500



DATE: 03/28/2019

PROJECT DIRECTORY

OWNER / APPLICANT
MARS INCORPORATED
700 HIGH STREET
HACKETTSTOWN, NJ 07840
908-852-1000

OWNER / APPLICANT SIGNATURE

SITE ENGINEERING
SUBURBAN CONSULTING ENGINEERS
96 US HIGHWAY 206, SUITE 101
FLANDERS, NJ 07836
973-398-1776

COUNTY APPROVAL BLOCK

LAND USE BOARD SECRETARY DATE

LAND USE BOARD CHAIRPERSON DATE

TOWNSHIP ENGINEER DATE

PRELIMINARY AND FINAL MAJOR SITE PLAN FOR
MARS INCORPORATED
PROPOSED TRAILER PARKING LOT
BLOCK 4, LOT 1
TOWN OF HACKETTSTOWN
COUNTY OF WARREN, STATE OF NEW JERSEY

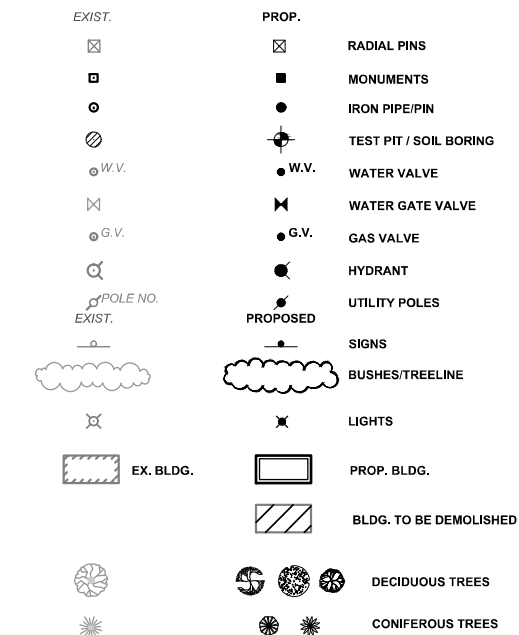
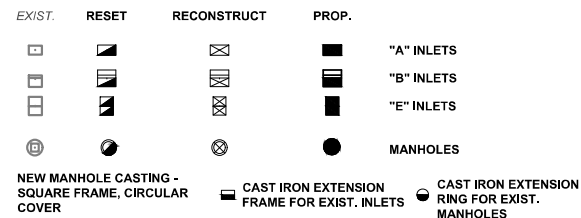
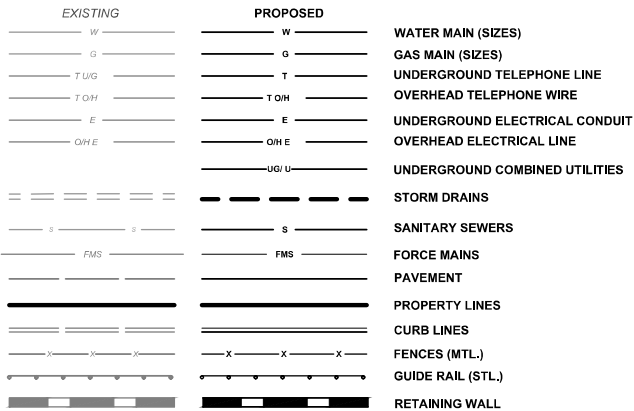
COVER SHEET



PROJECT NUMBER: SCE-8719.074 SHEET 1 OF 14

REVISION B

LEGEND



GENERAL NOTES

APPLICANT: MARS INCORPORATED
700 HIGH STREET
HACKETTSTOWN, NJ 07840

1. THE SUBJECT PROPERTY KNOWN AS LOT 1, BLOCK 4S AS SHOWN ON THE TOWN OF HACKETTSTOWN TAX MAP SHEET 9.
2. THE SUBJECT APPLICATION IS SEEKING APPROVAL FOR THE CONSTRUCTION OF A PROPOSED TRAILER PARKING LOT LOCATED WITHIN THE SAME PROJECT AREA AS THE ORIGINAL ON-SITE WASTEWATER TREATMENT FACILITY. THE WASTEWATER TREATMENT FACILITY WAS TO BE PARTIALLY DEMOLISHED AS PART OF THE APPROVAL OF THE NEWLY CONSTRUCTED AND OPERATING WASTEWATER TREATMENT FACILITY (LOCATED AT THE EASTERN PORTION OF THE SITE). DUE TO AN OPERATING CONDITION AT THE NEW FACILITY, TWO (2) EXISTING CLARIFIER TANKS AND ONE (1) EXISTING REACTOR TANK FROM THE PREVIOUS FACILITY WILL TEMPORARILY REMAIN. THESE TANKS WILL REMAIN IN OPERATION DURING THE CONSTRUCTION AND OPERATION OF THE TRAILER PARKING LOT, AT THE TIME THAT THE TWO (2) CLARIFIER TANKS AND ONE (1) REACTOR TANK CAN BE DEMOLISHED. THESE AREAS WILL BE REPAVED, STRIPED, AND UTILIZED FOR ADDITIONAL TRAILER PARKING.
3. MARSS INCORPORATED CURRENTLY PARKS TRAILERS THROUGHOUT THEIR SITE IN VARIOUS LOCATIONS, MAKING THE SUBJECT APPLICATION NECESSARY FOR MORE EFFICIENT OPERATIONS AT THE FACTORY. THE MAJORITY OF THE PARKED TRAILERS WILL BE EMPTY; SOME TRAILERS WILL CONTAIN FINISHED PRODUCT FOR A SHORT PERIOD OF TIME BEFORE BEING SHIPPED. TRAFFIC WILL BE REDUCED BY STORING TRAILERS ONSITE.
4. EXISTING UTILITIES TO BE REMOVED SHALL BE TERMINATED IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN AND UTILITY AUTHORITIES. ALL PERMITS SHALL BE OBTAINED PRIOR TO DEMOLITION.
5. ALL LOCATIONS AND ELEVATIONS OF UTILITIES ARE SHOWN BASED ON THE BEST INFORMATION AVAILABLE BUT SHOULD BE CONSIDERED APPROXIMATE. CALL BEFORE YOU DIG MUST BE CONTACTED PRIOR TO THE START OF CONSTRUCTION AT 811.
6. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE TOWN OF HACKETTSTOWN STANDARDS AND SPECIFICATIONS, AND ALL STRUCTURES ARE SUBJECT TO REVIEW BY THE CONSTRUCTION CODE OFFICIAL.
7. DUST CONTROL DURING CONSTRUCTION WILL BE PROVIDED BY THE UTILIZATION OF SPRAYED WATER AND STANDARD SOIL EROSION AND SEDIMENT CONTROL MEASURES REQUIRED BY THE WARREN COUNTY SOIL CONSERVATION DISTRICT AS REPRESENTED ON THESE PLANS AND AS REQUIRED PER THE WARREN COUNTY SOIL CONSERVATION DISTRICT REQUIREMENTS.
8. ALL TRAFFIC CONTROL MEASURES SHALL MEET THE REQUIREMENTS OF THE N.J.D.O.T. REGULATIONS AND THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" CURRENT EDITION.
9. CONSTRUCTION WORK HOURS MAY BE PERFORMED MONDAY THROUGH FRIDAY BETWEEN THE HOURS OF 8:00 AM AND 5:00 PM. THE ENGINEER MUST APPROVE EARLY STARTS AND WORK ON SATURDAYS, SUNDAYS AND HOLIDAYS. THE COST FOR INSPECTION SERVICES BY THE ENGINEER BEYOND NORMAL WORK DAYS AND HOURS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL NOTIFY THE LOCAL POLICE AGENCY(IES) OF THE PROJECT AND NORMAL OPERATING TIMES AND DAYS.
10. THE APPLICANT IS RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL MATERIAL IN ACCORDANCE WITH THE APPLICABLE GOVERNING REGULATIONS.
11. NO MATERIAL OR EQUIPMENT IS TO BE STORED ON ANY AREA THAT HAS NOT BEEN ESTABLISHED AS A DESIGNATED STAGING AREA. ALL EXCAVATIONS SHALL BE PROTECTED AT THE END OF EACH WORK DAY.
12. THE APPLICANT WILL HOLD A PRE-CONSTRUCTION MEETING WITH THE TOWN ENGINEER AND OTHER GOVERNING AGENCIES WHO WISH TO ATTEND.
13. APPLICANT WILL PROVIDE TOWN WITH ALL REQUIRED OUTSIDE AGENCY APPROVALS. THE FOLLOWING APPROVALS ARE ANTICIPATED:
 - WARREN COUNTY PLANNING BOARD
 - WARREN COUNTY SOIL CONSERVATION DISTRICT
 - HIGHLANDS APPLICABILITY DETERMINATION
 - NJDEP FHA VERIFICATION AND INDIVIDUAL PERMIT
14. DUE TO THE PRESENCE OF THE HACKETTSTOWN BROOK FLOOD HAZARD AREA (FHA) ON SITE, SUBMISSION OF A FHA VERIFICATION AND INDIVIDUAL PERMIT PACKAGE TO NJDEP IS REQUIRED.
15. THESE PLANS ARE FOR TOWN APPROVAL AND PLANNING PURPOSES ONLY AND ARE NOT TO BE UTILIZED FOR CONSTRUCTION.
16. THESE PLANS REFERENCE THE SURVEY ENTITLED, "BOUNDARY SURVEY PLAN" PREPARED BY BARRY ISETT & ASSOCIATES, DATED JANUARY 29, 2019.

ZONING SUMMARY

LAND USE AND DEVELOPMENT REGULATION	ALLOWABLE LM DISTRICT - REQ.	EXISTING* (INCLUDING PREVIOUSLY APPROVED APPLICATIONS)	MAJOR SITEPLAN APPLICATION (PROPOSED)	VARIANCE	WAIVER
PRINCIPAL PERMITTED USE	LIMITED MANUFACTURING	LIMITED MANUFACTURING; WASTEWATER TREATMENT FACILITY**	LIMITED MANUFACTURING	Yes	No
MIN. LOT AREA	3 ACRES (130,680 SF)	60.18 ACRES (2,621,421 SF)	NO CHANGE	No	No
MIN. LOT WIDTH	300'	1,200'	NO CHANGE	No	No
MIN. LOT DEPTH	330'	1,338'	NO CHANGE	No	No
MINIMUM PRINCIPAL BUILDING SETBACK					
MIN. FRONT YARD	50'	≥50'	NO CHANGE	No	No
MIN. SIDE YARD (ONE SIDE)	50'	≥50'	NO CHANGE	No	No
MIN. REAR YARD	50'	≥50'	NO CHANGE	No	No
MINIMUM ACCESSORY BUILDING SETBACK					
DISTANCE TO SIDE LINE	15'	65.5'	NO CHANGE	No	No
DISTANCE TO REAR LINE	15'	110.5'	NO CHANGE	No	No
DISTANCE TO OTHER BUILDING	15'	52.5'	NO CHANGE	No	No
MAX. PRINCIPAL BUILDING HEIGHT	3 STORIES/45'	45'	NO CHANGE	No	No
MAX. ACCESSORY BUILDING HEIGHT	15'	19.5' PRETREATMENT (EN) 24.5' ANAEROBIC REACTOR (EN) 20.7' EQUALIZATION TANK (EN) 16.8' POST AERATION (EN) 25.5' FLOURESTACK (EN)	7' Clarifier Tank 7' Clarifier Tank (V) 13.5' Surge Tank (V)	No	No
MAXIMUM LOT COVERAGE ***	75%	1,301,022 SF (49.6%)	1,294,273 (49.4%)	No	No
MAX. BLDG. (LOT) COVERAGE	33%	537,052 SF (20.5%)	531,965 (20.3%)	No	No

* EXISTING CONDITIONS WERE TAKEN FROM THE PLAN SET ENTITLED, "PRELIMINARY AND FINAL SITE PLAN FOR MARS CHOCOLATE NORTH AMERICA LLC WASTEWATER PRETREATMENT SYSTEM UPGRADES," PREPARED BY DYNAMIC ENGINEERING, AS APPROVED BY RESOLUTION #Z-14-05, APPROVED ON 11/18/2014 AND MEMORIALIZED ON 12/16/2014.

**** VARIANCE RELIEF IS ANTICIPATED FOR THE THREE (3) TANKS TO REMAIN DUE TO CONDITIONS FROM RESOLUTION #Z-14-05 DICTATING THAT ALL THE TANKS AND STRUCTURES ARE TO BE REMOVED FROM**

***EXISTING LOT COVERAGE CALCULATED BY ADDING 68,109 SF (IMPERVIOUS AREA TO BE REMOVED PER HIGHLANDS PLANNING AREA EXEMPTION DETERMINATION, EXEMPTION #01 LETTER PREPARED BY DYNAMIC ENGINEERING CONSULTANTS, PC, DATED NOVEMBER 14, 2014) TO THE PROPOSED LOT COVERAGE OF 1,232,913 SF PER PREVIOUSLY APPROVED PLAN SET ENTITLED "PRELIMINARY AND FINAL SITE PLAN FOR MARS CHOCOLATE NORTH AMERICA LLC WASTEWATER PRETREATMENT SYSTEM UPGRADES," PREPARED BY DYNAMIC ENGINEERING, AS APPROVED BY RESOLUTION #2-14-05, APPROVED ON 11/18/2014 AND MEMORIALIZED ON 12/16/2014.

(V): VARIANCE REQUIRED
(EN): EXISTING NON-CONFORMITY

PARKING CALCULATION: NO HABITABLE FLOOR AREA IS PROPOSED, THEREFORE, THE SITE'S PARKING CALCULATION IS UNCHANGED.

OFF-STREET LOADING: NO LOADING OR UNLOADING IS TO OCCUR WITHIN THE PROJECT AREA

SIGNAGE: NO SIGNS PROPOSED.

CERTIFIED PROPERTY OWNERS LIST WITHIN 200 FT.:

MUNICIPAL CERTIFIED LIST AS OF DECEMBER 5, 2018

<u>BLOCK</u>	<u>LOT</u>	<u>PROPERTY OWNER</u>	<u>PROPERTY LOCATION</u>	<u>BLOCK</u>	<u>LOT</u>	<u>PROPERTY OWNER</u>	<u>PROPERTY LOCATION</u>
2	1	FIVE INVESTORS INC C/O RPC INC 6 EMERY AVE SUITE 1 RANDOLPH, NJ 07869	901 HIGH STREET	5	6	HARTIGAN, BERNARD/DEWS, PATRICK 137 CASTERLINE ROAD DENVER, NJ 07834	705 HIGH STREET
2	2	APDJ LLC 160 EAST MAIN ST RAMSEY, NJ 07446	903 HIGH STREET	5	7	TAPP, JEFFREY F & DONNA M 701 HIGH ST HACKETTSTOWN, NJ 07840	701 HIGH STREET
2	3	C2 PROPERTIES LLC 905 HIGH STREET HACKETTSTOWN, NJ 07840	905 HIGH STREET	8	5	SZAWALUK, JEAN EST 609 HIGH STREET HACKETTSTOWN, NJ 07840	609 HIGH STREET
3.04	21	CAMPBELL, MARK & WENDY 105 OAK STREET HACKETTSTOWN, NJ 07840	105 OAK STREET	8	6	TESTA, R WINFRED & ROBBIE N 90 ROSEVILLE RD BYRAM TWP, ANDOVER NJ 07821	605 HIGH STREET
3.04	22	JHANKHAR, SHANTILAL & PURSHAPABEN 801 HIGH STREET HACKETTSTOWN, NJ 07840	801 HIGH STREET	8	7	SANTARELLI VINCENT M JR & CHERYL A 801 HIGH STREET HACKETTSTOWN, NJ 07840	601 HIGH STREET
3.04	23	MACIAG, MARY BETH 805 HIGH STREET HACKETTSTOWN, NJ 07840	805 HIGH STREET	139	6.01	MAKORINC C/O WLF, JOSEPH & HARRY 820 MORRIS TURNPIKE S301 SHORT HILLS, NJ 07078	811 HIGH STREET
3.04	24	M&M MARS INC C/O RYAN LLC ONE PPG PLACE SUITE 2510 PITTSBURGH, PA 15222	807 HIGH STREET	139	20	WILLOW CO C/O S GELTMAN & CO 45 EBENHOWER DR STE 270 PARAMUS, NJ 07652	102 OLD ALLAMUCHY RD
4	4	MARS INC C/O HKP FINANCE MANGER ONE PPG PLACE SUITE 2510 PITTSBURGH, PA 15222	600 HIGH STREET	139	21	WILLOW CO C/O S GELTMAN & CO 45 EBENHOWER DR STE 270 PARAMUS, NJ 07652	900 OLD ALLAMUCHY RD
4	5	TOWPATH ASSOC C/O SALEM MGT CO 2029 MORRIS AVE POB 2175 UNION, NJ 07083	HIGH STREET				
5	4	BODINE, JR, ROBERT A 3 DEER PARK ROAD HACKETTSTOWN, NJ 07840	100 OAK STREET				
5	5	GOLDSMITH, C/CAMERON, JI SOKOLOSKI 709 HIGH STREET HACKETTSTOWN, NJ 07840	709 HIGH STREET				

NOTICE

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SUBURBAN CONSULTING ENGINEERS, INC.

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REV. FOR REGULATORY COMMENTS	B	11/12/2019	SOS	ESA
REV. PER HIGHLANDS COMPLIANCE	A	07/18/2019	SOS	PDC
DESCRIPTION	NO.	DATE:	BY:	CHK:
REVISIONS				

DRAWN BY:
RHK

03/28/2010

CHECKED BY:
EBA

03/28/2019
CHECKED BY:

CHECKED BY:

DAREN J. PHIL, PE
NJ PROFESSIONAL ENGINEER
LICENSE NO. 24286
24286
DATE: 03/2

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COA NO.: 24G/A2803750
21MH00004200

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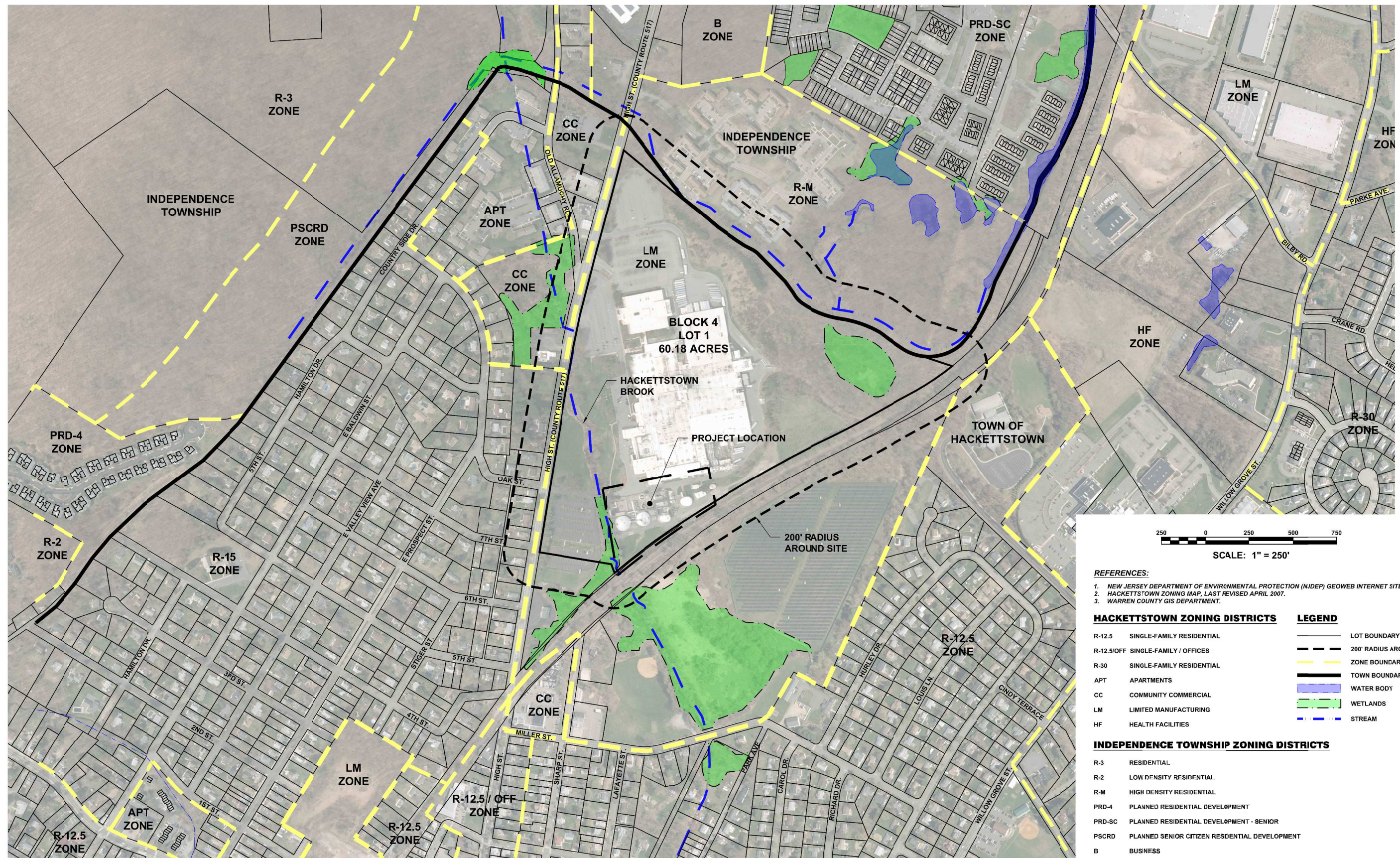
**PRELIMINARY AND FINAL MAJOR SITE PLAN FOR
MARS INCORPORATED
PROPOSED TRAILER PARKING LOT
BLOCK 4, LOT 1
TOWN OF HACKETTSTOWN
COUNTY OF WARREN, STATE OF NEW JERSEY**








PROJECT NUMBER:
SCE-8719.074

SCALE:
N.T.S.

SHEET 2 OF 14REVISION B

LEGEND, GENERAL NOTES AND ZONING

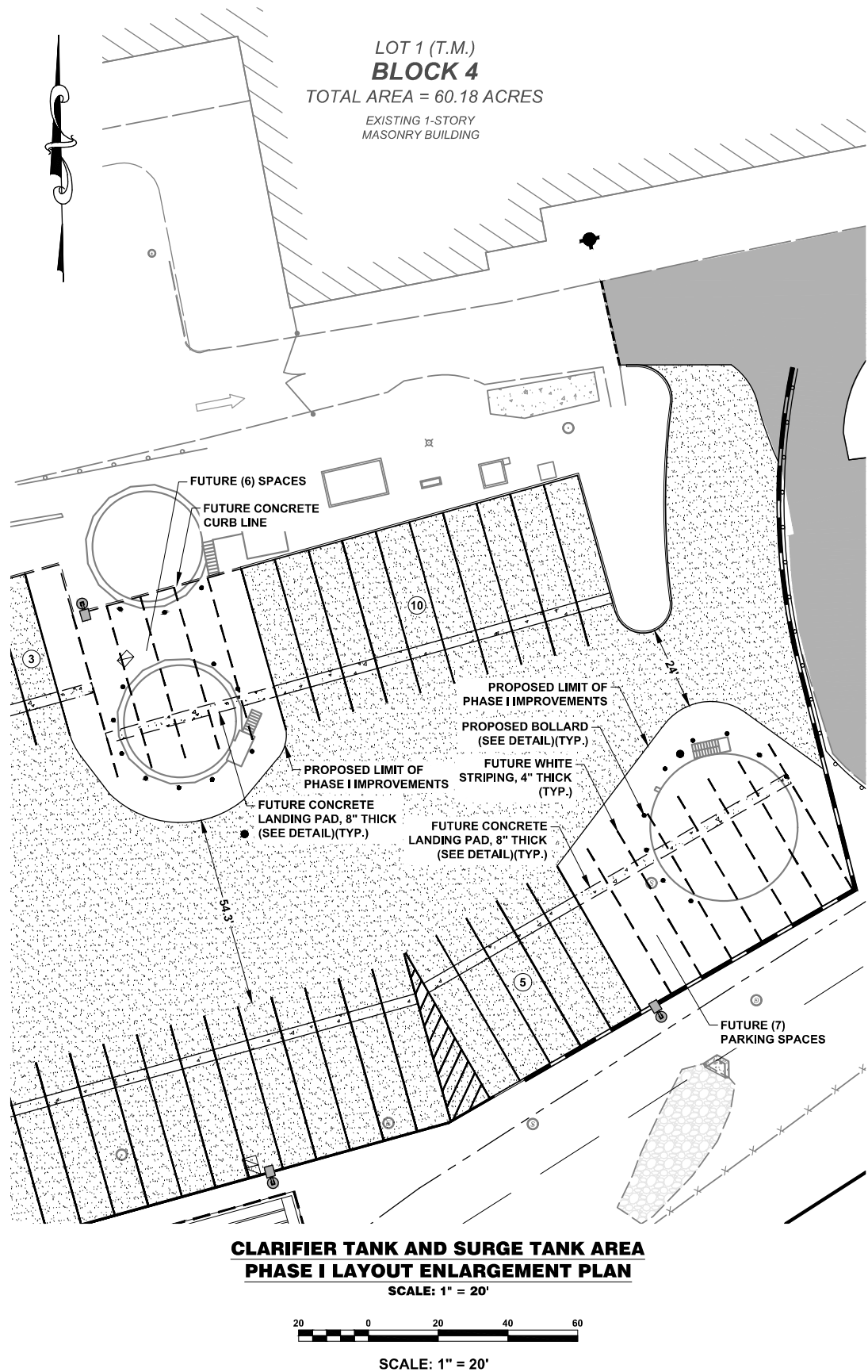
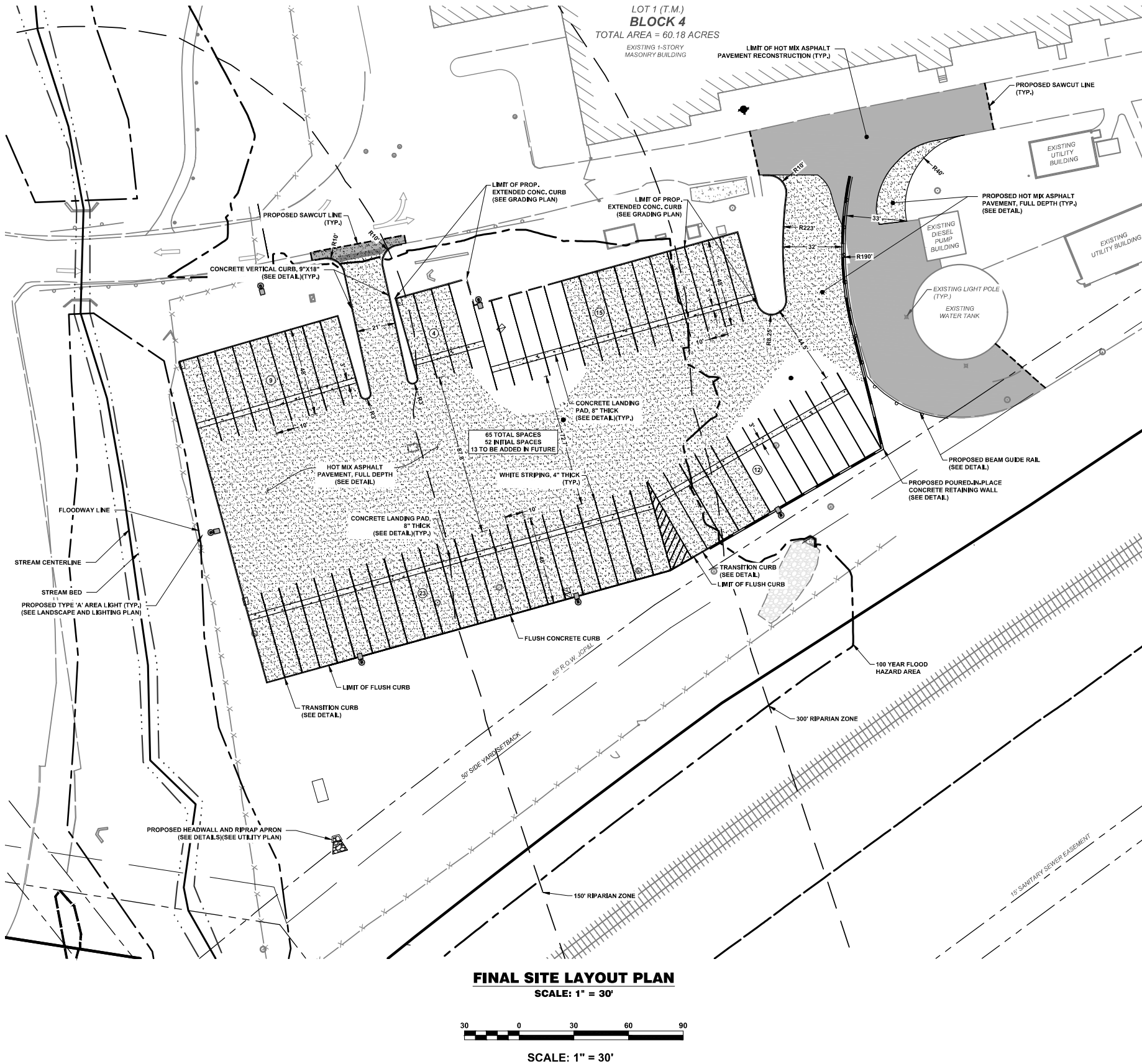


<u>REFERENCES:</u>	
1.	NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION (NJDEP) GEOWEB INTERNET SITE.
2.	HACKETTSTOWN ZONING MAP, LAST REVISED APRIL 2007.
3.	WARREN COUNTY GIS DEPARTMENT.
<u>HACKETTSTOWN ZONING DISTRICTS</u>	
R-12.5	SINGLE-FAMILY RESIDENTIAL
R-12.5/OFF	SINGLE-FAMILY / OFFICES
R-30	SINGLE-FAMILY RESIDENTIAL
APT	APARTMENTS
CC	COMMUNITY COMMERCIAL
LM	LIMITED MANUFACTURING
HF	HEALTH FACILITIES
<u>LEGEND</u>	
	LOT BOUNDARY
	200' RADIUS AROUND
	ZONE BOUNDARY
	TOWN BOUNDARY
	WATER BODY
	WETLANDS
	STREAM

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<div style="writing-mode: vertical-rl; transform: rotate(180deg);"> NO R </div>	<div style="text-align: center;"> PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY </div>	PROJECT NUMBER: SCE-8719.074
		SCALE: 1" = 30'
	<div style="text-align: center;"> EXISTING CONDITIONS AND DEMOLITION PLAN </div>	SHEET <u>4</u> OF <u>14</u> REVISION <u>B</u>

E:\SCE\Hackettstown\8719 Hackettstown\8719.074 Final Site Plan Trailer Storage Lot\Sheets\8719.074 05 Site Layout Plan.dwg Wed, Nov 13, 2019 - 11:14am Sung SUBURBAN CONSULTING ENGINEERS, INC.



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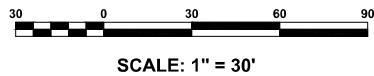
REV. FOR REGULATORY COMMENTS		B	11/12/2019	SCS	EBA
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REVISIONS					

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RHK
03/28/2019
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PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY		PROJECT NUMBER: SCE-8719.074
SITE LAYOUT PLAN		SCALE: AS NOTED
		SHEET 5 OF 14
		REVISION B



KEY

TC: TOP OF CURB
BC: BOTTOM OF CURB
GH: GROUND (HIGH)
GL: GROUND (LOW)

TC: TOP OF CURB
BC: BOTTOM OF CURB
GH: GROUND (HIGH)
GL: GROUND (LOW)



INTERIM GRADING NOTES:

1. CONTRACTOR MAINTAIN MATCH EXISTING GRADE SURROUNDING THE TANKS-TO-REMAIN. A 1:1 PAVED SLOPE SHALL BE UTILIZED TO MEET PROPOSED GRADE SURROUNDING THE TANKS.
2. PAVEMENT SHALL BE CONSTRUCTED PER PHASE I GRADING ENLARGEMENT PLANS UNTIL REMOVAL OF THE CLARIFIER AND SURGE TANKS. AT THAT TIME, PAVEMENT SHALL BE RECONSTRUCTED AND GRADED PER FINAL GRADING PLAN.



SURGE TANK AREA
PHASE I GRADING ENLARGEMENT PLAN
SCALE: 1" = 20'

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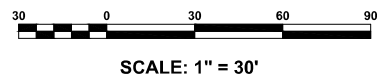
**PRELIMINARY AND FINAL MAJOR SITE PLAN FOR
MARS INCORPORATED
PROPOSED TRAILER PARKING LOT
BLOCK 4, LOT 1
TOWN OF HACKETTSTOWN
COUNTY OF WARREN, STATE OF NEW JERSEY**

SITE GRADING PLAN

PROJECT NUMBER: SCE-8719.074
SCALE: AS NOTED
SHEET <u>6</u> OF <u>14</u>
REVISION <u>B</u>



FINAL UTILITY PLAN
SCALE: 1" = 30'



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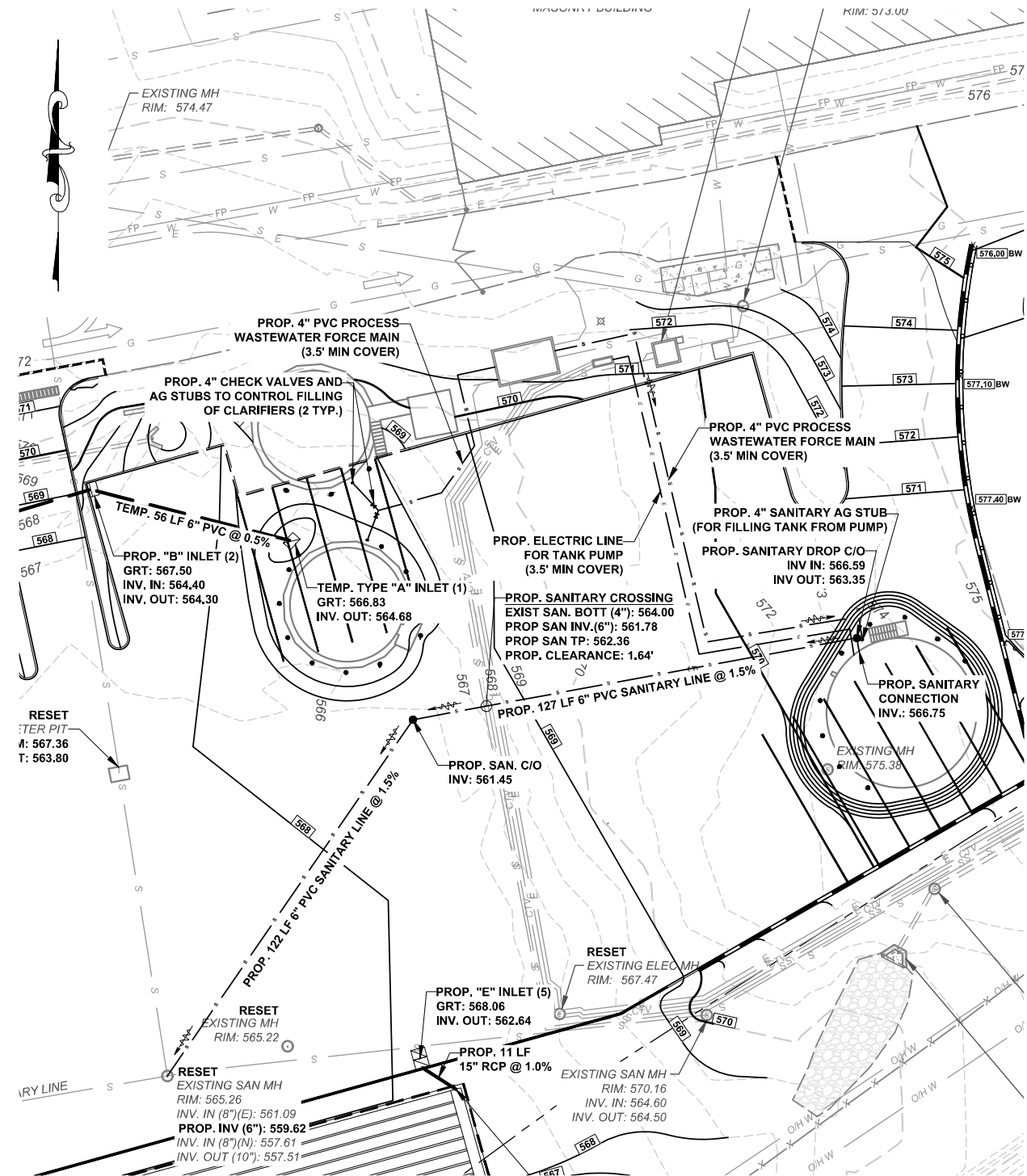
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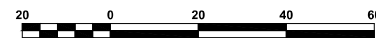
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PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY		PROJECT NUMBER: SCE-8719.074
SCALE: AS NOTED		SHEET 7 OF 14
SITE UTILITY PLAN		REVISION B



INTERIM UTILITY NOTE:
UTILITY STRUCTURES AND PIPES SHALL BE INSTALLED UNTIL REMOVAL OF THE CLARIFIER AND SURGE TANKS. AT THAT TIME, UTILITY STRUCTURES AND PIPES SHALL BE ABANDONED.

**CLARIFIER AND SURGE TANK AREA
PHASE I UTILITY ENLARGEMENT PLAN**
SCALE: 1" = 20'



SCALE: 1" = 20'

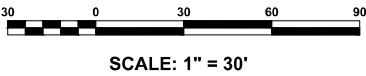
PLANT SCHEDULE							
EVERGREEN TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	REMARKS
	JH	23	JUNIPERUS VIRGINIANA 'HILLSPIRE'	HILLSPIRE JUNIPER	8 B B	5-6'	
STREET TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	REMARKS
	AS	3	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	8 B B	2"-2.5" CAL.	
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	REMARKS
	CH	5	CLETHRA ALNIFOLIA 'HUMMINGBIRD'	SUMMERSWEET	3 GAL	18"-24"	
	CR	25	CORNUS SERICEA	RED TWIG DOGWOOD	3 GAL	18"-24"	
	HL	9	HAMAMELIS VIRGINIANA 'LITTLE SUZY'	COMMON WITCH HAZEL	7 GAL	3'-4'	
	IR	9	ILEX VERTICILLATA 'RED SPRITE'	RED SPRITE WINTERBERRY	3 GAL	18"-24"	
	MN	24	MORELLA PENNSYLVANICA	NORTHERN BAYBERRY	3 GAL	18"-24"	
ANNUALS/PERENNIALS	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	REMARKS
	AT	30	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	2" PLUGS	18" o.c.	
	RG	28	RUDBECKIA FULGIDA 'GOLDSTRUM'	CONEFLOWER	2 GAL	24" o.c.	
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT.	SIZE	REMARKS
	EV	18	ELYMUS VIRGINICUS	VIRGINIA WILD RYE	2" PLUGS	24" o.c.	
	PV	34	PANICUM VIRGATUM	SWITCH GRASS	3 GAL	24" o.c.	



- LIGHTING NOTES:**
1. THIS PLAN IS TO BE USED FOR THE PURPOSES OF LANDSCAPE AND LIGHTING ONLY.
 2. EXAMPLE LABEL: "A @ 25'" DENOTES LUMINAIRE TYPE 'A' AND MOUNTING HEIGHT AT 25'.
 3. ALL POSTS SHALL BE LOCATED A MINIMUM OF 2'-6" FROM THE EDGE OF CURB.
 4. LIGHT CALCULATIONS PROVIDED FOR PROPOSED TRAILER PARKING LOT ONLY.
 5. LAYOUT SHOWN REFLECTS FINAL PHASE INCLUDING TANK REMOVAL.

Light Calculation Statistics					
Description	Symbol	Avg	Max	Min	Avg/Min
Parking Lot	+	2.0 fc	4.8 fc	0.5 fc	4.0:1

Lighting Schedule						
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp
	A	7	Uthonia Lighting	DSX1 LED P9 50K TFTM MVOLT	DSX1 LED P9 50K TFTM MVOLT	LED
	B	2	Uthonia Lighting EXISTING LIGHT TO REMAIN	DSX1 LED P9 50K T3M NVOLT	DSX1 LED P9 50K T3M MVOLT	LED



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PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY

LANDSCAPE AND LIGHTING PLAN

PROJECT NUMBER: SCE-8719.074
SCALE: 1" = 30'
SHEET 8 OF 14
REVISION B



SEQUENCE OF CONSTRUCTION

1. MOBILIZATION AND ESTABLISHING STAGING AREA, AND INSTALLATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES	1.0 WEEK
2. DEMOLITION, CLEARING SITE AND EARTHWORK	24.0 WEEKS
3. DRAINAGE, UTILITY STRUCTURES, ROUGH GRADING AND RETAINING WALL CONSTRUCTION	6.0 WEEKS
4. CONCRETE CURB AND CONCRETE PAD INSTALLATION	7.0 WEEKS
5. LIGHTING INSTALLATION	1.0 WEEK
6. ASPHALT PAVEMENT INSTALLATION	2.0 WEEKS
7. SITE RESTORATION AND REMOVAL OF SOIL EROSION AND SEDIMENT MEASURES	2.0 WEEK
TOTAL:	43.0 WEEKS

LEGEND

	PROPOSED LIMIT OF DISTURBANCE
	PROPOSED SILT FENCE
	PROPOSED CONSTRUCTION FENCE
	SOIL SERIES BOUNDARY
	PROPOSED INLET PROTECTION/DEVICE
	AREA SUBJECT TO COMPACTION TESTING (SEE CALCULATIONS)

TOTAL DISTURBANCE = 124,717 SF (2.86 ACRES)

TOTAL AREA OF SOIL COMPACTION TESTING

	SECTION	AREA (SF)	AREA (AC.)
	1	10,260	0.24
	2	35,714	0.82
TOTAL		45,974	1.06

SOIL COMPACTION TESTING NOTE:
2 TESTS REQUIRED FOR ONE ACRE.
1 TEST PER 0.5 ACRE OVER ONE ACRE.

TOTAL NUMBER OF TESTS REQUIRED: 3

NOTE:
LAYOUT SHOWN REFLECTS FINAL PHASE. CONTRACTOR SHALL IMPLEMENT SOIL EROSION AND SEDIMENT CONTROL MEASURES DURING THE REMOVAL OF THE CLARIFIER AND SURGE TANKS.

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PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT		PROJECT NUMBER: SCE-8719.074
BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY		SCALE: 1" = 30'
SOIL EROSION AND SEDIMENT CONTROL PLAN		SHEET 9 OF 14
		REVISION B

**WARREN COUNTY SOIL EROSION & SEDIMENT CONTROL
GENERAL NOTES**

- THE DISTRICT SHALL BE REPRESENTED AT THE PROJECT PRE-CONSTRUCTION MEETING WITH THE TOWNSHIP ENGINEER, CONTRACTORS AND UTILITY REPRESENTATIVES. IF THE TOWNSHIP ENGINEER DOES NOT SCHEDULE A PRE-CONSTRUCTION MEETING, IT IS THE RESPONSIBILITY OF THE OWNER/APPLICANT TO SCHEDULE ONE BEFORE ANY LAND DISTURBANCE. TWO WEEKS WRITTEN NOTICE MUST BE GIVEN FOR SCHEDULING PRE-CONSTRUCTION MEETINGS.
- FAILURE OF THE AFOREMENTIONED PLAN SHALL NOT RELIEVE THE APPLICANT OF ANY OF ITS RESPONSIBILITIES RELEVANT TO THE APPROPRIATE STATUTES. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES MAY BE REQUIRED AS DEEMED NECESSARY BY THE DISTRICT IN THE EVENT OF ANY UNFORESEEN PROBLEMS DURING CONSTRUCTION.
- ANY CHANGES OF APPROVED PLANS SHALL REQUIRE AN ADDITIONAL SUBMITTAL TO THE DISTRICT INCLUDING APPROPRIATE RE-REVIEW FEES.
- A 48 HOUR START OF LAND DISTURBANCE NOTIFICATION SHALL BE GIVEN.
- IN THAT N.J.S.A. 4-24-39 ET SEQ REQUIRES THAT NO CERTIFICATES OF OCCUPANCY TO BE ISSUED BY THE MUNICIPALITY BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES. ALL SITE WORK RELATIVE TO APPROVED PLANS AND ALL WORK AROUND INDIVIDUAL LOTS IN SUBDIVISIONS WILL BE COMPLETED BEFORE THE DISTRICT ISSUES A CERTIFICATE OF COMPLIANCE. TWO WEEKS WRITTEN NOTICE MUST BE GIVEN TO THE DISTRICT TO SCHEDULE INSPECTION FOR CERTIFICATE OF COMPLIANCE RELEASE.
- FINAL STABILIZATION OF ALL LAND DISTURBANCES ASSOCIATED WITH UNDERGROUND UTILITIES, IRRESPECTIVE OF PHASING, IS THE ULTIMATE RESPONSIBILITY OF THE OWNER.
- A CASH BOND OF NOT LESS THAN \$2,500. (PER DISTURBED ACRE OR PART THEREOF) WILL BE POSTED WITH THE WARREN COUNTY SOIL CONSERVATION DISTRICT DURING THE NON-GROWING SEASON (NOVEMBER 15 - APRIL 15) IF A CERTIFICATE OF COMPLIANCE IS NEEDED AND SOIL EROSION AND SEDIMENT CONTROL MEASURES FOR PERMANENT STABILIZATION ARE NOT COMPLETED.
- SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS SHALL BE SWEEPED AT THE END OF EACH WORKING DAY.
- NO BUILDING PERMITS WILL BE RELEASED UNTIL ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON APPROVED PLANS ARE INSTALLED.
- DUST TO BE CONTROLLED WITH WATER, CALCIUM CHLORIDE OR OTHER METHOD APPROVED BY THE SOIL CONSERVATION DISTRICT.
- TRACKING PAD TO BE KEPT CLEAN AND REPAIRED AS NECESSARY.
- SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL IN NEW JERSEY, FEBRUARY 2014.
- SEE DETAIL SHEETS FOR ADDITIONAL SOIL AND SEDIMENT CONTROL DETAILS.
- TOPSOIL STOCKPILE PROTECTION
 - APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS PER 1000 SQ. FT.
 - APPLY PERENNIAL RYEGRASS SEED AT 1 LB PER 1000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB PER 1000 SQ. FT.
 - MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS PER 1000 SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
 - PROPERTY ENTRENCH A SILT FENCE AT THE BOTTOM OF THE STOCKPILE.
- TEMPORARY STABILIZATION SPECIFICATIONS
 - APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT.
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS PER 1000 SQ. FT.
 - APPLY PERENNIAL RYEGRASS SEED AT 1 LB PER 1000 SQ. FT. AND ANNUAL RYEGRASS AT 1 LB PER 1000 SQ. FT.
 - MULCH WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
- PERMANENT STABILIZATION SPECIFICATIONS
 - APPLY TOPSOIL TO A DEPTH OF 5 INCHES (UNSETTLED).
 - APPLY GROUND LIMESTONE AT A RATE OF 90 LBS PER 1000 SQ. FT. AND WORK FOUR INCHES INTO SOIL.
 - APPLY FERTILIZER (10-20-10) AT A RATE OF 11 LBS PER 1000 SQ. FT.
 - APPLY HARD FESCUE SEED AT 2.7 LBS PER 1000 SQ. FT. AND CREEPING RED FESCUE SEED AT 0.7 LBS PER 1000 SQ. FT. A PERENNIAL RYEGRASS SEED AT 0.25 LBS PER 1000 SQ. FT.
 - MULCH STOCKPILE WITH STRAW OR HAY AT A RATE OF 90 LBS. PER 1000 SQ. FT.
 - APPLY A LIQUID MULCH BINDER OR TACK TO STRAW OR HAY MULCH.
- USDA SOIL SERIES FROM SOIL SURVEY MANUAL OF WARREN COUNTY, NEW JERSEY SHOW:
FrdAb - Fredon-Halsey complex, 0 to 3 percent slopes, very stony
NetBb - Netcong loam, 0 to 8 percent slopes, very stony
Udaub - Udorthents-Urban land complex, 0 to 8 percent slopes

DUST CONTROL NOTES

THE FOLLOWING METHODS SHOULD BE USED FOR CONTROLLING DUST:
MULCHES - SEE STANDARDS FOR STABILIZATION WITH MULCHES ONLY (Pg. 5-1).
VEGETATIVE COVER - SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER (Pg 7-1), PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION (Pg 7-1), AND PERMANENT STABILIZATION WITH SOD (8-1).
SPRAY-ON ADHESIVE - ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

TABLE 16-1: DUST CONTROL MATERIALS

MATERIAL	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS / ACRE
ANIONIC ASPHALT EMULSION	7 : 1	COARSE SPRAY	1,200
LATEX EMULSION	12.5 : 1	FINE SPRAY	225
RESIN IN WATER	4 : 1	FINE SPRAY	300
POLYACRYLAMIDE (PAM)- SPRAY ON POLYACRYLAMIDE (PAM)- DRY SPRAY	APPLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS. MAY ALSO BE USED AS AN ADDITIVE TO SEDIMENT BASINS TO FLOCCULATE AND PRECIPITATE SUSPENDED COLLOIDS. SEE SEDIMENT BASIN STANDARD (Pg. 26-1)		
ACULATED SOY BEAN STICK	NONE	COARSE SPRAY	1,200

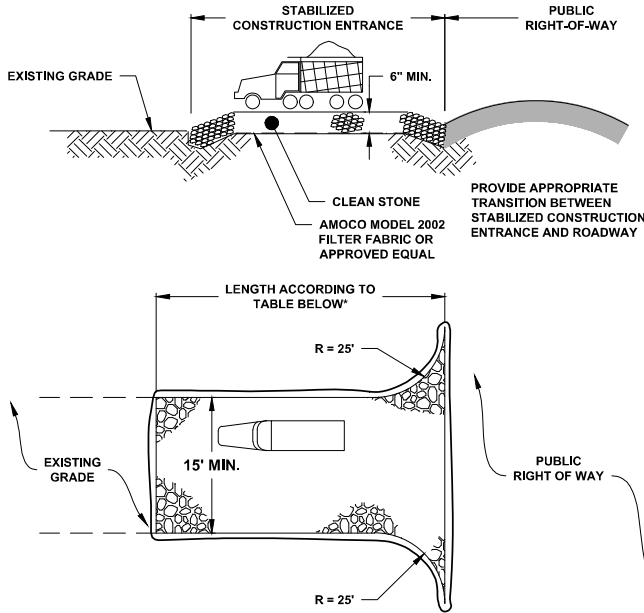
TILLAGE - TO ROUGHEN SURFACE AND BRNG CLODS TO THE SURFACE. THIS IS A TEMPORARY EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12 INCHES APART, AND SPRING-TOOTHED HARROWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

SPRINKLING - SITE IS SPRINKLED UNTIL THE SURFACE IS WET.

BARRIERS - SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS, BALES OF HAY, AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING.

CALCIUM CHLORIDE - SHALL BE IN THE FORM OF LOOSE, DRY GRANULES OR FLAKES FINE ENOUGH TO FEED THROUGH COMMONLY USED SPREADERS AT A RATE THAT WILL KEEP SURFACE MOIST BUT NOT CAUSE POLLUTION OR PLANT DAMAGE. IF USED ON STEEPER SLOPES, THEN USE OTHER PRACTICES TO PREVENT WASHING INTO STREAMS OR ACCUMULATION AROUND PLANTS.

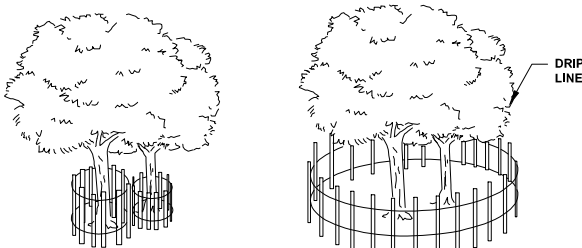
STONE - COVER SURFACE WITH CRUSHED STONE OR COARSE GRAVEL.



PERCENT SLOPE OF ROADWAY	LENGTH STONE REQUIRED	
	COARSE GRAINED SOILS	FINE GRAINED SOILS
0 TO 2%	50 FT.	100 FT.
2 TO 5%	100 FT.	200 FT.
> 5%	ENTIRE SURFACE STABILIZED WITH FABC BASE COURSE	

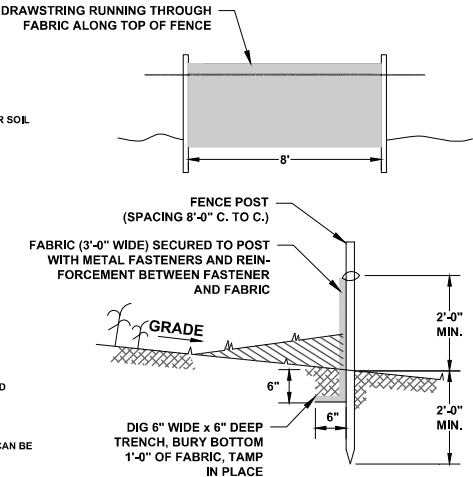
AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

**STABILIZED CONSTRUCTION ENTRANCE
N.T.S.**

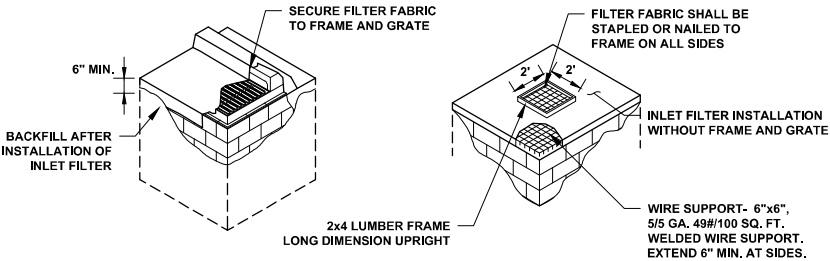


**INCORRECT FENCING FOR TREE PROTECTION
CORRECT FENCING FOR TREE PROTECTION**

**TREE PROTECTION
N.T.S.**

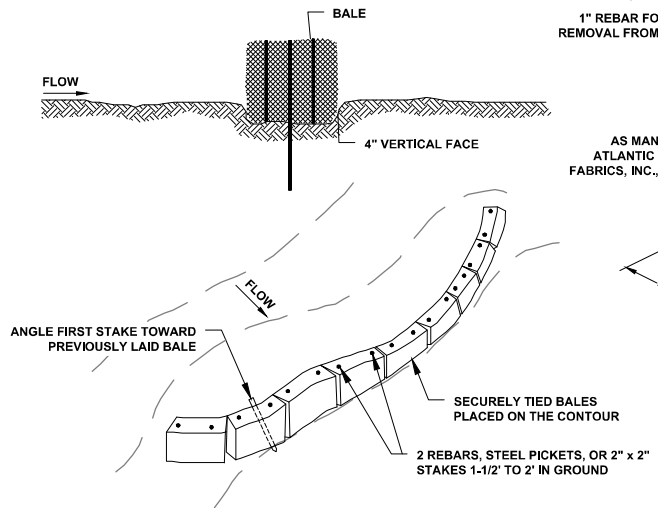


**SEDIMENT FENCE DETAIL
N.T.S.**

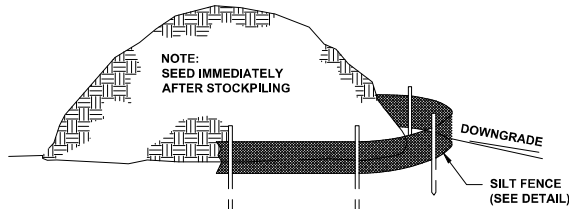


- NOTES:
- CONTRACTOR IS TO CLEAN INLET FILTER AFTER EVERY STORM.
 - IF BOTTOM OF ROADWAY BOX IS BELOW TOP OF GRATE, CONSTRUCT OPENINGS IN INLET WALL TO ALLOW WATER TO FLOW IN, COVER OPENINGS WITH WELDED WIRE SUPPORT AND FILTER FABRIC.
 - INSPECTION SHALL BE MADE FREQUENT. MAINTENANCE, REPAIR AND REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED. THE BARRIER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARDS THE INLET HAS BEEN STABILIZED.

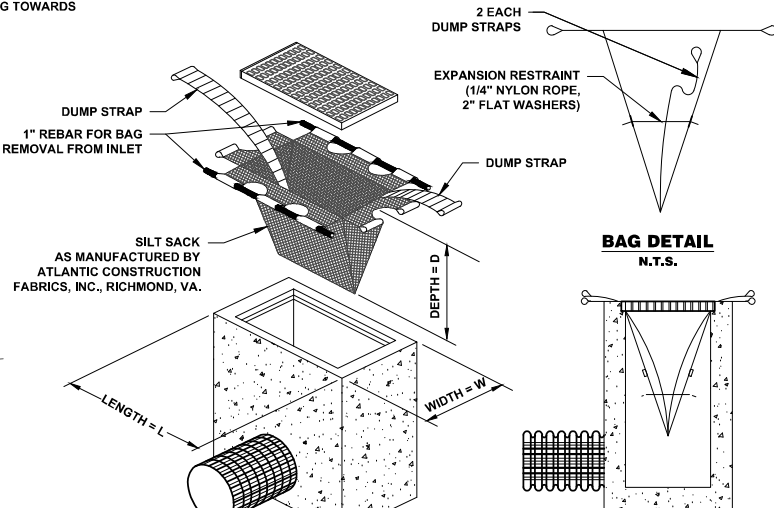
**INLET FILTER DETAIL
N.T.S.**



**HAYBALE SEDIMENT BARRIERS
N.T.S.**



**TYPICAL TOPSOIL STOCKPILE
N.T.S.**



**BAG DETAIL
N.T.S.**

**INSTALLATION DETAIL
N.T.S.**

**INLET PROTECTION DEVICE
N.T.S.**

Soil Conservation Training Materials

Soil Conservation Training Materials

1. **Soil Conservation Training Materials** - A comprehensive guide to soil conservation practices, including erosion control, sedimentation, and water quality management. This manual provides detailed instructions and diagrams for various techniques used to prevent soil erosion and sediment transport from construction sites.

2. **Soil Conservation Training Materials** - A comprehensive guide to soil conservation practices, including erosion control, sedimentation, and water quality management. This manual provides detailed instructions and diagrams for various techniques used to prevent soil erosion and sediment transport from construction sites.

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Soil Conservation Training Materials

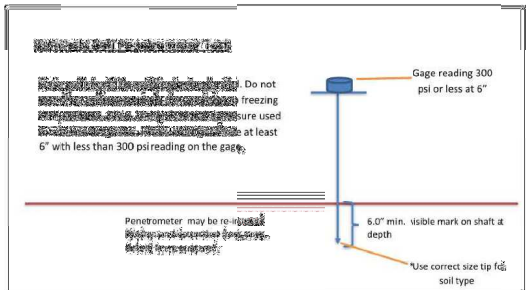
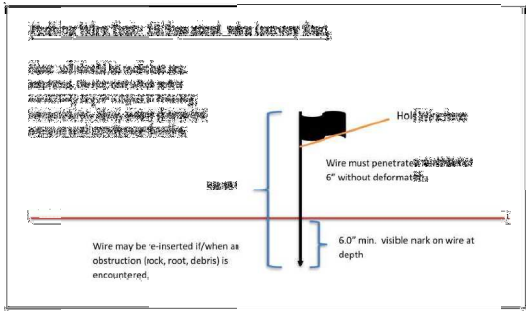
Soil Conservation Training Materials

4. **Soil Conservation Training Materials** - A comprehensive guide to soil conservation practices, including erosion control, sedimentation, and water quality management. This manual provides detailed instructions and diagrams for various techniques used to prevent soil erosion and sediment transport from construction sites.

Soil Conservation Training Materials

5. **Soil Conservation Training Materials** - A comprehensive guide to soil conservation practices, including erosion control, sedimentation, and water quality management. This manual provides detailed instructions and diagrams for various techniques used to prevent soil erosion and sediment transport from construction sites.

Soil Conservation Training Materials



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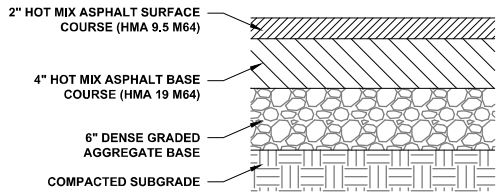
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CHECKED BY:	03/28/2019

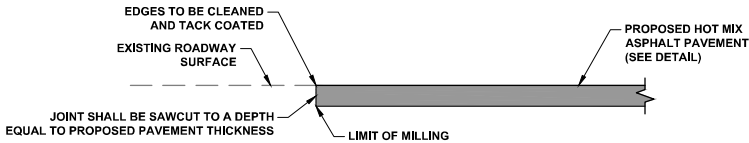
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DATE: 03/28/2019

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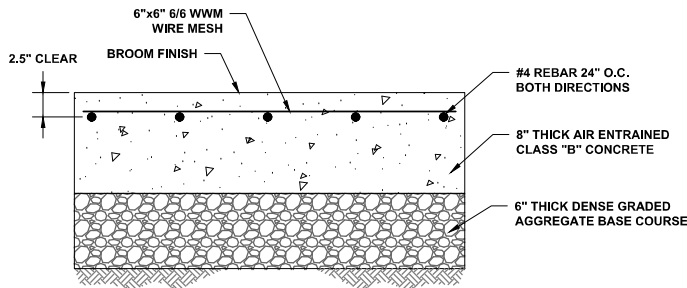
PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY
SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS
PROJECT NUMBER: SCE-8719.074
SCALE: N.T.S.
SHEET 10 OF 14
REVISION B



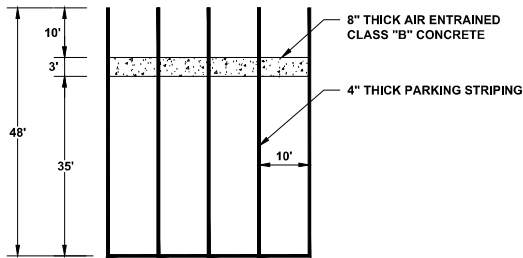
HOT MIX ASPHALT PAVEMENT, FULL DEPTH
N.T.S.



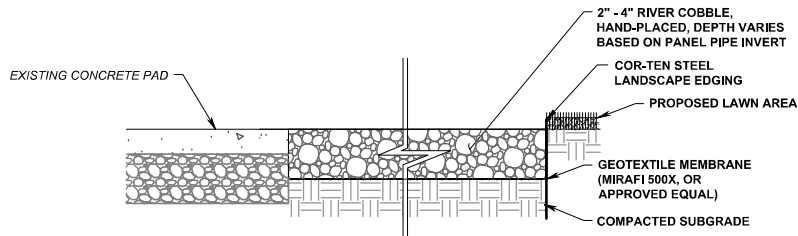
EXISTING TO PROPOSED HOT MIX ASPHALT PAVEMENT DETAIL
N.T.S.



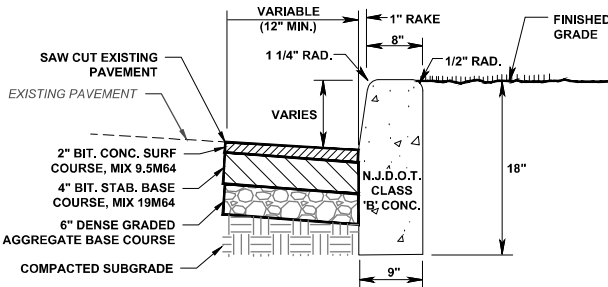
CONCRETE LANDING PAD, 8" THICK
N.T.S.



FLUSH CONCRETE CURB
N.T.S.

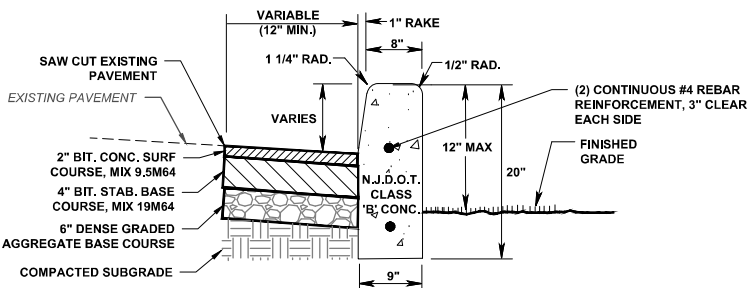


RIVER COBBLE DETAIL
N.T.S.



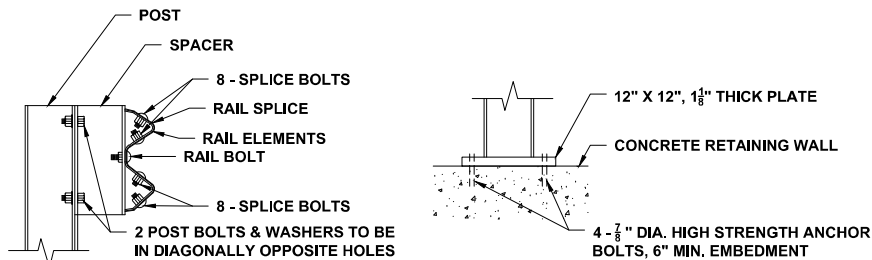
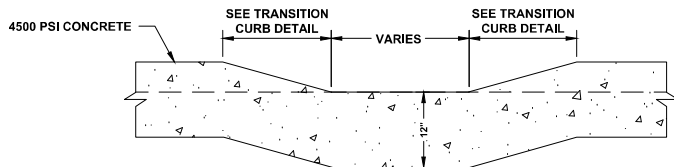
- NOTES:
1. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF A.A.S.H.O. SPEC. M-213, RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF CURB.
 2. PAVEMENT REPAIR TO BE INCLUDED IN COST OF CURB.

CONCRETE VERTICAL CURB, 9" X 18"
N.T.S.



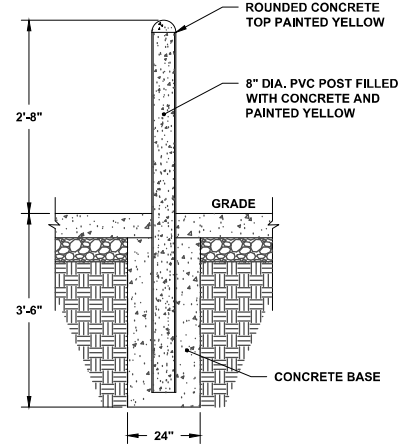
- NOTES:
1. TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20' APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS IMPREGNATED FIBER JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF A.A.S.H.O. SPEC. M-213, RECESSED 1/4" IN FROM THE FRONT FACE AND TOP OF CURB.
 2. PAVEMENT REPAIR TO BE INCLUDED IN COST OF CURB.

EXTENDED CONCRETE CURB
N.T.S.

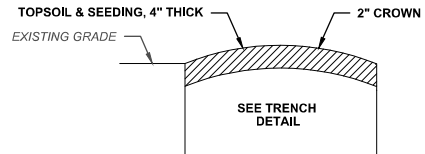


- NOTES:
1. GUIDE RAIL POSTS TO BE SPACED AT 6'-3" O.C.
 2. RAIL ELEMENTS SHALL BE FURNISHED SHOPCURVED, CONCAVE OR CONVEX, FOR RADII LESS THAN 150 FEET.
 3. THE STEEL FOR RAIL ELEMENTS AND BOLTS SHALL CONFORM TO NJDOT STANDARD SPECIFICATIONS AND ITS AMENDMENTS.

BEAM GUIDE RAIL POST ASSEMBLY & INSTALLATION DETAIL
N.T.S.



BOLLARD DETAIL
N.T.S.



LAWN SURFACE RESTORATION NON-PAVED AREAS
N.T.S.

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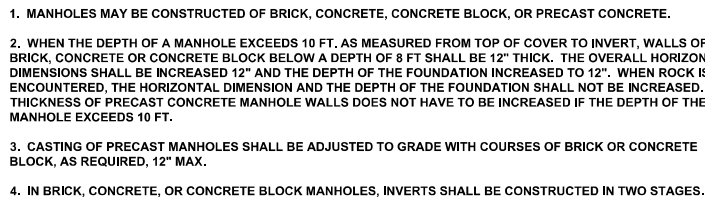
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CHECKED BY:	EBA
CHECKED BY:	03/28/2019

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LICENSE NO. 240A238037500
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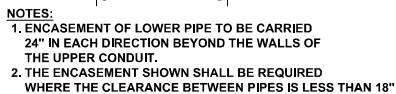
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21M110004300
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EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY	PROJECT NUMBER: SCE-8719.074
CONSTRUCTION DETAILS I	SCALE: N.T.S.
	SHEET 11 OF 14
	REVISION B



NOTES:

1. EXCAVATED MATERIAL SHALL BE DISPOSED OF AS STIPULATED IN THE SPECIFICATIONS AT NO ADDITIONAL COST.
2. BEDDING, D.G.A. BACKFILL AND PAVEMENT RESTORATION SHALL BE INCLUDED AT NO ADDITIONAL COST.
3. HIGH GROUNDWATER EXISTS IN THE PROSPECT AREA, DEWATERING SHALL BE INCLUDED AT NO ADDITIONAL COST.




NOTE:
IF CLEANOUT IS LOCATED IN
DRIVEWAY THE CASTING IS REQUIRED.



- NOTES:**
1. ALL EDGES TO BE CHAMFERED 1".
 2. CONCRETE TO BE N.J.D.O.T., CLASS "C".
 3. APRONS TO BE 6" THICK TO CONCRETE, FLAT AT OUTLET END, DASHED AT INLET END.
 4. EXPOSED PORTIONS OF WALL TO BE RUBBED AND FLOATED.
 5. FOR ARCH PIPE, THE SPAN SHALL BE SUBSTITUTED FOR D.



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LICENSE NO. 242503019100

DATE: 03/28

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**PRELIMINARY AND FINAL MAJOR SITE PLAN FOR
MARS INCORPORATED
PROPOSED TRAILER PARKING LOT
BLOCK 4, LOT 1
TOWN OF HACKETTSTOWN
COUNTY OF WARREN, STATE OF NEW JERSEY**

CONSTRUCTION DETAILS III

PROJECT NUMBER: SCE-8719.074
SCALE: N.T.S.
SHEET <u>13</u> OF <u>14</u>
REVISION <u>B</u>



D-Series Size 1
LED Array Luminaire

Model Number: DSX LED 3JC 700 40K 15W (6VOLT SMD DUA DBA)	
Rating: A+	Warranty: 5 Year


Capable Luminaire

This item is an A+ capable luminaire, which has been designed and tested to provide consistent color and system-level interoperability.

- 1. The operations of this luminaire meet the A+ specification for chromatic consistency.
- 2. This luminaire is A+ Certified when ordered with the controls marked by a **shaded background**.
- 3. The A+ equipped luminaires meet the A+ specification for luminaire to system interoperability.
- 4. This luminaire is part of an A+ Certified solution for ROAM2 or XPoint™ IP networks, providing out-of-the-box interoperability with simple control and control compatibility with drivers and control systems by a **shaded background**.

To learn more about A+, visit www.aacuitybrands.com/apls.

1. See ordering tree for details.
2. A+ Certified Solutions for ROAM require the order of one RCAM node per luminaire. Sold Separately. Link to [Roam Link to DTL DLL](#)

 An A+ capable system indicator. This indicator is used to identify A+ capable systems.

[illegible][illegible][illegible][illegible][illegible]

Operating hours below. For other mean maintenance values, contact factory				
Operating hours	0	25,000	50,000	100,000
Correct Maintenance Factor	1.0	0.98	0.95	0.91
	1.0	0.99	0.97	0.95

Performance Data

Lumen Output

Lumen values are for photometric tests performed in accordance with IESNA LM-79-09. All lumen values are based on a 1000-hour life expectancy. Lighting Facts. Contact factory for performance data for any configurations not shown here.

Forward Output

LEDs	Sns. Temp. (°C)	System Eff. (%)	Rev. Temp. (°C)	5W				6W				10W				16W				16W				
				T800K (lm)				T800K (lm)				T800K (lm)				T800K (lm)				T800K (lm)				
				1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	
T85	2384	1	0	1	111	5712	2	0	2	189	8350	1	0	2	120	4581	1	0	1	67				
T85	2381	2	0	2	189	8350	2	0	2	120	4581	1	0	1	67									
T85	2380	1	0	2	189	8350	2	0	2	120	4581	1	0	1	67									
T85	2380	1	0	2	189	8350	2	0	2	120	4581	1	0	1	67									
T85	2380	1	0	2	189	8350	2	0	2	120	4581	1	0	1	67									
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LIGHT POLE FOUNDATION NOTES:

1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS, COORDINATE WITH ALL CONTRACT DRAWINGS, PROJECT SHOP DRAWINGS AND FIELD CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL ENSURE NO CONFLICTS ARISE BETWEEN LIGHT POLE FOUNDATIONS, STRUCTURES, AND UTILITIES. IF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND DESIGN PLANS ARISE, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
2. THE CONTRACTOR IS TO HAVE GEOTECHNICAL ENGINEER, LICENSED IN THE PROJECT'S STATE, ON SITE TO INSPECT FILL, MONITOR FILL COMPACTATION AND TO VERIFY SUBGRADE ALLOWABLE BEARING CAPACITY AND SOIL DESIGN CRITERIA PRIOR TO CONSTRUCTION

IN ACCORDANCE TO THE DESIGN ASSUMPTIONS STATED, UNSUITABLE MATERIALS FOND MUST BE REMOVED TO THE REMEDIATIONS AS PER THE DIRECTION OF THE ON SITE GEOTECHNICAL ENGINEER.

3. IF CONDITIONS IN THE FIELD ARE DIFFERENT THAN THOSE INDICATED, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.

4. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT APPROPRIATE SELECT BACKFILL IS USED, AND THOROUGHLY COMPACTED TO 95% MAX. DENSITY ASTM 698.

5. STRUCTURAL CONCRETE AND CONCRETING PRACTICES SHALL CONFORM WITH ACI-318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE." DETAILS ARE TO BE IN ACCORDANCE WITH ACI-315, "MANUAL OF STANDARD PRACTICE: DETAILS AND DETAILING OF CONCRETE REINFORCEMENT." FORMWORK SHALL CONFORM ACI-308 "GUIDE TO FORM WORK FOR CONCRETE". UNLESS OTHERWISE NOTED ON THE CONTRACT DOCUMENTS.

6. CONCRETE SHALL BE NORMAL WEIGHT STONE AGGREGATE WITH THE STATED MINIMUM COMPRESSIVE STRENGTH. PROPOSED MIX DESIGN SHALL BE SUBMITTED TO THE ENGINEER FOR THE PRELIMINARY DESIGN MIX IS TO BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. THE WATER-CEMENT RATIO FOR THE PROPOSED MIX DESIGN MUST ACHIEVE AN AVERAGE 28-DAY STRENGTH OF 1,200 PSI GREATER THAN THE REQUIRED STRENGTH ON LABORATORY TEST RESULTS.
7. CONCRETE IS TO HAVE A SLUMP NO GREATER THAN 4" TO WITHIN A TOLERANCE OF 1".
8. EXPOSED CONCRETE IS TO BE AIR ENRICHED, 6% (WITHIN 1% TOLERANCE), CONFORMING TO ASTM C260.
9. CONCRETE TO BE CONSOLIDATED IN PLACE USING AN INTERNAL VIBRATOR.
10. REINFORCING STEEL BARS SHALL BE BILLET STEEL ASTM A615, GRADE 60. ALL REINFORCEMENT TO BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS OR STIRRUPS TO BE PROVIDED BY THE CONTRACTOR TO

11. FURNISH SUPPORT FOR ALL BARS. BAR SUPPORTS IN CONTACT WITH EXPOSED SURFACES TO BE PROPERLY TYPED. ALL ACCESSORIES MUST BE GALVANIZED.
12. ALL SPLICES OF REINFORCING BARS NOT INDICATED ARE TO BE LTS AS PER THE REINFORCING SPLICE SCHEDULE OR 40 BAR DIAMETERS. DISCONTINUOUS ENDS OF CONTINUOUS ARE TO BE STANDARD HOOKS.
13. IF CAVING OF DRILLING HOLES ARE ENCOUNTERED, CONTRACTOR SHALL PROVIDE BENTONITE SLURRY IN PERMANENT CASINGS FOR DRILLED CONCRETE PIER FOUNDATIONS.
14. CONCRETE MUST ATTAIN 80% OF THE DESIGN STRENGTH OR CURE FOR A MINIMUM OF 7-DAYS PRIOR TO THE INSTALLATION OF THE LIGHT POLES OR ALL LIGHT POLES ARE TO BE SUITABLY BRACED AGAINST WIND LOADS DURING THE ABOVE MENTIONED TIMEFRAME.
15. ALL ELECTRICAL COMPONENTS TO COMPLY WITH N.E.C.

15. WHEN 2" CLEARANCE CAN NOT BE PROVIDED, CONCRETE FOUNDATION SHALL BE EXTENDED TO 30" ABOVE SURFACE, OR PROVIDE BOLLARD PROTECTION FOR LIGHT POLE.

16. CONTRACTOR IS TO RECORD ON A CLEAN COPY OF THE LIGHTING PLAN, THE LOCATION OF CONDUIT SUPPLYING POWER TO LIGHTS. A COMPLETED COPY OF THIS RECORD PLAN IS TO BE PROVIDED TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE WORK.

LIGHT POLE FOUNDATION DESIGN CRITERIA

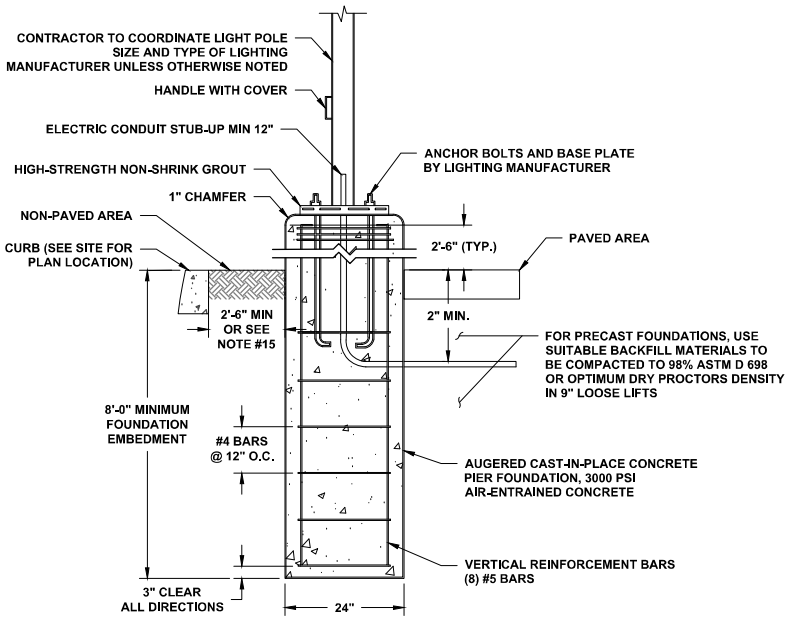
1. THIS DETAIL FOR SCHEMATIC DESIGN AND MUNICIPAL BOARD APPROVALS ONLY, AND NOT FOR CONSTRUCTION.

2. CONTRACTOR TO PROVIDE A FOUNDATION DETAIL SIGNED AND SEALED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER FOR BUILDING PERMIT APPROVALS.

3. MINIMUM REQUIRED ALLOWABLE BEARING PRESSURE = 1,000 PSF - ASSUMED (TO BE VERIFIED IN FIELD)
4. SOIL FRICTION ANGLE = 30 DEG - ASSUMED (TO BE VERIFIED IN FIELD)
5. SOIL DRY UNIT WEIGHT = 120 PCF - ASSUMED (TO BE VERIFIED IN FIELD)
6. WIND PRESSURE = 30 PSF

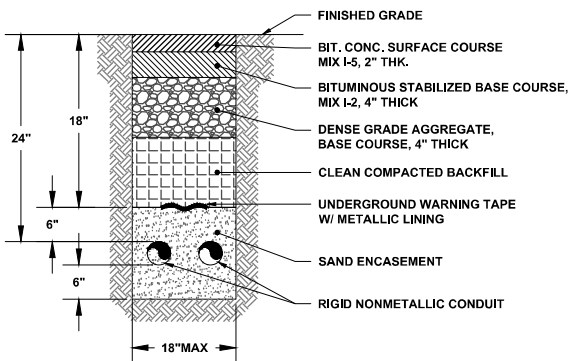
<p align="center"><u>NOTICE</u></p> <p>THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED.</p> <p>THIS DRAWING MAY NOT BE COPIED, REPRODUCED, RECALLED, REDISTRIBUTED, OR BILLED UPON FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN PERMISSION OF</p>		
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SUBURBAN CONSULTING ENGINEERS, INC.		
PER N.J.A.C. ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID SERIAL SEAL OR PAPER COPIES NOT CONTAINING A RAISED SEAL ARE NOT ORIGINALS AND MAY HAVE BEEN ALTERED.		
REV. FOR REGULATORY COMMENTS		B
REV. PER HIGHLANDS COMPLIANCE		A
DESCRIPTION		NO
		REVISIONS



LIGHT POLE FOUNDATION DETAIL

N.T.S.



TRENCH DETAIL
SCHEDULE 40 PVC CONDUIT FOR ELECTRICAL WIRING
(IN PAVEMENT AREA)
N.T.S.



- ## LIGHT POLE FOUNDATION NOTES:
1. THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND CONDITIONS, COORDINATE WITH ALL CONTRACT DRAWINGS, PROJECT SHOP DRAWINGS AND FIELD CONDITIONS PRIOR TO CONSTRUCTION. CONTRACTOR SHALL ENSURE NO CONFLICTS ARISE BETWEEN LIGHT POLE FOUNDATIONS, STRUCTURES, AND UTILITIES. IF ANY DISCREPANCIES BETWEEN FIELD CONDITIONS AND DESIGN PLANS ARISE, THE ENGINEER SHALL BE NOTIFIED IMMEDIATELY.
 2. THE CONTRACTOR IS TO HAVE GEOTECHNICAL ENGINEER, LICENSED IN THE PROJECT'S STATE, ON SITE TO INSPECT FILL, MONITOR FILL COMPACTION AND TO VERIFY SUBGRADE ALLOWABLE BEARING CAPACITY AND SOIL DESIGN CRITERIA PRIOR TO CONSTRUCTION IN ACCORDANCE T THE DESIGN ASSUMPTIONS STATED. UNSUITABLE MATERIALS FOUND MUST BE REMOVED OR BE REMEDIED AS PER THE DIRECTION OF THE ON SITE GEOTECHNICAL ENGINEER.
 3. IF CONDITIONS IN THE FIELD ARE DIFFERENT THAN THOSE INDICATED, THE CONTRACTOR IS TO IMMEDIATELY NOTIFY THE ENGINEER IN WRITING.
 4. CONTRACTOR IS RESPONSIBLE TO ENSURE THAT APPROPRIATE SELECT BACKFILL IS USED, AND THOROUGHLY COMPACTED TO 98% MAX. DENSITY ASTM 698.
 5. STRUCTURAL CONCRETE AND CONCRETING PRACTICES SHALL CONFORM WITH ACI-318, "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE." DETAILS ARE TO BE IN ACCORDANCE WITH ACI-315, "MANUAL OF STANDARD PRACTICE: DETAILS AND DETAILING OF CONCRETE REINFORCEMENT." FORM WORK SHALL CONFORM ACI-347 "GUIDE TO FORMWORK FOR CONCRETE", UNLESS OTHERWISE NOTED ON THE CONTRACT DOCUMENTS.
 6. CONCRETE SHALL BE NORMAL WEIGHT STONE AGGREGATE WITH THE STATED MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS. HISTORICAL DATA OR LABORATORY TESTS FOR THE PRELIMINARY DESIGN MIX IS TO BE SUBMITTED TO THE ENGINEER FOR REVIEW PRIOR TO CONSTRUCTION. THE WATER-CEMENT RATIO FOR THE PROPOSED MIX DESIGN MUST ACHIEVE AN AVERAGE 28-DAY STRENGTH OF 1,200 PSI GREATER THAN THE REQUIRED STRENGTH ON LABORATORY RESULT.
 7. CONCRETE SHALL BE PLACED IN A SLUMP NO GREATER, THAN 4" TO WITHIN A TOLERANCE OF 1".
 8. EXPOSED CONCRETE IS TO BE AIR ENTRAINED, 6% (WITHIN 1% TOLERANCE), CONFORMING TO ASTM C260.
 9. CONCRETE TO BE CONSOLIDATED IN PLACE USING AN INTERNAL VIBRATOR.
 10. REINFORCING STEEL BARS SHALL BE BILLET STEEL ASTM A615, GRADE 60. ALL REINFORCEMENT TO BE SECURELY HELD IN PLACE WHILE PLACING CONCRETE. IF REQUIRED, ADDITIONAL BARS OR STIRRUPS TO BE PROVIDED BY THE CONTRACTOR TO PROVIDE SUPPORT FOR THE STEEL BARS. ALL STEEL SUPPORTS IN CONTACT WITH EXPOSED SURFACES TO BE PLASTIC TIPPED. ALL ACCESSORIES MUST BE GALVANIZED.
 11. ALL SPLICES OF REINFORCING BARS NOT INDICATED ARE TO BE LTS AS PER THE REINFORCING SPLICE SCHEDULE OR 40 BAR DIAMETERS. DISCONTINUOUS ENDS OF CONTINUOUS ARE TO BE STANDARD HOOKS.
 12. IF CAVING OF DRILLED HOLES ARE ENCOUNTERED, CONTRACTOR SHALL PROVIDE BENTONITE SLURRY IN PERMANENT CASINGS FOR DRILLED CONCRETE PIER FOUNDATIONS.
 13. CONCRETE MUST ATTAIN 80% OF THE DESIGN STRENGTH OR CURE FOR A MINIMUM OF 7-DAYS PRIOR TO THE INSTALLATION OF THE LIGHT POLES OR ALL LIGHT POLES ARE TO BE SUITABLY BRACED AGAINST WIND LOADS DURING THE ABOVE MENTIONED TIMEFRAME.
 14. ALL ELECTRICAL COMPONENTS TO COMPLY WITH N.E.C.
 15. WHEN 2'-6" CLEARANCE CAN NOT BE PROVIDED, CONCRETE FOUNDATION SHALL BE EXTENDED TO 30" ABOVE SURFACE, OR PROVIDE BOLLARD PROTECTION FOR LIGHT POLES.
 16. CONTRACTOR IS TO RECORD ON A CLEAN COPY OF THE LIGHTING PLAN, THE LOCATION OF CONDUIT SUPPLYING POWER TO LIGHTS. A COMPLETED COPY OF THIS RECORD PLAN IS TO BE PROVIDED TO THE OWNER PRIOR TO FINAL ACCEPTANCE OF THE WORK.

LIGHT POLE FOUNDATION DESIGN CRITERIA

1. THIS DETAIL FOR SCHEMATIC DESIGN AND MUNICIPAL BOARD APPROVALS ONLY, AND NOT FOR CONSTRUCTION.
2. CONTRACTOR TO PROVIDE A FOUNDATION DETAIL SIGNED AND SEALED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER FOR BUILDING PERMIT APPROVALS.
3. MINIMUM REQUIRED ALLOWED BEARING PRESSURE = 1,000 PSF - ASSUMED (TO BE VERIFIED IN FIELD)
4. SOIL SLOTTION ANGLE = 30 DEG - ASSUMED (TO BE VERIFIED IN FIELD)
5. SOIL DRY UNIT WEIGHT = 120 PCF - ASSUMED (TO BE VERIFIED IN FIELD)
6. WIND PRESSURE = 30 PSF

AREA LIGHT FIXTURE DETAIL
N.T.S.

<p align="center">NOTICE</p> <p>THIS DRAWING AND ALL INFORMATION CONTAINED HEREIN IS AUTHORIZED FOR USE ONLY BY THE PARTY FOR WHOM THE WORK WAS CONTRACTED OR TO WHOM IT IS CERTIFIED.</p> <p>THIS DRAWING MAY NOT BE <u>COPIED</u>, <u>REPRODUCED</u>, <u>DISSEMINATED</u>, <u>REPRODUCED</u>, OR <u>USED</u> FOR ANY OTHER PURPOSE WITHOUT THE WRITTEN CONSENT OF SUBIRRAM CONSULTING ENGINEERS, INC.</p> <p>PER J.A.C., ELECTRONIC SUBMISSIONS NOT CONTAINING A VALID DATE, SEAL, OR PAPER COVER NOT CONTAINING A RAISED SEAL, ARE NOT GUARANTEED AND MAY HAVE BEEN ALTERED.</p>					
<p>REV. FOR REGULATORY COMMENTS</p>		B	11/12/2019	SOS	EBA
<p>REV. PER HIGHLANDS COMPLIANCE</p>		A	07/18/2019	SOS	PDC
DESCRIPTION	NO.	DATE:	BY:	CHK:	
		<p>REVISIONS</p>			
<p>© COPYRIGHT 2018 SUBIRRAM CONSULTING ENGINEERS, INC. CERTIFICATE OF AUTHORIZATION NO. 2654260373500</p>					
<p>ALL RIGHTS RESERVED</p>					

DRAWN BY:	DAREN J. PHIL, PE NJ PROFESSIONAL ENGINEER LICENSE NO. 2422019100 
RHK 03/28/2019	
CHECKED BY:	
EBA 03/28/2019	
CHECKED BY:	DATE: 03/28/2019

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ENGINEERS, INC.**

CO. NO.: 24G-A28037500
21M/H00004200

• Civil Engineers • Municipal Engineers •
• Landscape Architects •
• Planners • Environmentalists • Land Surveyors •

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Hlanders, N.J. 07836-9733 Fax: 1776 Wal, N.J. 08736-7322 Bld. 1776

EXCELLENCE ♦ ECONOMY ♦ ENVIRONMENT

<p align="center">PRELIMINARY AND FINAL MAJOR SITE PLAN FOR MARS INCORPORATED PROPOSED TRAILER PARKING LOT BLOCK 4, LOT 1 TOWN OF HACKETTSTOWN COUNTY OF WARREN, STATE OF NEW JERSEY</p>	<p>PROJECT NUMBER: SCE-8719.074</p>
	<p>SCALE: N.T.S.</p>
	<p>SHEET 14 OF 14</p>
<p align="center">CONSTRUCTION DETAILS IV</p>	
<p>REVISION <u>B</u></p>	