

**AGENDA**  
**PLANNING BOARD**  
**MEETING TIME 6:30 PM - MAIN MEETING ROOM**  
**JANUARY 7, 2026**

1. OPENING STATEMENT

2. ROLL CALL

|  |  |
|--|--|
| MR. DAVID MERCES<br><br>Class IV Member      | MS. ROSEANN ETESON<br><br>Class I/Mayor's Designee               |
| MR. CARL RATHJEN<br><br>Class IV Member      | MR. JOHN RENTSCHLER<br><br>Class II/Public Official Member       |
| MR. KEVIN COLANGELO<br><br>Class IV Member   | MR. KEVIN SETTEMBRINO<br><br>Class III/Township Committee Member |
| MR. STEVE SCHWEIZER<br><br>Class IV Member   |  |
| MR. VLAD BERSON<br><br>Class IV Member       | MR. JAY BANASIAK<br>Alternate #1                                 |
| MR. JOSEPH AMECANGELO<br><br>Class IV Member | MR. JAMES PISANO<br><br>Alternate #2                             |

3. SALUTE TO THE FLAG

4. READING OF AGENDA BY THE SECRETARY

5. APPROVAL OF MINUTES

Minutes to be posted to Township Website Upon Approval

6. APPROVAL OF RESOLUTIONS

**None**

7. ADMINISTRATIVE MATTERS

Request for Extension of Time #2019-201 – LaSalle, Lincroft, Inc. (Christian Brothers Academy), Block 1063, Lot 67.01, Newman Springs Road, R-220 Zone.

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8. OLD BUSINESS

None

9. NEW BUSINESS

- 9.I. #2025-400 – Milano Brothers Builders, LLC, Walada Avenue & Arlington Avenue, Block 158, Lot 1; Block 159, Lot 3; Block 122, Lot 122, Located In The R-7 Zone.

The applicant is seeking Preliminary & Final Major Subdivision Approval and Minimum Lot Frontage Variances where 75 feet is required, and 39.27 feet is proposed for New Lot 1; 64 feet is proposed for New Lot 2; 39.27 feet is proposed for New Lot 3; and 66.45 feet is proposed for New Lot 4.

Documents:

[WALDA AVENUE PLANNERS TECHNICAL MEMORANDUM.PDF](#)  
[WALADA AVENUE T AND M REVIEW.PDF](#)  
[WALADA AVENUE SUBDIVISION PLAN.PDF](#)

10. ADJOURNMENT

# TOWNSHIP OF MIDDLETOWN

Planning Board  
1 Kings Highway  
Middletown, NJ 07748-2504

DAVID MERCES  
Chairman



Organized December 14, 1667  
"Pride in Middletown"

AMY H. CITRANO, P.P., A.I.C.P.  
Director of Planning

DEBRA YURO  
Planning Board Secretary

Tel: (732) 615-2102  
Fax: (732) 615-2103

## TECHNICAL MEMORANDUM

**DATE:** December 19, 2025  
**BOARD:** Planning Board  
**APPLICATION:** Milano Builders  
Walada Avenue & Arlington Avenue  
Block 122, Lot 122; Block 158, Lot 1; Block 159, Lot 3  
Preliminary & Final Major Subdivision with Variances

### PROJECT DESCRIPTION

The subject property contains three (3) existing vacant, wooded lots located to the rear of existing single family homes along Walada Avenue in Port Monmouth. The applicant is proposing to subdivide the subject property into four (4) new single family residential lots. Access to the new lots will be from an existing unimproved right of way from Walada Avenue known as Barton Place (40 ft ROW). The applicant proposes to improve Barton Place with a 40 ft wide cul-de-sac (28 ft wide cartway). There is an unimproved right of way named Arlington Avenue the borders the subject property to the rear and south. The applicant proposes to vacate this ROW as part of this proposal.

The table below compares the lot requirements to the proposed conditions for the 4-lot subdivision. Variance relief is required for lot frontage for all new lots. Variance relief may be required for minimum circle diameter, minimum gross floor area and first floor area and number of stories. Testimony shall be provided and the zoning table on the cover sheet shall be revised.

**Zoning Table: 10-Lot Subdivision**

|                         | <b>R-7 Zone Standard</b> | <b>New Lot 1</b>         | <b>New Lot 2</b>         | <b>New Lot 3</b>         | <b>New Lot 4</b>         |
|-------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| Min. Lot Area:          | 7,500 sf                 | 13,909 sf                | 12,800 sf                | 18,136 sf                | 13,565 sf                |
| Min. Lot Frontage       | 75 ft                    | 39.27 ft *               | 64 ft*                   | 39.27 ft*                | 66.45 ft*                |
| Min. Buildable Lot Area | 5,000 sf                 | 13,909 sf                | 12,800 sf                | 18,136 sf                | 13,565 sf                |
| Min. Circle Diameter    | 50 ft                    | Testimony to be provided | Testimony to be provided | Testimony to be provided | Testimony to be provided |

### **Many Neighborhoods. One Middletown!**

Belford ◊ Chapel Hill ◊ Fairview ◊ Harmony ◊ Leonardo ◊ Lincroft ◊ Locust ◊ Middletown Village  
Monmouth Hills ◊ Navesink ◊ New Monmouth ◊ North Middletown ◊ Nut Swamp ◊ Oak Hill ◊ Port Monmouth ◊ River Plaza

|                         | <b>R-7 Zone Standard</b> | <b>New Lot 1</b>                         | <b>New Lot 2</b>                         | <b>New Lot 3</b>                         | <b>New Lot 4</b>                         |
|-------------------------|--------------------------|--|--|--|--|
| Min. Building Setbacks: |                          |  |  |  |  |
| Front                   | 20 ft                    | ≥20 ft                                   | ≥20 ft                                   | ≥20 ft                                   | ≥20 ft                                   |
| Side                    | 10 ft                    | ≥ 10 ft                                  | >10 ft                                   | >10 ft                                   | >10 ft                                   |
| Rear                    | 20 ft                    | ≥ 20 ft                                  | >20 ft                                   | >20 ft                                   | >20 ft                                   |
| Min. Gross Floor Area   | 900 sf                   | Testimony to be provided                 | Testimony to be provided                 | Testimony to be provided                 | Testimony to be provided                 |
| Min. First Floor Area   | 800 sf                   | Testimony to be provided                 | Testimony to be provided                 | Testimony to be provided                 | Testimony to be provided                 |
| Max. Building Coverage  | 35%                      | ≤ 35%                                    | ≤ 35%                                    | ≤ 35%                                    | ≤ 35%                                    |
| Max. Lot Coverage       | 40%                      | ≤40%                                     | ≤40%                                     | ≤40%                                     | ≤40%                                     |
| Max. Building Height    | 2 ½ stories/35'          | ≤28 ft; Number of stories to be provided | ≤28 ft; Number of stories to be provided | ≤28 ft; Number of stories to be provided | ≤28 ft; Number of stories to be provided |

\* Variance relief shall be required.

The proposal requires a "Planning Variance" for the proposed improvement of Barton Place. As indicated by the Board Engineer, the applicant proposes a 28 ft. wide paved road with an approximately 18.5 ft. radius cul-de-sac within the Barton Place Right-of-Way. The proposed radius does not meet RSIS requirements for cul-de-sacs which require a minimum 40 ft. radius and an additional 8 ft. radius beyond the edge of the cartway to the proposed Right-of-Way (48 ft. radius R.O.W.). Additionally, the applicant is proposing pervious pavement within the new Barton Place roadway; and this is not an acceptable design for a municipal roadway as per the Township Engineer.

Additionally, existing off-site lots known as Block 159 Lot 4 and Block 158 Lot 5 are adjacent to the proposed cul-de-sac. These existing lots will become corner lots due to the proposed cul-de-sac, making them non-conforming in lot area and potentially street-side yard setbacks.

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#### PROPERTY DESCRIPTION, ZONING AND SURROUNDING LAND USE

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The subject property contains three (3) existing vacant, wooded lots and totals 46,445 square feet in area, located to the rear of existing single family homes along Walada Avenue in Port Monmouth. The subject property is located within Flood Zone AE (BFE 13). No freshwater wetlands are on the subject property as per the submitted NJDEP LOI.

The unimproved right of way known as Barton Place will be improved for access from Walada Avenue to the proposed subdivision. The unimproved right of way named Arlington Avenue borders the subject property to the rear and south. The applicant proposes to vacate this ROW as part of this proposal.

The subject property is located in the Residential (R-7) Zone and surrounded by residential uses in the R-7 Zone to the north, east, and west and by B-2 Zone to the south. Adjacent to the east of the subject property is Township owned open space on the ROSI.

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## PLANNING COMMENTS

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### 1. Zoning Compliance

- a. Minimum Lot Frontage – A variance is required for minimum lot frontage for all four (4) new lots.

|                   | Required | New Lot 1  | New Lot 2 | New Lot 3 | New Lot 4 |
|-------------------|----------|------------|-----------|-----------|-----------|
| Min. Lot Frontage | 75 ft    | 39.27 ft * | 64 ft*    | 39.27 ft* | 66.45 ft* |

- b. Minimum Circle Diameter – 50 ft is required. The applicant shall indicate in testimony the proposed minimum circle diameter and revise the cover sheet. A variance may be required.
- c. Minimum Gross Floor Area – 900 sf is required. The applicant shall indicate in testimony the proposed minimum gross floor area and revise the cover sheet. A variance may be required.
- d. Minimum First Floor Area – 800 sf is required. The applicant shall indicate in testimony the proposed minimum gross first floor area and revise the cover sheet. A variance may be required.
- e. Number of Stories – 2 ½ stories are permitted. The applicant shall indicate in testimony the proposed number of stories and revise the cover sheet. A variance may be required.
- f. Off-site lots (Block 159 Lot 4 and Block 158 Lot 5) – Require variances for lot area and street side yard setback as a result of the proposal.
- g. “Planning” Variance – The applicant is seeking what is commonly referred to as a “Planning Variance.” 540-504A requires every principal building shall be built upon a lot with frontage *improved* to meet the Township requirements; and the Township Engineer will not accept the proposed pervious pavement design. The pervious pavement shall be replaced with a material acceptable to the Township Engineer and Board Engineer.

Barton Place is proposed to be improved less than RSIS requirements. The Planning Board may grant a variance to permit the construction of a building that fronts upon a street that has not been improved to Township standards - as long as the following conditions are satisfied:

- Adequate access for firefighting equipment, ambulances and other emergency vehicles is provided to ensure the protection of health and safety. We defer to the Fire Advisory Board review; and
- The future street layout shown on the official Township map is preserved.

Additionally, the applicant must demonstrate to the Board that the circumstances of the case do not require the residences to be related to a street, or that disallowing the construction of a residence on the subject lot will entail practical difficulty or unnecessary hardship.

### 2. Environmental

- a. Wetlands – The applicant obtained a Letter of Interpretation (LOI) from the NJDEP dated December 22, 2022, valid through 2027, verifying there is no presence of wetlands on the subject property.
- b. Flood Hazard Area – The subject property is located in Flood Zone AE (BFE 13). Township Floodplain Administrator review and approval for the design of the homes and building height shall be made a condition of approval.

- c. Wooded Areas - As per 540-651, no more than 40% of the wooded areas within the net tract area shall be cleared or developed. The applicant shall submit the percentage of clearance to ensure compliance with this standard or a design waiver shall be required.
- Additionally, as per Ch. 423 Article VI a Tree Management Plan was submitted. The Tree Management Plan indicates a total of 212 required replacement trees. Five (5) street trees are proposed. Street trees shall not be counted to fulfill this requirement. The applicant shall indicate in testimony compliance with tree replacement requirements.

### 3. Design and Layout

- a. Proposed Street Vacation – The applicant proposes the vacation of a portion of the unimproved 40' right of way known as Arlington Avenue adjacent to the subject property. In 2023, residents along Gordon Court adjacent to the Arlington Avenue right of way, submitted a street vacation request. This request was circulated to Township Departments and applicable outside agencies and no objections were received. Township Committee approval is required for the applicant's request to vacate a portion of Arlington Avenue and shall be made a condition of approval.
- b. The proposed cul-de-sac will have a 40' right-of-way and 28' cartway with concrete curb and sidewalk. We defer to the Board Engineer and Fire Advisory Review Board whether the proposed construction and design of the road that it meets Township standards.
- The applicant shall indicate in testimony whether the proposed cul-de-sac will be a public road. The road must be accepted by the Township Engineer.
- c. The proposed building footprints and lot coverage for each new building lot max out the standards for building and lot coverage in the R-7 Zone. As per Section 540-624D(2), the applicant shall provide testimony for all proposed lots about the availability of usable rear yard and the ability to put accessory structures such as swimming pool, sheds, etc.
- d. The applicant shall indicate in testimony and provide colored renderings of the proposed residential building designs for compliance with 540-604B-C with special attention to color, finish and material to avoid the appearance of a large undifferentiated project.
- Any ground mounted generators or HVAC units proposed for the dwellings? If so, these units shall be screened as per 540-632.
  - Any signage proposed for the identification of the development?
- e. Sidewalk is proposed except for the frontage along off-site Block 159 Lot 4. The Planning Board can either grant a waiver and require a payment in lieu for that portion; or require sidewalk on both sides of the street.
- f. Stormwater management – The plans indicate two drywells per new lot in the rear yard. The plans also indicate 15 ft wide pervious driveways for each home lot and for the cul-de-sac. The applicant shall indicate in testimony maintenance responsibility of this proposed stormwater management system. We defer to the Board Engineer for additional comments related to stormwater management.
- In agreement with the Environmental Commission's review, there is a concern about the use of pervious pavement for the driveways and cul-de-sac, mainly with the required maintenance

so as not to lose the ability to percolate stormwater. The applicant shall indicate in testimony the ongoing maintenance plan for the proposed stormwater management system, specifically the pervious pavement.

- A 15' wide drainage easement is proposed along New Lots 1 and 2. As per 540-614A, an easement document shall be filed as a condition of approval.

g. Utilities –TOMSA approval review will be required for sewer connection. We defer to the Board Engineer for additional utility comments.

#### **4. Landscaping & Lighting**

- a. As per Section 540-622B(6), seven (7) street trees are required and only five (5) street trees are proposed along the new lots. Existing trees may be used towards this requirement. Testimony shall be provided how the applicant will conform with this requirement.
- b. Section 540-645E(2) requires that street trees shall have a minimum caliper of three (3") inches measured one (1') foot from the butt. The Landscape Plan notes the caliper between 2.5" to 3". The plans shall be revised to comply with this ordinance requirement.
- c. Section 540-622B(6) the applicant shall provide percentage of additional trees (not including street trees and trees to remain) required not less than 10 per acre and species breakdown.
- d. Each new lot is proposed to contain a portion of the existing wooded area. The applicant shall indicate in testimony whether this wooded area is to remain and if a conservation easement may be considered to maintain the wooded area on each new lot.
- e. Street lighting is proposed including five (5) street lights at 16' height, along the cul-de-sac road. The lights shall be consistent with JCPL design standards.
- f. We defer to the Board Engineer for additional landscaping and lighting comments.

#### **5. Miscellaneous**

- a. All utilities shall be installed underground in conformance with RSIS standards.
- b. Proposed block and lot numbers shall be approved by the Middletown Township Tax Assessor.
- c. Street naming shall be approved by the Middletown Township Committee.
- d. Affordable Housing Trust Fund – A contribution will be required to the Township Affordable Housing Trust Fund at time of issuance of certificates of occupancy, pursuant to Section 16-531.C.19.
- e. Encroachments - It appears that improvements from off-site Block 159 Lot 4 encroach into the unimproved right of way Barton Place. Also, it appears there is a fence encroachment on New Lot 4 from off-site Lots Block 159 Lots 2, 3 and 4. The applicant shall address in testimony how these encroachments are to be removed.

## 6. Approving Agencies

Final approval or letter of no jurisdiction should be obtained from the following agencies and any other agencies having jurisdiction.

- Freehold Soil Conservation District
- TOMSA
- Middletown Floodplain Administrator
- Middletown Township Fire Advisory Board

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## DOCUMENTS REVIEWED


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- Completeness submission letter, prepared by Crest Engineering Associates, Inc. dated September 29, 2025;
- Preliminary & Final Major Subdivision Plans, consisting of thirteen (13) sheets, prepared by Crest Engineering Associates, Inc., dated May 30, 2023, last revised September 29, 2025;
- Boundary and Topographic Survey, consisting of two (2) sheets, prepared by DPK Consulting, LLC, dated December 11, 2021, last revised September 22, 2025;
- NJDEP Land Use Permitting Report;
- Final Plat of Major Subdivision for Walada Enterprises, LLC, prepared by Crest Engineering Associates Inc., dated April 23, 2025;
- Tree Management Plan, prepared by Crest Engineering Associates Inc., dated March 10, 2025;
- Authorization for Freshwater Wetlands Letter of Interpretation- Extension for Walada Enterprises, LLC from the New Jersey Department of Environmental Protection, dated December 22, 2022;
- Soil Report, prepared by Air, Land & Sea Environmental Management Services, Inc., dated July 19, 2022;
- Written request for waivers;
- Project narrative, undated;
- Disclosure of Ownership;
- Certificate of Title letter, dated June 12, 2025;
- Affidavit of Ownership;
- W-9 Form;
- Verification that property taxes are current;
- Zoning Officer Denial; and
- Application for Development Permit.

We reserve the right to make additional comments based upon the submission of additional documents or testimony presented to the Board.

### Report Prepared by:

  
Amy H. Citrano, PP, AICP  
Director of Planning

  
Patricia Dunkak  
Sustainability Coordinator

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**LOCATION MAP**

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MIPB-R9140

December 18, 2025

Ms. Debi Yuro, Secretary  
Township of Middletown Planning Board  
One Kings Highway  
Middletown, New Jersey 07748

*via E-Mail (dyuro@middletownnj.org)*

**Re: Milano Brothers, LLC  
Walada Avenue & Arlington Avenue  
Blocks 122, 158, & 159, Lots 122, 1, & 3  
Preliminary & Final Major Subdivision  
First Engineering Review**

Dear Board Members:

As requested, our office has reviewed the above referenced Preliminary & Final Major Subdivision application, consisting of the following:

- Preliminary & Final Major Subdivision Plan, prepared by Robert D. Sive, P.E., of Crest Engineering Associates, Inc., dated May 30, 2023, last revised September 29, 2025, consisting of thirteen (13) sheets.
- Final Plat prepared by Daniel P. Hundley, P.L.S., of Crest Engineering Associates, Inc., dated April 23, 2025, last revised September 29, 2025, consisting of one (1) sheet.
- Boundary and Topographic Survey prepared by James J. Heiser, P.L.S., of DPK Consulting, LLC, dated December 23, 2023, last revised September 22, 2025, consisting of one (1) sheet.
- Tree Management Plan prepared by Robert D. Sive, P.E., of Crest Engineering Associates, Inc., dated March 20, 2025, consisting of one (1) sheet.
- Soils Report prepared by Z. John Zingis Jr. of Air, Land & Sea Environmental Management Services, dated July 19, 2022.
- Completeness Review, prepared by Amy Citrano, P.P. of the Township of Middletown, dated October 8, 2025.
- NJDEP Land Use Permitting Report
- NJDEP LOI Extension Letter prepared by Ariana Tsiattalos, of NJDEP, dated December 22, 2022.

Based on our review and site visit, we offer the Board the following comments and suggestions:

**A. Project Description**

The tract in question consists of Lot 1 of Block 1589, Lot 2 of Block 159, and Lot 122 of Block 12 and located within the R-7 zone. The tract fronts on two unimproved right-of-way paper streets, Arlington Avenue and Barton Place. The overall tract area is undeveloped and wooded.

The applicant is seeking Major Subdivision approval to subdivide three (3) combined lots as well as vacate a portion of the Arlington Avenue right-of-way for the creation of four (4) new lots fronting on Barton Place. The subject application proposes the construction of four (4) single family residential dwellings within the proposed lots, along with constructing a new roadway and cul-de-sac on Barton Place with associated curbing and sidewalk to connect to Walada Avenue. Utility extensions are proposed from Walada Avenue to service the proposed dwellings. Additionally, the applicant proposes to construct an underground infiltration system within proposed Lots 1 & 2, as well as individual drywell systems on each of the four proposed Lots.



**Le:** Township of Middletown  
Attn: Ms. Debi Yuro, Secretary

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**B. Variances and Design Waivers**

| ORDINANCE SECTION     | ORDINANCE REQUIREMENT   | PROPOSED CONDITION   | VARIANCE/WAIVER REQUIRED?                         |
|-----------------------|---|--|---|
| <b>540-624.K</b>      | The building envelope for any lot shall be of such dimensions that it shall be able to contain within it the shape of a circle whose minimum diameter is not less than 50 FT  | Lot 1: 44 FT<br>Lot 2: 44 FT<br>Lot 3: 44 FT<br>Lot 4: 44 FT<br>(Applicant to Confirm)                               | Variances Required for Proposed Lots 1, 2, 3, & 4 |
| <b>540-916.(3)</b>    | Minimum Lot Frontage of 75 FT.  | Lot 1: 39.27 FT<br>Lot 2: 64.00 FT<br>Lot 3: 39.27 FT<br>Lot 4: 66.45 FT   | Variances Required for Proposed Lots 1, 2, 3, & 4 |
| <b>540-609.I.(3)</b>  | The minimum slope for lawns shall be 3/4%   | Approximately:<br>Lot 3: 0.4%<br>Lot 4: 0.4%   | Waivers Required for Proposed Lots 3& 4           |
| <b>540-609.I.(4)</b>  | The maximum lawn grading within five feet of a building is 10%.   | Approximately:<br>Lot 1 = 21%<br>Lot 2 = 49%<br>Lot 4 = 34%  | Waivers Required.                                 |
| <b>540-612.J</b>      | Access drives for single- and two-family dwellings shall have a minimum width of 10 feet and a maximum width of 12 feet when they provide access to a one-car garage  | Lot 1: 15 FT<br>Lot 2: 15 FT<br>Lot 3: 15 FT<br>Lot 4: 15 FT   | Testimony to be provided.                         |
| <b>540-619.B.4</b>    | Garages, whether attached or detached, shall be arranged to open to the side or rear of the lot, except fully detached garages located entirely to the rear of the principal building.  | Garages to open to the front of the lot.   | Wavier Required.                                  |
| <b>540-622.B.6</b>    | Besides screening and street tree requirements, additional trees shall be planted throughout the subdivision. The number of trees planted shall be not less than 10 per acre, calculated on the basis of the entire subdivision tract.  | No additional trees proposed.  | Wavier Required.                                  |
| <b>540-631.C.2(a)</b> | Flexible asphalt concrete pavements shall have an equivalent structural depth of at least 10 inches for local, local collector, and minor collector streets. Having a minimum wearing surface of not less than 1 1/2 inches of pavement, hot-mix asphalt (HMA) (Mix 9.5M64), and a minimum HMA (Mix 19M64) base course of not less than 2 1/2 inches and a dense-graded aggregate base course to provide the remaining depth. | The applicant does not propose 9.5M64 HMA Surface Course or 19M64 HMA Base Course. Porous asphalt pavement proposed. | Waiver Required.                                  |



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| ORDINANCE SECTION | ORDINANCE REQUIREMENT   | PROPOSED CONDITION  | VARIANCE/WAIVER REQUIRED? |
|-------------------|---|---|---------------------------|
| <b>540-634.A</b>  | Sidewalk construction shall be required on both sides of all streets within a development and entirely around the perimeter of all cul-de-sacs. Where the development abuts only one side of an existing street, the sidewalks shall only be required for that side. Sidewalks shall also be constructed at other places, such as pedestrian walkways, access points to open space or where the sidewalk can connect to another existing sidewalk system. | Sidewalk is only proposed along both sidewalks of the street, with the exception of the north side of Barton Place abutting adjacent Lot 4. | Waiver required.          |
| <b>540.641.G</b>  | Minimum two-way pavement width shall be 30 ft. for local roads.   | Roadway Width: 28 FT  | Waiver Required.          |
| <b>540-651.B</b>  | In zone districts in the Township where the maximum percent of lot coverage is greater than 15%, no more than 40% of such wooded areas within the net tract area may be cleared or developed. The remaining 60% shall be maintained as permanent open space or preserved within the lot.  | Approximate Clearing Limit > 40%  | Waiver Required.          |

### **C. Off-Site and Off-Tract Improvements**

1. The applicant proposes a pervious pavement drainage system within the public roadway of Barton Place. This proposal will create challenges of ensuring restoration of this drainage system to its original design specifications if/when future excavation/repairs are conducted by the Township, Utility Authorities, or local contractors. In addition, maintenance of the system will be challenging for the Township. As such, we do not recommend this drainage proposal. The applicant shall investigate alternative drainage solutions to eliminate this system from the Township Right-of-Way.
2. The applicant proposes a 28 ft. wide paved road with an approximately 18.5 ft. radius cul-de-sac within the Barton Place Right-of-Way. The proposed radius does not meet Township Ordinance§540.641.D.(3) to provide a 50 ft. paved radius, nor does it meet RSIS requirements for cul-de-sacs which require a 40 ft. radius and an additional 8 ft. radius beyond the edge of the cartway to the proposed Right-of-Way (48 ft. radius R.O.W.). The applicant shall review the design and provide plans complying with RSIS and Township requirements. In addition, the applicant shall provide the radius dimension of the paved area of the cul-de-sac on the plans, currently, the only dimension provided is the radius to the proposed Right-of-Way.



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3. The applicant proposes sidewalk along the property frontages as well as on the south side of Barton Place to the intersection of Walada Avenue. No sidewalk is proposed on the north side of Barton Place to connect to this intersection. Per Ordinance §540-634.A, sidewalk is required on both sides of all streets within a development. If sidewalk is not installed, an appropriate contribution should be made in accordance with Ordinance §540-419.A. It should be noted that sidewalks are required per RSIS requirements.
4. The applicant shall be responsible to mill and overlay the pavement along Walada Avenue with 2 inches of 9.5M64 surface course pavement to 1 ft. beyond the outside limits of trenching or, to the opposite side curb line if trenching extends beyond the centerline. Repair areas shall be rectangular in nature. Based on available mapping, it appears the existing gas main is in the west side of Walada Avenue and additional excavation and street restoration will be required than depicted on the plans.
5. The applicant shall be aware that any damages to the existing pavement due to the proposed construction shall be repaired or replaced to the satisfaction of the Township Engineer.
6. We recommend the applicant provide crosswalk and stop bar striping at the intersection of Walada Avenue.
7. The plans shall be revised to dimension the proposed curb radii at the intersection of Walada Avenue. The minimum curb radius shall be 5 ft.
8. The applicant proposes a sanitary sewer extension from Walada Avenue. We defer to TOMSA for review of the sanitary sewer improvements.
9. The applicant is proposing to relocate a fence that exists within the Barton Place Right-of-Way which appears to be owned by Lot 4. The fence is proposed to be relocated within the property boundaries of Lot 4. Based on aerial imagery, it appears there is an existing above-ground pool in the rear yard of Lot 4 which may conflict with the relocated fence. The applicant shall provide testimony regarding this. A construction easement agreement will be required to be obtained from the owner of Lot 4.

**D. Site Requirements/Layout**

1. It is noted that no-parking restrictions are proposed on both sides of the proposed roadway. The R7-1 sign detail shall be revised to be consistent with MUTCD standards.
2. The applicant is proposing driveways and garages on each lot. Per RSIS a one-car garage and driveway combination count as 2 spaces. therefore, it appears that adequate parking is provided for the proposed single-family dwellings, however, the applicant shall provide testimony to confirm.
3. The applicant proposes 15 FT wide driveways with garages. Per Ordinance §540-612.J., access drives for single-family dwellings with a one-car garage are permitted to be a maximum of 12 FT and drives serving two-car garages may be up to 24 FT wide. The applicant shall confirm if the garages are proposed as one- or two-car garages. A design waiver may be required upon further review.



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4. The applicant shall note locations of A/C and other mechanical equipment on the individual plot plans, these areas shall be screened in accordance with the requirements of the Ordinance and shall meet any applicable setback requirements.
5. It is noted that the nearest existing fire hydrant is located on the corner of Walada Avenue and Main Street, over 400FT from the intersection of Walada Avenue and Barton Place. The applicant proposes a fire hydrant at the cul-de-sac bulb. We defer further review to the Township Fire Advisory Board.
6. The plans shall revise the circle diameter to be measured within the lot's buildable envelope.

**E. Drainage/Grading**

1. The proposed area of disturbance exceeds 1.0 acre (1.02 acres) and the increase in motor vehicular surface (0.18 ac) and non-motor vehicular impervious surface (0.18 ac), therefore, the project is considered a "major development" as defined by N.J.A.C. 7:8, and is subject to the NJDEP Stormwater Management standards.
2. The applicant indicates that the stormwater quantity requirement is addressed by reducing the post construction peak runoff rates and the volumes for the 2, 10 and 100-year storm events by using (2) drywells for each proposed dwelling, Pervious Paving driveway systems and a stone trench.
3. This project increase in motor vehicle impervious surface area does not exceeds 0.25 acres; therefore, the water quality requirements are not applicable per N.J.A.C. 7:8-5.5.
4. The applicant indicates that the project meets the groundwater recharge requirements to maintain 100 percent of the average annual pre-construction groundwater recharge volume for the site, in accordance with N.J.A.C. 7:8-5.4(a)2i(1) by (2) drywells for each proposed dwelling, Pervious Paving, driveway systems and a stone trench.
5. The applicant is proposing pervious pavement within the new Barton Place roadway. After discussion with the Township Engineer, this is not an acceptable design for a municipal roadway. The Township does not have the capabilities to maintain this system and this system does not meet Township Roadway standards. The applicant shall re-evaluate the drainage design to remove pervious pavement from within the Township Right-of-Way and provide an alternative design.
6. Per Section 7:8-5.8(c) of RSIS, the responsibility for maintenance of the stormwater system in a residential development shall not be assigned or transferred to the owner or tenant of an individual property in a residential development or project, unless such owner or tenant owns or leases the entire residential development or project. The applicant shall provide testimony confirming that the stormwater systems will be maintained by a Homeowners Association (HOA). HOA documents outlining maintenance responsibilities shall be provided as a condition of any approval.



**Le:** Township of Middletown  
Attn: Ms. Debi Yuro, Secretary

**Re:** Milano Brothers, LLC  
Walada Avenue & Arlington Avenue  
Blocks 122, 158, & 159, Lots 122, 1, & 3  
Preliminary & Final Major Subdivision  
First Engineering Review

7. The application shall provide the following documents for review,
  - FEMA Map
  - Test pits information on “Grading and Drainage Plan”
  - Roof drain connection to the drywells
  - Locations of the inspection port for the stone trench and drywells.
  - Infiltration basin notes.
  - Stormwater Management Facilities Operations & Maintenance.
  - the X (1/2 length of basin, X direction in feet) and Y (1/2 length of basin, Y direction in feet) swapped Groundwater Mounding Calculations
8. The applicant appears to propose flood vents at each dwelling and is within the fluvial 100-year floodplain. The applicant shall confirm and provide the following,
  - a. Confirm compliance with the NJDEP Flood Hazard Area (FHA) rules.
  - b. Provide all required permits associated with this project.
  - c. Depict the flood plain limits on the plans.
  - d. We defer to the Township Floodplain Administrator for any additional comments.
9. According to NJ SWM BMP Chapter 12, Soil Testing Criteria, Section 2.3, two (2) soil borings are required for each green infrastructure if the BMP is greater than 500 square feet in area.
10. Applicant shall provide the offsite (adjacent lots) topo and contours to ensure no offsite runoff sheet flows onto adjacent properties.
11. Applicant shall revise the width of the Stone Trench Detail from 5.5’ to 10’ in the plan view detail.
12. Pursuant to NJAC 7:8-5.2(m) all stormwater management measures must be reflected in a deed notice recorded in the Office of the Monmouth County Clerk. A form of deed notice should be submitted to the Township for approval before filing.
13. As part of the NJDEP Stormwater reporting procedures the applicant should complete and submit to the Township Engineer the NJPDES Tier A, MS4 – Attachment D – Major Development Stormwater Summary sheet upon final approval from the Board. A copy shall also be provided to the Board Engineer.
14. Pursuant to Ordinance 540-609.I.((3), a minimum yard slope of 0.75% is required, whereas there appear to be areas in Lots 3 & 4 with slopes as low as approximately 0.4%. The applicant shall review and increase the minimum slopes proposed, as feasible.
15. The plans should be revised to reduce/eliminate the slopes within 5 feet of the buildings to a maximum of 10% in accordance with Ordinance 540-609.I.((4).
16. Detailed grading information shall be provided for the proposed curb ramps along Walada Avenue.



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**F. Environmental**

1. It is noted that the applicant has received a Freshwater Wetlands Letter of Interpretation – Extension which verified the absence of any wetlands on the property. This extension is valid until October 2027.
2. It is noted that this property is located within the AE-13 Flood zone. We defer further review to the Township Floodplain Manager.

**G. Lighting and Landscaping**

1. The applicant is proposing post top streetlights with a 16 ft. mounting height. The applicant shall confirm that the proposed streetlighting meets the requirements of the Ordinance, Section 540-643.
2. Per section 540-528.C.12(a) of the Ordinance, light spillage shall not exceed 0.5 foot-candles beyond any property line. Based on the proposed lighting levels it appears that there is spillage into Lots 4 and 5 exceeding 0.5 fc. The plans shall be revised to address this. The applicant shall also address any issues with glare and provide adequate shielding for nearby residences.
3. The applicant shall review the lighting at the southern curb ramp on Walada Avenue. It appears an existing streetlight on Walada will provide additional illumination for this crossing. However, this was not modeled in the lighting plan. The applicant shall confirm that the crossing will be adequately lit.
4. A Light Pole Foundation construction detail shall be provided.
5. The lighting schedule and plans shows a quantity of 5 total light poles, but the colonial post top standard detail states 6 total streetlights. The applicant shall revise the plans accordingly.
6. The applicant shall confirm that the proposed lighting will be directed downwards.
7. The applicant shall confirm if the proposed lighting will be dark sky compliant.
8. Ordinance §540-651.B permits no more than 40% of wooded areas within the net tract area to be cleared or developed. The proposed clearing appears to exceed this requirement. The plans shall be revised to confirm.
9. Ordinance §540-645 requires street trees to be planted at a maximum spacing of 30 ft. on center. Based on a total frontage of 209 FT, 7 street trees are required whereas 5 are proposed. The plans shall be revised to comply, or a design waiver will be required.
10. In addition to street tree requirements, Ordinance §540-622.B.6. requires 10 additional trees per acre to be planted throughout subdivisions, whereas no additional trees are proposed. The plans shall be revised to comply, or a design waiver will be required.



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11. Ordinance §540-645.E.2. requires shade trees to have a minimum caliper size of three (3) inches, whereas, the plans note 2.5 to 3 inches. The plan shall be revised to provide a minimum of 3-inch caliper.
12. Ordinance §540-645.B requires that proposed street trees shall not lie closer than five feet to sidewalks. The plans shall be revised to confirm compliance with this requirement.
13. The applicant has provided a Tree Management Plan. The following comments pursuant to the tree removal and replacement requirements of Ordinance 2024-3446 are offered:
  - a. The plan bases tree removal on 0.1-acres tree inventory plots. As less than 1 acre of the tract is proposed to be cleared, the number and species of trees to be removed are to be based on the actual count.
    - i. The tree count shall include the existing tree along the north lot line of Lot 5, which is located outside the limit shown on the woodlands management plan, as it would require removal for the construction of the roadway and sidewalk.
  - b. Per the tree removal and replacement calculations, a total of 212 replacement trees are required. The landscaping plan proposes 5 street trees, however only up to 5% of trees required by a landscaping plan may be credited towards replacement requirements. Therefore only 1 street tree may be credited as a replacement tree.
  - c. The applicant shall advise how they will comply with the tree replacement and/or waiver requirements by either providing the remaining 211 trees on-site, by providing the remaining 211 trees off-site, or, if a waiver is approved by the Board, by providing a contribution to the Tree Replacement Trust Fund.
  - d. The Tree Management Plan and tree replacement requirements are also subject to review to the Township Engineer, Township Planner, and the Township's Tree Expert. We defer further review to them for same.
14. It appears a marginal +/-6" buffer strip is proposed between the curb and sidewalk which will be difficult to maintain. We recommend this be eliminated.

#### **H. Subdivision**

1. The applicant proposes right-of-way vacations for portions of the unimproved paper streets, Arlington Avenue and Barton Place. As a condition of approval, the applicant will be required to receive approval the Township Committee prior to filing the subdivision. The limits of the Right-of-Way vacations should be reviewed by the Township Engineer. The Township Committee should also determine if the additional sections of Arlington Avenue within these areas should remain as paper streets or be vacated to the adjacent properties.
2. The applicant shall obtain confirmation in writing from the Township Tax Assessor that the proposed lot numbering is acceptable. Additionally, the existing lots are within separate blocks, however the proposed lot numbering does not indicate which block the proposed lots will be a part of. This should be confirmed with the Tax Assessor as well.
3. The plan shall be revised to include additional curve data for the proposed lots lines along the cul-de-sac (delta angle/chord distance/chord bearing).



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4. Drainage and utility easements are depicted on the plans. The Subdivision plan should be revised to further dimension the proposed easements from proposed lots lines and provide additional line/curve data for confirmation of easement limits.
5. If approved, easement documents and metes and bounds descriptions for all easements shall be provided for review by the Board Engineer and Board Attorney.

**I. Miscellaneous**

1. The plans shall be revised to depict existing structures on adjacent lots abutting the property. Additionally, Lots 4 & 5 should further detail existing improvements on the property to help further assess any impacts of the proposed improvements.
2. The plans shall be revised to properly indicate all waivers and variances required/requested for this application.
3. The final plan submitted for signatures must be signed by the owner and notarized.
4. The applicant shall be responsible to obtain a road opening permit from the Township Department of Public Works for utility connections on Walada Avenue.
5. A note shall be added to the plan stating that all improvements will be ADA/PROWAG compliant where applicable.
6. Approvals or letters of service should be obtained from the following agencies:
  - Middletown Township Fire Advisory Board
  - Township of Middletown Sewerage Authority (TOMSA).
  - Monmouth County Planning Board
  - NJDEP
  - Freehold Soil Conservation District.
  - New Jersey American Water
  - New Jersey Natural Gas
  - Comcast Cable
  - JCP&L
  - Verizon
  - All other agencies and departments having jurisdiction.



**Le: Township of Middletown**  
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If you have any questions or require additional information, please call.

Very truly yours,

T&M ASSOCIATES

ROBERT R. KEADY, P.E., C.M.E.  
MIDDLETOWN PLANNING BOARD ENGINEER

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GREGORY T. GITTO, P.E., C.M.E.  
GROUP MANAGER

RRK:GTG:GMM:AJA

cc: Amy Citrano, PP, AICP, Director of Planning, ([acitrano@middletownnj.org](mailto:acitrano@middletownnj.org))

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## LIST OF OWNERS WITHIN 200'

| BLOCK | TAX LOT | OWNER   |
|-------|---------|---|
| 122   | 99      | TWP OF MIDDLETOWN<br>1 KINGS HWY<br>MIDDLETOWN, NJ 07748                          |
| 122   | 100     | BONELLO, GIUSEPPE & JESSICA<br>5 WALADA AVE<br>PORT MONMOUTH, NJ 07758            |
| 122   | 101     | ROSE, WILLIAM & DIANE<br>7 WALADA AVE<br>PORT MONMOUTH, NJ 07758                  |
| 122   | 103     | MILLER, CLAUDE W & NANCY M<br>9 WALADA AVE<br>PORT MONMOUTH, NJ 07758             |
| 122   | 104     | PITTA, VICTOR FELIPE & SAMANTHA LUC<br>11 WALADA AVE<br>PORT MONMOUTH, NJ 07758   |
| 122   | 105     | VIDAL, JOHN CHARLES & JOHN JR.<br>15 WALADA AVE<br>PORT MONMOUTH, NJ 07758        |
| 122   | 106     | SMITH, THOMAS & ERICA M<br>17 WALADA AVE<br>PORT MONMOUTH, NJ 07758               |
| 122   | 107     | WALADA ENTERPRISES LLC<br>30 N LAKE DR<br>MIDDLETOWN, NJ 07748                    |
| 122   | 111     | TWP OF MIDDLETOWN<br>1 KINGS HWY<br>MIDDLETOWN, NJ 07748                          |
| 122   | 112     | MARTIN, KATHLEEN R.<br>18 GORDON COURT<br>PORT MONMOUTH, NJ 07758                 |
| 122   | 113     | LEE, HYUN K & IN K KIM<br>17 GORDON COURT<br>PORT MONMOUTH, NJ 07758              |
| 122   | 114     | BURBY, ADAM & COLLEEN<br>15 GORDON COURT<br>PORT MONMOUTH, NJ 07758               |
| 122   | 115     | SECHAM, WILLIAM J & DEBORAH W<br>13 GORDON COURT<br>PORT MONMOUTH, NJ 07758       |
| 122   | 116     | UNKEI, DANIEL & WERNER, AMY<br>11 GORDON COURT<br>PORT MONMOUTH, NJ 07758         |
| 122   | 117     | FERRANTE, ROBERT C<br>13 HUMBERLY CT, APT. 26<br>RED BANK, NJ 07701               |
| 122   | 118     | MAY, NATHAN & KATELYN<br>7 GORDON CT<br>PORT MONMOUTH, NJ 07758                   |
| 122   | 119     | GLYNN, MICHAEL & GUMBA LAURENE<br>5 GORDON CT<br>PORT MONMOUTH, NJ 07758          |
| 122   | 120     | SHEARER, JOHN C<br>3 GORDON CT<br>PORT MONMOUTH, NJ 07758                         |
| 122   | 121     | HWANG, SOK Y & BETH A HWANG<br>1 GORDON CT<br>PORT MONMOUTH, NJ 07758             |
| 122   | 122     | WALADA ENTERPRISES LLC<br>30 N LAKE DR<br>MIDDLETOWN, NJ 07748                    |
| 122   | 123.01  | BUNO, TONY & WTALE NICHOLAS JOHN<br>160 MAIN ST<br>PORT MONMOUTH, NJ 07758        |
| 122   | 123.02  | MCCARTHY, DENNIS J<br>PO BOX 4252<br>MIDDLETOWN, NJ 07748                         |
| 122   | 123.03  | ZIVANOVIC, VLADIMIR & WHITNEY LEE<br>158 MAIN ST<br>PORT MONMOUTH, NJ 07758       |
| 122   | 124     | IRWIN, GEORGE<br>158 MAIN ST<br>PORT MONMOUTH, NJ 07758                           |
| 122   | 125     | MONAHAN, HENRY & BARBARA<br>154 MAIN ST<br>PORT MONMOUTH, NJ 07758                |
| 122   | 126     | PETROVICH, HILDEGARD & PETERSON, CARMEN<br>152 MAIN ST<br>PORT MONMOUTH, NJ 07758 |
| 122   | 127     | LI, TENG MING & ZOU, MICHELE<br>150 MAIN ST<br>PORT MONMOUTH, NJ 07758            |

## ZONE : RESIDENTIAL ~ R-7 ZONE

| MINIMUMS:                       | REQUIRED:   | NEW LOT 1:  | NEW LOT 2:  | NEW LOT 3:  | NEW LOT 4:  |
|---------------------------------|-------------|-------------|-------------|-------------|-------------|
| LOT AREA (Interior Lot)         | 7,500 S.F.  | 13,909 S.F. | 12,800 S.F. | 18,136 S.F. | 13,565 S.F. |
| LOT FRONTAGE (Interior Lot)     | 75 FT.      | 39.27 FT.   | 64.00 FT.   | 39.27 FT.   | 66.45 FT.   |
| CIRCLE DIAMETER                 | 50 FT.      | > 50 FT.    | > 50 FT.    | > 50 FT.    | > 50 FT.    |
| BUILDABLE LOT AREA              | 5,000 S.F.  | 13,909 S.F. | 12,800 S.F. | 18,136 S.F. | 13,565 S.F. |
| FLOOR AREA, GROSS (Multi-Story) | 800 S.F.    | ≥ 800 S.F.  | ≥ 800 S.F.  | ≥ 800 S.F.  | ≥ 800 S.F.  |
| PRINCIPAL BUILDING              |             |             |             |             |             |
| FRONT SETBACK                   | 20 FT.      | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    |
| SIDE SETBACK                    | 10 FT.      | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    |
| SIDE, STREET SETBACK            | 10 FT.      | N/A         | N/A         | N/A         | N/A         |
| REAR SETBACK                    | 20 FT.      | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    |
| ACCESSORY BUILDING              |             |             |             |             |             |
| SIDE SETBACK                    | 10 FT.      | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    |
| REAR SETBACK                    | 10 FT.      | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    |
| MAXIMUMS:                       |             |             |             |             |             |
| BUILDING COVERAGE               | 35%         | ≤ 35%       | ≤ 35%       | ≤ 35%       | ≤ 35%       |
| LOT COVERAGE                    | 40%         | ≤ 40%       | ≤ 40%       | ≤ 40%       | ≤ 40%       |
| BUILDING HEIGHT                 | 28 FT.      | ≤ 28 FT.    | ≤ 28 FT.    | ≤ 28 FT.    | ≤ 28 FT.    |
|                                 | 2.5 STORIES |             |             |             |             |

\* VARIANCE REQUIRED

## PRELIMINARY &amp; FINAL MAJOR SUBDIVISION

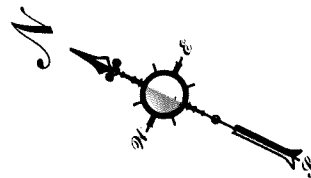
Block 158, Tax Lot 1

Block 159, Tax Lot 3

Block 122, Tax Lot 122

MIDDLETOWN TOWNSHIP

MONMOUTH COUNTY, NEW JERSEY



## VICINITY MAP

GRAPHIC SCALE



( IN FEET )

1 inch = 100 ft.

| Sheet List Table |              |   |
|------------------|--------------|---|
| 1                | A            | B   |
| 2                | Sheet Number | Sheet Title                                     |
| 3                | 1            | Cover Sheet                                     |
| 4                | 2            | Existing Conditions Plan                        |
| 5                | 3            | Site Layout Plan                                |
| 6                | 4            | Grading Plan                                    |
| 7                | 5            | Utility Plan                                    |
| 8                | 6            | Landscape Plan                                  |
| 9                | 7            | Lighting Plan                                   |
| 10               | 8            | Profile & Detail Sheet                          |
| 11               | 9            | Detail Sheet                                    |
| 12               | 10           | Soil Erosion & Sediment Control Plan            |
| 13               | 11           | Soil Erosion & Sediment Control Compaction Plan |
| 14               | 12           | Soil Erosion & Sediment Control Details         |
| 15               | 13           | Soil Erosion & Sediment Control Notes           |
| 16               |              |   |
| 17               | 1 of 1       | Final Plot                                      |

## GENERAL NOTES:

- PROPERTY KNOWN AS BLOCK 158, TAX LOT 1, BLOCK 159, TAX LOT 3 & BLOCK 122, TAX LOT 122, AS SHOWN ON SHEET 1A, LAST REVISED 12/02/11, OF THE OFFICIAL TAX MAPS OF THE TOWNSHIP OF MIDDLETOWN TOWNSHIP. THE PROPERTY IS SITUATED WITHIN THE R-7 RESIDENTIAL ZONE.
- BOUNDARY, TOPOGRAPHIC AND EXISTING SITE IMPROVEMENT INFORMATION IS BASED UPON A BOUNDARY AND TOPOGRAPHIC SURVEY BY DPK CONSULTING, DATED 12/11/2021.
- NO FRESHWATER WETLANDS ARE WITHIN THE AREA OF PROPOSED DEVELOPMENT, AS PER A NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION FRESHWATER WETLANDS LETTER OF INTERPRETATION (LOI) EXTENSION 'ABSENT' LETTER, FILE AND ACTIVITY NUMBER 1331-17-0011, FWH220001, DATED DECEMBER 22, 2022.
- THE PROPERTY LIES WITHIN THE AE FLOOD HAZARD AREA, WITH A BASE FLOOD ELEVATION OF 1.5, AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, MAP NUMBER 34025C0081F, EFFECTIVE DATE SEPTEMBER 25, 2009.
- THE PROPERTY IS CURRENTLY WOODED AND VACANT. BARTON PLACE AND ARLINGTON AVENUE ARE UNDEVELOPED, PAPER STREETS.
- THE PROPERTY IS PROPOSED TO BE SUBDIVIDED INTO 4 RESIDENTIAL LOTS AND INCLUDE THE IMPROVEMENT OF BARTON PLACE WITH A 28 FOOT WIDE PAVED CARTRAY WITH CURB AND SIDEWALK WHICH MATCHES THE ROADWAY DEVELOPMENT IN THE AREA. A PORTION OF ARLINGTON AVENUE SHALL BE VACATED.
- BARTON PLACE AND ARLINGTON AVENUE ARE PAPER STREETS (UNIMPROVED) WITH 40 FOOT WIDE RIGHT-OF-WAYS. AS PART OF THIS SUBDIVISION DEVELOPMENT, BARTON PLACE WOULD BE CLASSIFIED AS MEDIUM INTENSITY RESIDENTIAL ACCESS STREET/CUL-DE-SAC. WHILE THE RESIDENTIAL SITE IMPROVEMENT STANDARDS (RSIS) REQUIRES A RIGHT-OF-WAY WIDTH OF 50 FEET, A 40 FOOT WIDE RIGHT-OF-WAY WITH A 28 FOOT WIDE CARTRAY WITH CURB AND SIDEWALK IS PROPOSED TO MATCH THE NEIGHBORHOOD. THE PORTION OF THE ARLINGTON AVENUE RIGHT-OF-WAY WHICH ADJUTS THE SUBJECT TRACT SHALL BE VACATED.
- PARKING REQUIREMENTS:  
4 BEDROOM SINGLE-FAMILY RESIDENTIAL DWELLINGS  
2.5 PARKING STALLS PER DWELLING  
EACH NEW LOT SHALL PROVIDE 3 ON-SITE PARKING STALLS WITHIN A GARAGE AND/OR DRIVEWAY AREA
- THE PROPOSED RESIDENTIAL LOTS SHALL BE SERVED BY THE EXISTING PUBLIC POTABLE WATER DISTRIBUTION AND SANITARY SEWER COLLECTION SYSTEMS.
- WASTE AND RECYCLABLES FROM THE PROPOSED DWELLINGS WILL BE REMOVED BY THE PUBLIC SANITATION SERVICE VIA CURBSIDE PICK-UP.
- PROPOSED DWELLING ELEVATIONS AND LOT GRADING IS PRELIMINARY. LIMITS OF GRADING AND DISTURBANCE MAY VARY WITH THE IMPLEMENTATION OF RETAINING WALLS, TERRACING, RETENTION OF SLOPES, LANDSCAPING, ETC., WHICH WILL BE DETERMINED AND FINALIZED AT THE TIME OF INDIVIDUAL LOT DEVELOPMENT AND ARCHITECTURAL DESIGN.
- ALL SIGNS AND PAVEMENT MARKINGS ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH LOCAL CODE AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST REQUIREMENTS.
- ALL AREAS NOT DESIGNATED FOR ROADWAYS, DWELLINGS, SIDEWALKS AND/OR DRIVEWAYS SHALL BE PLANTED, LANDSCAPED, OR TOPSOILED IN ACCORDANCE WITH THE LANDSCAPE PLAN, ALL TOPSOIL, FERTILIZER, SEED, SOIL, MULCH AND PLACEMENT THEREOF SHALL CONFORM TO THE MOST CURRENT REQUIREMENTS OF THE SOIL CONSERVATION DISTRICT.
- ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND. LOCATION AND INSTALLATION OF NEW UTILITIES AND SERVICE CONNECTIONS NOT SHOWN ON THIS PLAN ARE THE RESPONSIBILITY OF OTHERS.
- THERE ARE NO KNOWN EXISTING COVENANTS OR DEED RESTRICTIONS.
- THERE ARE NO WATER COURSES WITHIN 200 FEET OF THE BOUNDARIES OF THE SITE.
- NO SWAMPS, BOGS OR PONDS EXIST WITHIN 200 FEET OF THE BOUNDARIES OF THE SITE.
- ALL EXISTING ON-SITE STRUCTURES ARE TO REMAIN, UNLESS NOTED OTHERWISE. ANY EXISTING FENCE ENCROACHMENTS FROM ADJACENT PROPERTIES ONTO THE SUBJECT PROPERTY SHALL BE RELOCATED, AS REQUIRED.
- ALL SITE MATERIALS AND/OR IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE ENCLOSED DETAILS, THE MIDDLETOWN TOWNSHIP LAND USE ORDINANCE AND THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
- THE CONTRACTOR OR LAYOUT PARTY SHALL VERIFY ALL ELEVATIONS AND DIMENSIONS ON THE JOB SITE AND SHALL VERIFY THAT THE PLANS BEING UTILIZED ARE FINAL AND APPROVED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO ELEVATIONS AND/OR DIMENSIONS SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN PROVIDED.
- THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO INSTALLATION OF PROPOSED IMPROVEMENTS. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF 'OTHER' UTILITIES NOT SHOWN ON THE PLAN EXIST WITHIN THE AREAS OF PROPOSED IMPROVEMENTS. SHOULD THERE BE 'OTHER' UTILITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY TO ANALYZE ANY POTENTIAL UTILITY CONFLICTS.
- THE CONTRACTOR SHOULD CALL 1-800-272-1000 SEVEN (7) DAYS PRIOR TO EXCAVATION FOR FIELD MARK OUT OF UNDERGROUND UTILITIES.
- PRIOR TO STARTING SITE CLEARING/CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE ALL REQUIRED PERMITS/APPROVALS HAVE BEEN OBTAINED. ALL SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS AND THE REQUIREMENTS AND STANDARDS OF THE PERMITTING AUTHORITY.
- ANY IMPORTED SOIL SHALL BE CERTIFIED CLEAN FILL/SOIL WHICH MEETS THE DEFINITION OF CLEAN FILL IN ACCORDANCE WITH THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S SITE REMEDIATION STANDARDS (FOUND AT N.J.A.C. 7:26C).
- THE PROPOSED DWELLINGS SHALL BE CONSTRUCTED SUCH THAT THE AREA UNDERNEATH THE FINISHED FIRST FLOOR IS SUFFICIENTLY WET FLOOD PROOFED IN ACCORDANCE WITH NFP TECHNICAL BULLETIN 7 WET FLOODPROOFING REQUIREMENTS AND LIMITATION.

## OWNER

WALADA ENTERPRISES, LLC  
30 N LAKE DRIVE  
MIDDLETOWN, NJ 07748

## APPLICANT

MILANO BROTHERS BUILDERS INC.  
845 BROAD STREET  
SHREWSBURY, NJ 07702APPROVED BY  
MIDDLETOWN TOWNSHIP PLANNING BOARD

|        |           |
|--------|-----------|
| DATE   | CHAIRMAN  |
| ATTEST | SECRETARY |
| DATE   | ENGINEER  |

CREST

Engineering Associates Inc.

Civil & Environmental Engineers  
Professional Engineers - Surveyors - Landscape Architects  
CERTIFICATE OF AUTHORIZATION NO. 246637889300100 FREE DRIVE  
MILLSTONE TOWNSHIP, NJ 08540  
(609) 448-3880ROBERT D. SIVE  
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE

5/30/23

SCALE

1" = 100'

DRAWN

RDS

CHECKED

RDS

SHEET

1 OF 13

PROJECT

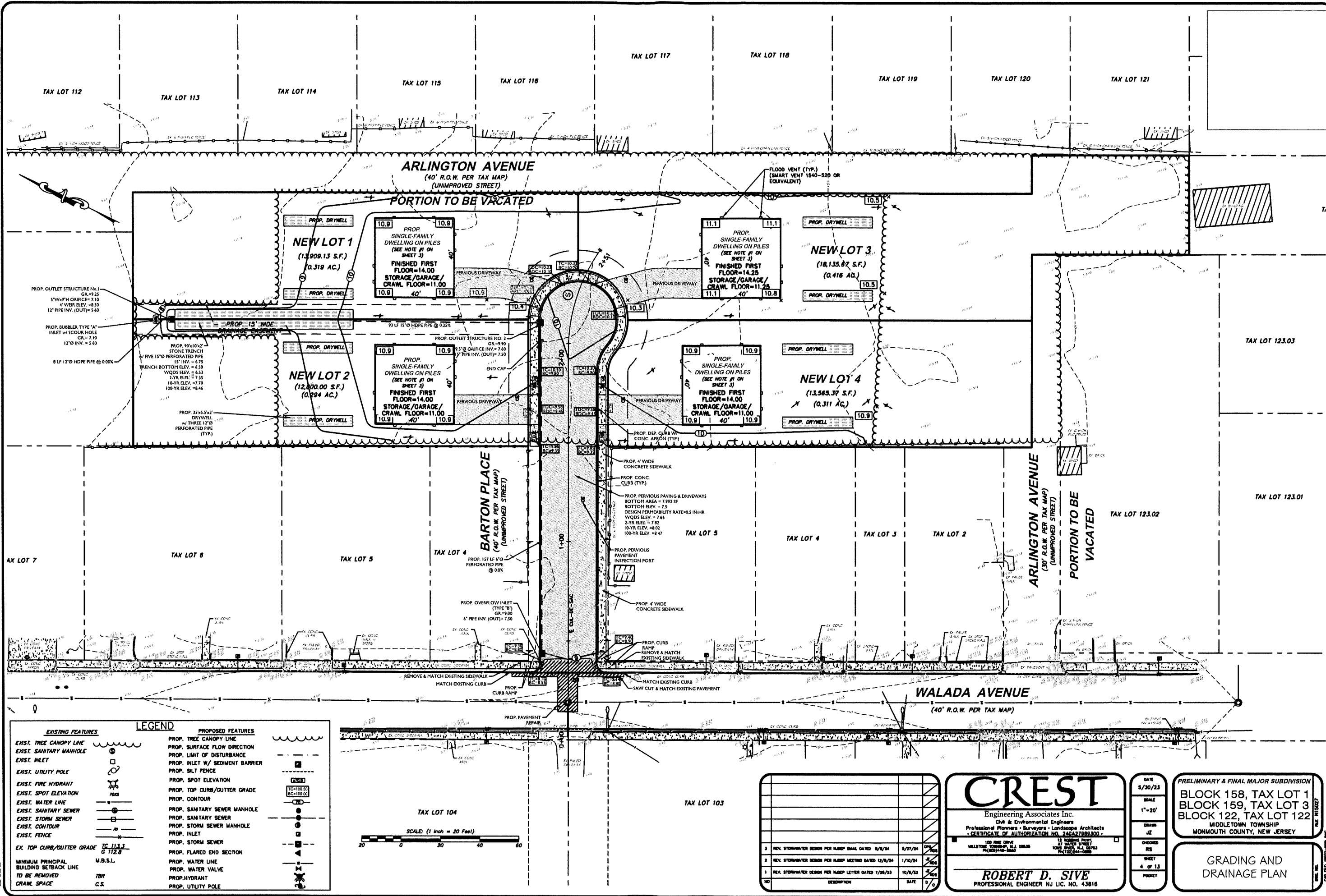
PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
TAX MAP SHEET NO. 14, LAST REV. 12/02/11  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

COVER SHEET





001-1550015027.DWG PLAN 15027.PDF PLDWG 10/7/2024 1:46:41 PM



**EXISTING FEATURES**

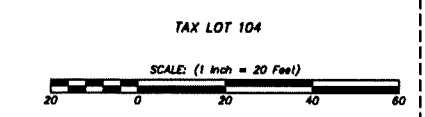
- EXIST. TREE CANOPY LINE
- EXIST. SANITARY MANHOLE
- EXIST. INLET
- EXIST. UTILITY POLE
- EXIST. FIRE HYDRANT
- EXIST. SPOT ELEVATION
- EXIST. WATER LINE
- EXIST. SANITARY SEWER
- EXIST. STORM SEWER
- EXIST. CONTOUR
- EXIST. FENCE
- EX. TOP CURB/GUTTER GRADE
- MINIMUM PRINCIPAL BUILDING SETBACK LINE TO BE REMOVED
- CRAWL SPACE

**PROPOSED FEATURES**

- PROP. TREE CANOPY LINE
- PROP. SURFACE FLOW DIRECTION
- PROP. LIMIT OF DISTURBANCE
- PROP. INLET W/ SEDIMENT BARRIER
- PROP. SILT FENCE
- PROP. SPOT ELEVATION
- PROP. TOP CURB/GUTTER GRADE
- PROP. CONTOUR
- PROP. SANITARY SEWER MANHOLE
- PROP. SANITARY SEWER
- PROP. STORM SEWER MANHOLE
- PROP. INLET
- PROP. STORM SEWER
- PROP. FLARED END SECTION
- PROP. WATER LINE
- PROP. WATER VALVE
- PROP. HYDRANT
- PROP. UTILITY POLE

**LEGEND**

- TC 113.3
- G 112.8
- M.B.S.L.
- TBR
- G.S.



| NO. | DESCRIPTION  | DATE    | BY  |
|-----|--|---------|-----|
| 3   | REV. STORMWATER DESIGN PER RASPP MEETING DATED 8/9/24  | 8/27/24 | CRS |
| 2   | REV. STORMWATER DESIGN PER RASPP MEETING DATED 12/6/24 | 1/10/25 | CRS |
| 1   | REV. STORMWATER DESIGN PER RASPP LETTER DATED 7/26/23  | 10/9/23 | CRS |

**CREST**

Engineering Associates Inc.

Civil & Environmental Engineers  
Professional Planners • Surveyors • Landscape Architects

CERTIFICATE OF AUTHORIZATION NO. 265427000-000

100 HINE DRIVE  
MILLSBORO, DELETION, DE 19966  
(302) 446-1880

100 HINE DRIVE  
AT WATER STREET  
TOWNE SQUARE, DELETION, DE 19966  
(302) 446-1880

**ROBERT D. SIVE**

PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE: 5/30/23

SCALE: 1"=20'

DRAWN: JZ

CHECKED: RS

SHEET: 4 OF 13

PROJECT:

PRELIMINARY & FINAL MAJOR SUBDIVISION

BLOCK 158, TAX LOT 1

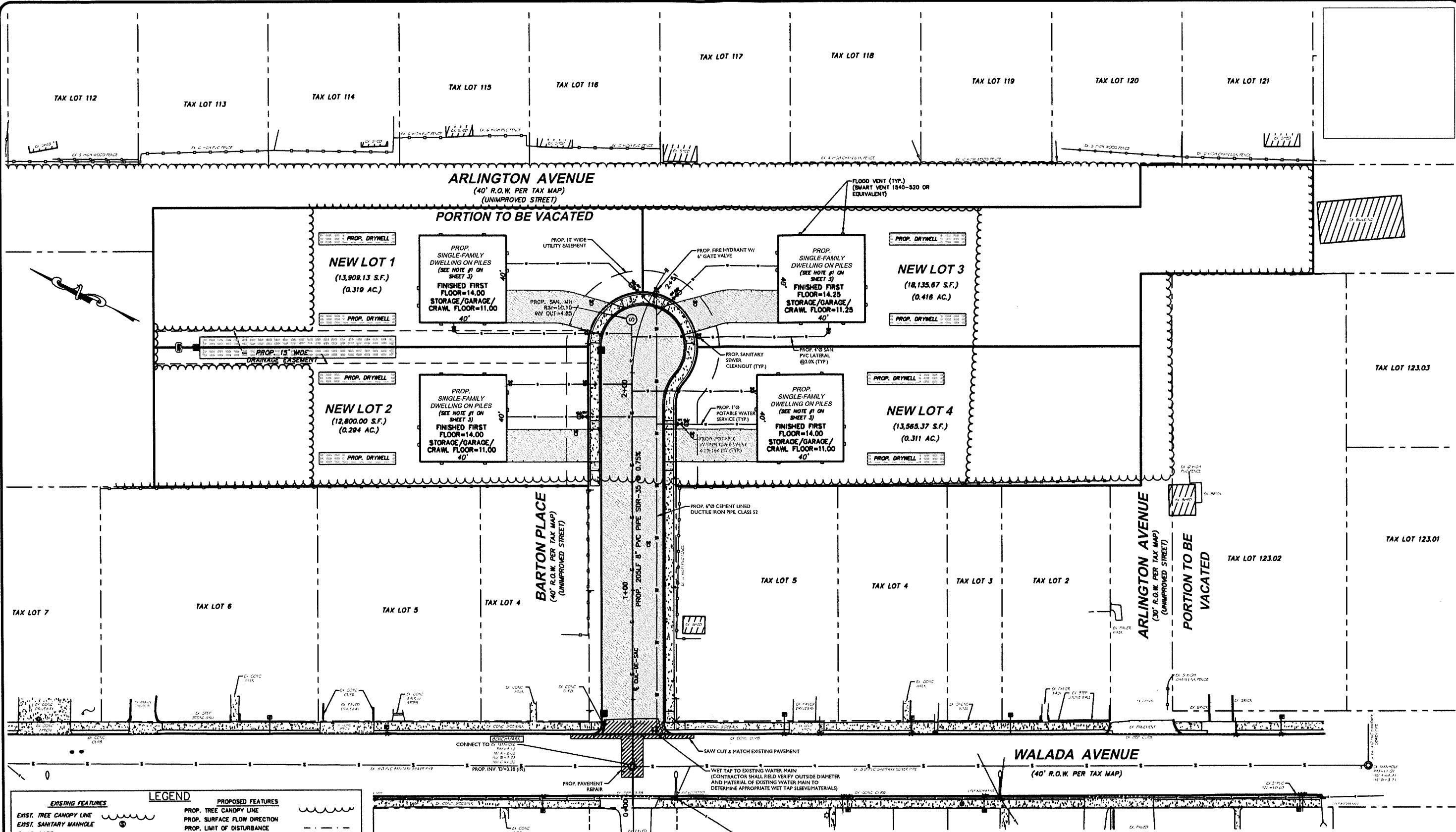
BLOCK 159, TAX LOT 3

BLOCK 122, TAX LOT 122

MIDDLETOWN TOWNSHIP

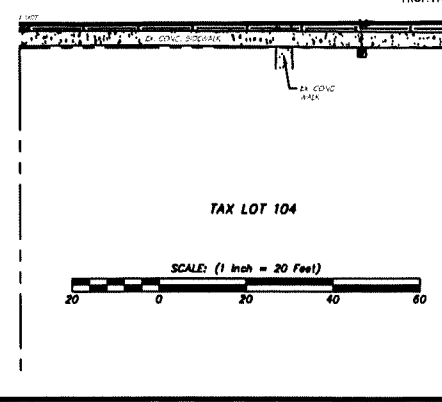
MONMOUTH COUNTY, NEW JERSEY

GRADING AND DRAINAGE PLAN



**LEGEND**

| EXISTING FEATURES                                     | PROPOSED FEATURES               |
|---|---------------------------------|
| EXIST. TREE CANOPY LINE                               | PROP. TREE CANOPY LINE          |
| EXIST. SANITARY MANHOLE                               | PROP. SURFACE FLOW DIRECTION    |
| EXIST. INLET  | PROP. LIMIT OF DISTURBANCE      |
| EXIST. UTILITY POLE                                   | PROP. INLET W/ SEDIMENT BARRIER |
| EXIST. FIRE HYDRANT                                   | PROP. SILT FENCE                |
| EXIST. SPOT ELEVATION                                 | PROP. SPOT ELEVATION            |
| EXIST. WATER LINE                                     | PROP. TOP CURB/GUTTER GRADE     |
| EXIST. SANITARY SEWER                                 | PROP. CONTOUR                   |
| EXIST. STORM SEWER                                    | PROP. SANITARY SEWER MANHOLE    |
| EXIST. CONTOUR  | PROP. SANITARY SEWER            |
| EXIST. FENCE  | PROP. STORM SEWER MANHOLE       |
| EX. TOP CURB/GUTTER GRADE                             | PROP. INLET                     |
| MINIMUM PRINCIPAL BUILDING SETBACK LINE TO BE REMOVED | PROP. STORM SEWER               |
| CRAWL SPACE   | PROP. FLARED END SECTION        |
|   | PROP. WATER LINE                |
|   | PROP. WATER VALVE               |
|   | PROP. HYDRANT                   |
|   | PROP. UTILITY POLE              |



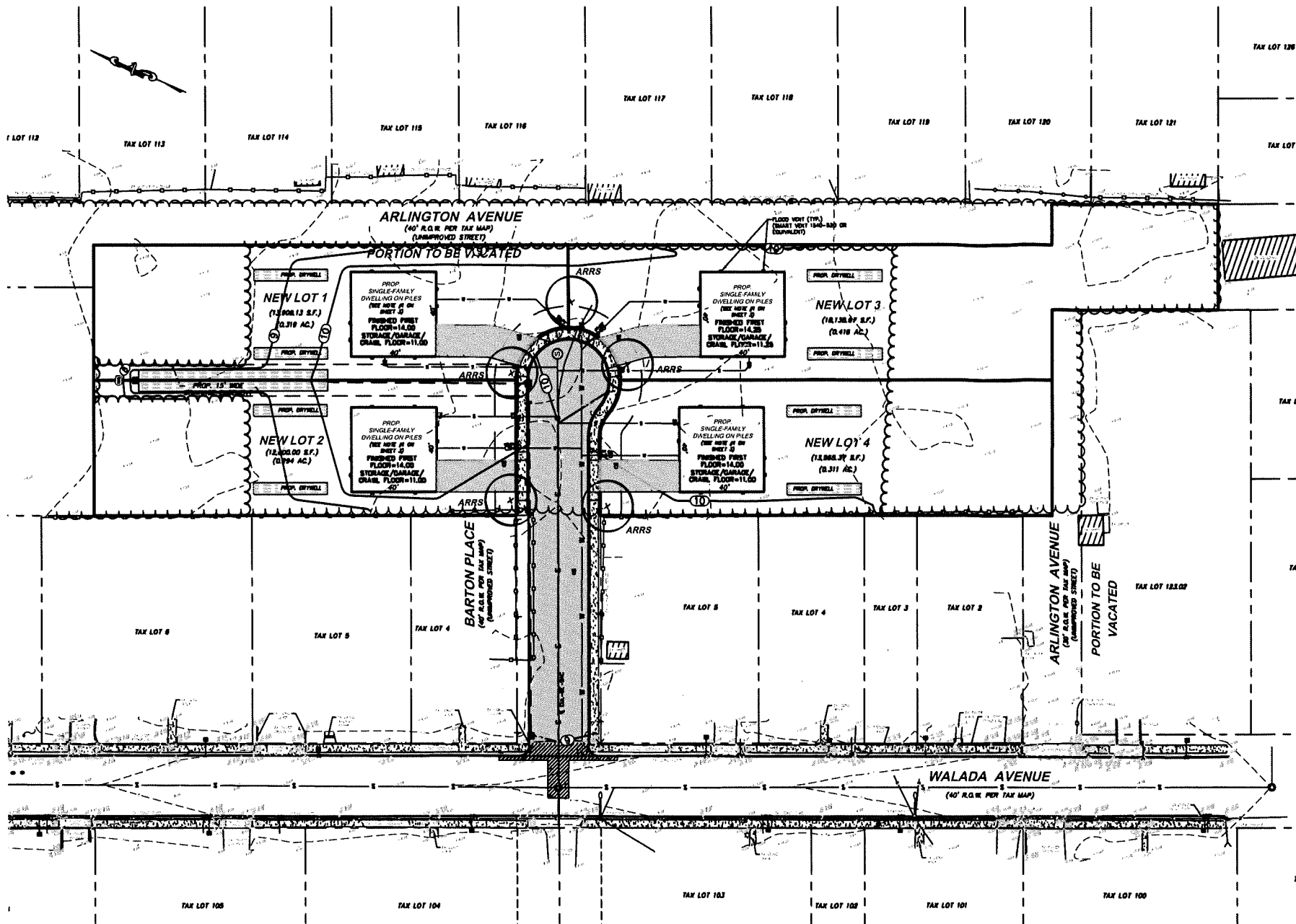
| NO. | DESCRIPTION   | DATE    | BY |
|-----|---|---------|----|
| 3   | REV. STORMWATER DESIGN PER ADEP CHAL DATED 8/8/24     | 8/27/24 | RS |
| 2   | REV. STORMWATER DESIGN PER ADEP MEETING DATED 12/8/24 | 1/16/24 | RS |
| 1   | REV. STORMWATER DESIGN PER ADEP LETTER DATED 7/26/23  | 10/9/23 | RS |

**CREST**  
Engineering Associates Inc.  
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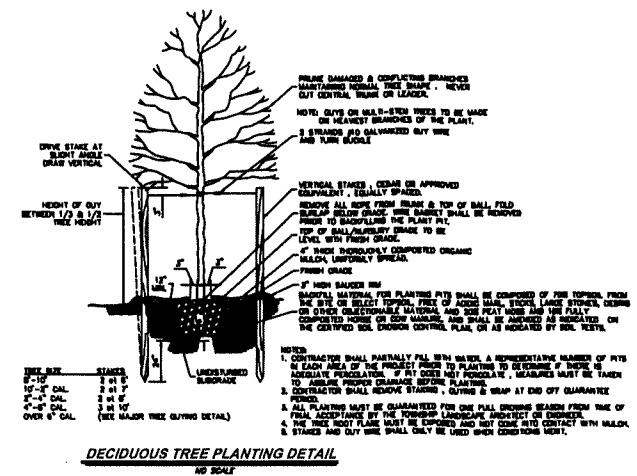
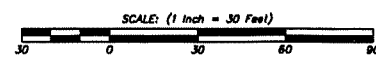
**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE: 5/30/23  
SCALE: 1"=20'  
DRAWN: JZ  
CHECKED: RS  
SHEET: 5 OF 13  
PROJECT: UTILITY PLAN

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY



- LEGEND**
- EXIST. WOODS LINE
  - PROP. LIMIT OF CLEARING
  - EXIST. CONTOUR
  - PROP. CONTOUR
  - EX. UTILITY POLE W/OVERHEAD WIRES
  - PROP. ACER RUBRUM "RED SUNSET", RED SUNSET RED MAPLE, 2 1/2" - 3" CAL., B&B



- LANDSCAPE NOTES**
- 1. GENERAL NOTES:**
- THIS PLAN TO BE USED ONLY FOR THE PURPOSES OF LANDSCAPING.
  - EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. NOTIFY THE LANDSCAPE DESIGNER IMMEDIATELY IN REFERENCE TO DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING.
  - IN THE EVENT THAT PLANT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANTING SCHEDULE, THE PLAN SHALL SUPERSEDE.
  - ALL PLANTING MATERIALS AND METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE MUNICIPAL ORDINANCES OF MIDDLETOWN TOWNSHIP AND ANS 2-80.1 (CURRENT VERSION), THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. IN THE EVENT OF CONFLICTS BETWEEN THE A.N.L.A. STANDARDS AND MUNICIPAL STANDARDS, THE MUNICIPAL STANDARDS SHALL SUPERSEDE.
  - ALL EXISTING TREES AND SHRUBS TO BE PRESERVED AT THE PERIMETER OF THE SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY APPROVED TREE PROTECTION FENCING. SEE TREE SAVE/TREE CLEAR PLAN FOR LOCATION AND DETAILS PERTAINING TO TREE PROTECTION.
  - ALL LANDSCAPING SHALL BE PLANTED SO AS TO NOT INTERFERE WITH UTILITY LINES, SIGHT TRIANGLES, UNDERGROUND UTILITIES, OR PUBLIC WALKWAYS OR ANY OTHER EXISTING OR PROPOSED STRUCTURE. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESSES, OR WITHIN REQUIRED SIGHT DISTANCES OR SIGHT TRIANGLES, EASEMENTS SHALL NOT BE BRANCHED ANY LOWER THAN 7'-0" ABOVE GRADE, AND MUST BE APPROPRIATELY PRUNED.
  - THE APPLICANT SHALL MAINTAIN THE AREA WHERE THE EXISTING TREES CURRENTLY ACTS AS A BUFFER TO THE RESIDENTIAL COMMUNITY LOW POTTER ROAD AFTER PRELIMINARY SITE CLEARING AND SUPPLEMENT PLANTINGS TO THE SATISFACTION OF THE TOWNSHIP ENGINEER.
- 2. PLANT MATERIAL:**
- NO PLANT SUBSTITUTION WITH REGARD TO SIZE, SPECIES, NAMED VARIETY OR CULTIVAR SHALL BE ALLOWED WITHOUT THE PERMISSION OF THE TOWNSHIP ENGINEER OR APPROVING AUTHORITY PRIOR TO INSTALLATION. PLANT RELOCATIONS SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER FOR REVIEW PRIOR TO INSTALLATION.
  - ALL PLANTS SHALL BE DUG, PACKED, TRANSPORTED AND HANDLED WITH THE UTMOST CARE TO ENSURE ADEQUATE PROTECTION FROM INJURY AND DESICCATION.
  - ALL PLANTS SHALL BE FREE FROM DISEASE AND INFESTATION AND BEAR ALL LEGALLY REQUIRED AGRICULTURAL CERTIFICATIONS.
  - ALL PLANTS SHALL BE PRUNED TO ENHANCE MOOR PRIOR TO, OR UPON INSTALLATION, WHILE RETAINING THE NATURAL GROWTH HABIT OF THE PLANTS. THE CENTRAL LEADER SHALL NOT BE CUT; MATERIAL PROVIDED IN THIS CONDITION SHALL NOT BE ACCEPTED. DAMAGED, BROKEN OR CONFLICTING BRANCHES SHALL BE PRUNED CLEANLY, FLUSH WITH THE MAIN TRUNK OR BRANCH.
  - ALL PLANTS SHALL BE NURSERY-GROWN AND TAGGED WITH A DURABLE LABEL INDICATING THE GENUS, SPECIES, NAMED VARIETY OR CULTIVAR. "JERSEY GROWN" PLANT MATERIAL PREFERRED.
- 3. PLANTING:**
- SOIL MUST BE FROST-FREE, FRABLE AND NOT MUDDY AT THE TIME OF PLANTING. PLANTING HOLES SHOULD BE A MINIMUM OF 12 INCHES LARGER IN DIAMETER THAN THE SOIL BALL OR ROOT MASS.
  - BACKFILL MATERIAL FOR PLANTING PITS SHALL BE COMPOSED OF 70% TOPSOIL FROM THE SITE OR SELECT TOPSOIL, FREE OF ADDED MARL, STICKS, LARGE STONES, DEBRIS OR OTHER OBJECTIONABLE MATERIAL, AND SOIL PEAT MOSS AND 10% FULLY COMPOSTED HORSE OR COW MANURE, AND SHALL BE APPLIED AS INDICATED ON THE CERTIFIED SOIL EROSION CONTROL PLAN, OR AS INDICATED BY SOIL TESTS.
  - PLANTS SHALL BE SET TO ULTIMATE FINISHED GRADE SO THAT THEY WILL BE LEFT IN THE RELATIONSHIP TO THE SURROUNDING GROUND AS THEY HAD, PRIOR TO BEING DUG. A RING OF PACKED SOIL SHALL BE PLACED AROUND THE FINISHED PLANTING HOLE OF EACH TREE. THIS SAUCER SHALL BE A MINIMUM OF FOUR INCHES HIGHER THAN THE FINISHED GRADE. IF EVIDENCE OF SATURATED SOILS IS ENCOUNTERED DURING EXCAVATION OF THE PLANTING PITS, UPON DIRECTION BY THE LANDSCAPE DESIGNER, PLANTS SHALL BE SET SO THAT THEIR ROOT CROWNS ARE APPROXIMATELY THREE INCHES ABOVE THE FINAL GRADE, WITH TOPSOIL AND MULCH GENTLY MOUND TO AVOID EXCESSIVE DRYING AT THE SURFACE. UNDER NO CIRCUMSTANCES SHALL PLANTINGS BE PLACED IN A MOUND.
  - THE CORD BINDING THE BALL OF ALL BALLED AND BURLAPPED (B&B) PLANTS SHALL BE CUT AND REMOVED, AND BURLAP ON THE LOWER PORTION OF THE ROOT BALL SHALL BE REMOVED. PLANTS WITH SYNTHETIC NON-DEGRADABLE ROOT BALL WRAPS SHALL NOT BE ACCEPTED. WIRE BASKETS ARE TO BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.
  - ALL TREES SHALL RECEIVE A 4" THICK APPLICATION OF THOROUGHLY COMPOSTED ORGANIC, SHREDDED HARDWOOD MULCH FREE OF ANY OBJECTIONABLE MATERIALS, SPREAD TO A MAXIMUM THICKNESS OF 1 INCH WITHIN 12 INCHES OF PLANT TRUNK ON STEEL. ALL PROPOSED TREES SHALL BE SET IN BEDS MULCHED TO THE LIMIT OF THEIR PLANTING PITS. FOR EVERGREEN TREES, THE MULCH BED SHALL EXTEND A MINIMUM OF 12" BEYOND THE DRIP LINE OF THE LOWEST TIER OF BRANCHES. ALL PROPOSED SHRUBS SHALL BE SET IN CONTINUOUS MASSED PLANTING BEDS, RATHER THAN AS ISOLATED INDIVIDUALS.
  - THE CONTRACTOR SHALL WATERED PLANTS THOROUGHLY ON THE SAME DAY AS INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND GROWTH OF ALL PLANTS.
- 4. MAINTENANCE:**
- OWNER IS RESPONSIBLE FOR ENSURING THAT PLANT MATERIALS SHALL RECEIVE PERIODIC MAINTENANCE BY WATERING, WEEDING, SPRAYING, FERTILIZING, PRUNING OR OTHER HORTICULTURAL PRACTICES, AS REQUIRED TO ENSURE VIABILITY.
  - REGULAR WATERING SHALL BE PROVIDED TO ENSURE ESTABLISHMENT AND GROWTH. WATER ALL PLANT MATERIAL AS NEEDED THROUGH FIRST AND SECOND GROWING SEASON. IF RAINFALL IS INSUFFICIENT, WATER THOROUGHLY TWO TIMES PER WEEK TO ENSURE PROPER ESTABLISHMENT.
  - PLANTS SHALL BE INSPECTED PERIODICALLY AND DAMAGED, BROKEN OR CONFLICTING BRANCHES SHALL BE PRUNED CLEANLY, FLUSH WITH THE MAIN TRUNK OR BRANCH, WHILE RETAINING THE NATURAL GROWTH HABIT OF THE PLANT. SHRUBS SHOULD BE PERMITTED TO GROW INTO CONTINUOUS MASSED PLANTING BEDS AND NOT BE PRUNED INTO ISOLATED INDIVIDUALS.
  - ONE YEAR AFTER INSTALLATION OF ALL PLANT MATERIALS, STAKING AND TREE WRAPS SHALL BE REMOVED.

- GENERAL SEEDING NOTES**
- TOPSOIL:** TOPSOIL SHALL BE SPREAD OVER ALL DISTURBED AREAS TO MINIMUM DEPTH OF 6 INCHES.
- FERTILIZATION/LIMING:** SHALL BE APPLIED AT SUCH RATES AS DETERMINED NECESSARY FOR GOOD PLANT GROWTH PER SOIL TEST FINDINGS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE OF AN ORGANIC ORIGIN.
- SEED:** SEED WITH SELECT HIGH QUALITY SEED. SEED MIXTURE AND RATES SHALL BE AS SPECIFIED BELOW TO ENSURE AN EVEN UNIFORM COVERAGE. SEED SHALL BE APPLIED IN TWO SUCCESSIVE ROWS, WITH THE SECOND ROWING PERPENDICULAR TO THE FIRST. THE RATE OF EACH ROWING SHALL BE 1/2 OF THE TOTAL SEEDING RATE SPECIFIED. TO ENSURE GOOD GERMINATION SEED SHALL BE RAKED INTO THE SOIL TO A DEPTH OF 1/2 INCH.
- SEED MIXTURE:**
- FESCUE
  - KENTUCKY BLUEGRASS
  - PERENNIAL RYEGRASS
- SEE SHEET 10, SOIL EROSION AND SEDIMENT CONTROL NOTES AND DETAILS, FOR SEEDING SPECIFICATIONS.
- MULCHING:** ALL SEEDING AREAS SHALL BE MULCHED IMMEDIATELY AFTER SEEDING. MULCH MAY BE EITHER DRY STRAW OR HAY FREE OF WILD SEEDS. APPLY AT A RATE OF 100 LBS. PER 1,000 SQ. FT.
- WATERING:** SEEDING AREAS SHALL BE WATERED DAILY TO ENSURE GOOD GERMINATION. UPON GERMINATION IRRIGATION MAY BE DISCONTINUED BUT SEEDLINGS MUST NEVER BE ALLOWED TO DRY OUT COMPLETELY. FREQUENT WATERING SHOULD BE CONTINUED FOR APPROXIMATELY THREE WEEKS FOLLOWING GERMINATION OR UNTIL GRASS HAS BECOME SUFFICIENTLY ESTABLISHED.
- PLANTING DATES:** MARCH 15 TO MAY 15 OR AUGUST 15 TO OCTOBER 15.

THIS DRAWING IS TO BE USED FOR LANDSCAPE PURPOSES ONLY

| NO. | DESCRIPTION   | DATE    | BY |
|-----|---|---------|----|
| 1   | REV. STORMWATER DESIGN PER HADEP LETTER DATED 7/26/23 | 10/9/23 | RS |
| 2   | REV. STORMWATER DESIGN PER HADEP CHAL DATED 8/9/24    | 8/27/24 | CR |

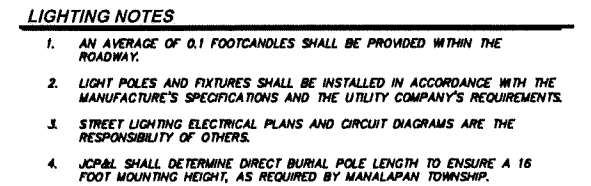
**CREST**  
Engineering Associates Inc.  
Civil & Environmental Engineers  
Professional Planners • Surveyors • Landscape Architects  
CERTIFICATE OF AUTHORIZATION NO. 24642788300  
100 HICK DRIVE, SUITE 100, HICKORY HILLS, NJ 07731-4400  
AT WATER STREET, SUITE 100, HICKORY HILLS, NJ 07731-4400

**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE: 5/30/23  
SCALE: 1"=30'  
DRAWN: JZ  
CHECKED: RS  
SHEET: 6 OF 13  
PROJECT: LANDSCAPE PLAN

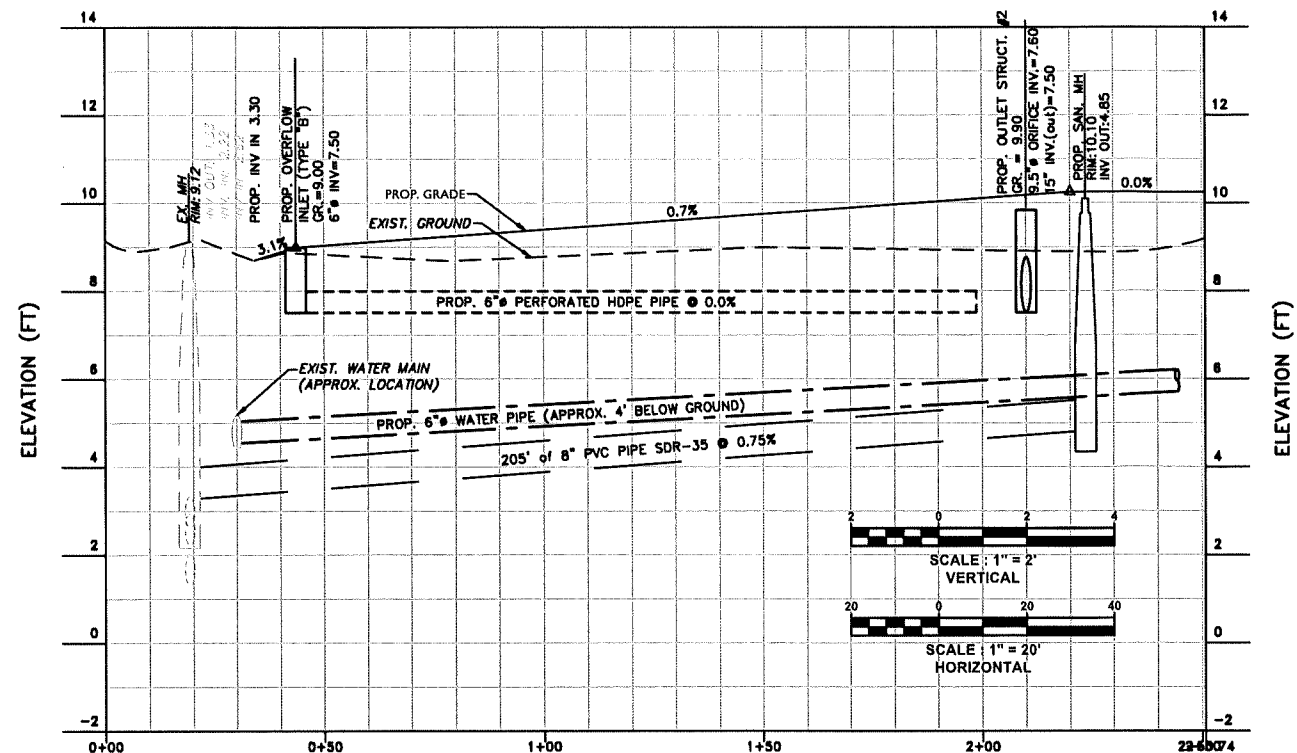
PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

DATE: 5/30/23  
SCALE: 1"=30'  
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CHECKED: RS  
SHEET: 6 OF 13  
PROJECT: LANDSCAPE PLAN



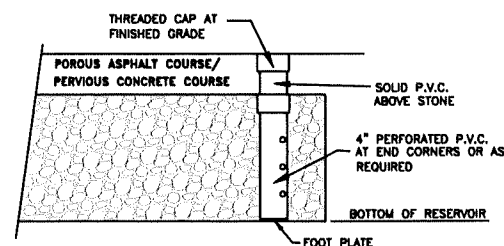
**THIS DRAWING IS TO BE USED  
FOR LIGHTING PURPOSES ONLY**

|                  |   |             |
|------------------|---|-------------|
| DATE<br>5/30/23  | PRELIMINARY & FINAL MAJOR SUBDIVISION<br><br>BLOCK 158, TAX LOT 1<br>BLOCK 159, TAX LOT 3<br>BLOCK 122, TAX LOT 122<br>MIDDLETOWN TOWNSHIP<br>MONMOUTH COUNTY, NEW JERSEY | FILE #15027 |
| SCALE<br>1"=30'  |   |             |
| DRAWN<br>RS      |   |             |
| CHECKED<br>RS    |   |             |
| SHEET<br>7 OF 13 |   |             |
| PROJECT          |   |             |
| LIGHTING PLAN    |   |             |



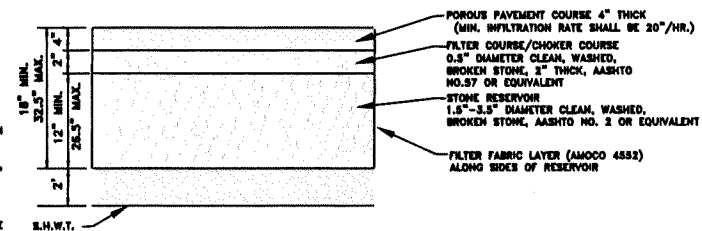
### GENERAL NOTES FOR POROUS PAVEMENT:

- PERVIOUS PAVEMENT AREAS SHALL BE COMPACTED IF CONSTRUCTED ON IN-SITU SOILS OR DEEP FILLED IF CONSTRUCTED ON FILL SOILS, WHICH SHOULD BE A STRUCTURAL SAND BASED FILL.
- STORAGE BED AGGREGATE MUST BE PLACED IN 6" MAXIMUM THICKNESS LIFTS & COMPACTED USING PLATE COMPACTORS IN ACCORDANCE WITH BMP MANUAL REQUIREMENTS.
- PERVIOUS PAVEMENT AREAS SHALL BE PROTECTED FROM RUNOFF UNTIL THE CONTRIBUTORY AREAS HAVE BEEN STABILIZED.
- FILTER FABRIC SHOULD BE A NON-WOVEN GEOTEXTILE AMOCO 4552 OR APPROVED EQUAL.
- POROUS PAVEMENT SHOULD BE A COURSE AGGREGATE MIX WITH 100% PASSING  $\frac{3}{4}$ ", 95% PASSING  $\frac{1}{2}$ ", 35% PASSING  $\frac{1}{4}$ ", 15% PASSING  $\frac{1}{8}$ ", 10% PASSING  $\frac{1}{16}$ " AND 2% PASSING #200 U.S. STANDARD SIEVE SIZES WITH A 5.75% - 8.00% ASPHALT BINDER BY WEIGHT.
- DEPTH FROM THE BOTTOM OF THE BMP TO THE CSHW MUST BE MINIMUM 2 FEET SEPARATION.
- THE POROSITY OF THE PERMEABLE ASPHALT SURFACE MUST BE 15-25%.
- THE BINDER USED IN THE SURFACE COURSE MUST BE PERFORMANCE GRADED FOR THE TYPE OF USE; THEREFORE, THE ASPHALT PLANT MUST ALSO BE ADVISED OF THE TYPE OF SURFACE COURSE SPECIFIED IN ORDER TO USE THE CORRECT BINDER FOR THE INSTALLATION. FOR PARKING LOTS, POLYMER MODIFIED BINDER PG 64-22 MUST BE SPECIFIED AS IT HAS BEEN SHOWN TO MINIMIZE SCUFFING CAUSED BY AUTOMOBILES WITH POWER STEERING.
- THE POROSITY OF ANY PERMEABLE ASPHALT BASE COURSE MUST BE 25%.
- MINIMUM AIR TEMPERATURE FOR PAVING: 50° F.
- INSTALLATION OF PERMEABLE ASPHALT REQUIRES DIFFERENT TEMPERATURE GUIDELINES, AS FOLLOWS, THAN THOSE OF IMPERVIOUS ASPHALT:  
 ASPHALT BASE COURSE: 200-240° F.  
 FINISH ROLLING BASE COURSE: 140-180° F.  
 ASPHALT SURFACE COURSE: 200-230° F. AND  
 FINISH ROLLING SURFACE COURSE: 110-140° F.
- VEHICULAR USE IS PROHIBITED FOR AT LEAST 48 HOURS ONCE THE PAVEMENT INSTALLATION IS COMPLETE.
- POST-CONSTRUCTION TESTING OF THE PERMEABLE ASPHALT SURFACE COURSE IS REQUIRED AND MUST CONFORM TO THE METHODS OF EITHER ASTM C1701: STANDARD TEST METHOD FOR INFILTRATION RATE OF IN PLACE PERVIOUS CONCRETE OR ASTM C1781: STANDARD TEST METHOD FOR SURFACE INFILTRATION RATE OF PERMEABLE UNIT PAVEMENT SYSTEMS. AT LEAST THREE LOCATIONS MUST BE USED FOR THE TEST, AND THEY SHOULD BE SPACED EVENLY ACROSS THE PERVIOUS PAVING SYSTEM. FAILURE TO ACHIEVE THE MINIMUM DESIGN INFILTRATION RATE OF THE SURFACE COURSE AT ONE OR MORE LOCATION INDICATES THE SYSTEM CANNOT BE PUT IN SERVICE UNTIL THE SYSTEM IS CORRECTED TO YIELD ALL PASSING VALUES.
- DO NOT USE OIL-ORIGIN COMPOUNDS/BALL/SAWD OVER PERVIOUS PAVEMENT TO CONTROL SHOW/ICE.
- DO NOT DUMP/STORE ANY CONSTRUCTION/LANDSCAPING/HAZARDOUS MATERIALS OVER PERVIOUS PAVEMENT. ELIMINATE INTRUSION OF HEAVY EQUIPMENT/VEHICLES FROM ENTERING PERVIOUS PAVEMENT AREA.
- PERFORM REGULAR MAINTENANCE OF THE PERVIOUS PAVEMENT AREA PER "OPERATION AND MAINTENANCE MANUAL" PREPARED FOR THE SITE COVERING PERVIOUS PAVEMENT AREA. GENERAL MAINTENANCE FOR PERVIOUS PAVEMENT SHALL ALSO FOLLOW NJDEP BMP MANUAL CHAPTER 8.6.
- PERFORM TESTING OF THE SURFACE COURSE OF THE PERVIOUS PAVEMENT FOR INFILTRATION RATE EACH SPRING, AS SPECIFIED IN THE "OPERATION AND MAINTENANCE MANUAL" PREPARED FOR THE SITE COVERING THE PERVIOUS PAVEMENT AREA.
- TESTING MUST BE PERFORMED ON THE SUBSOIL BELOW THE STORAGE BED AFTER EXCAVATION BUT PRIOR TO PLACEMENT OF THE STONE IN ACCORDANCE WITH THE CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY TESTING SECTION IN APPENDIX E OF THE BMP MANUAL. TESTING RESULTS MUST BE PROVIDED TO THE TOWNSHIP ENGINEER AND WHERE AS-BUILT TESTING SHOWS A LONGER DRAIN TIME THAN DESIGNED, CORRECTIVE ACTIONS MUST BE TAKEN.
- THE SURFACE COURSE MUST BE INSPECTED AFTER EVERY STORM EXCEEDING ONE INCH OF RAINFALL.



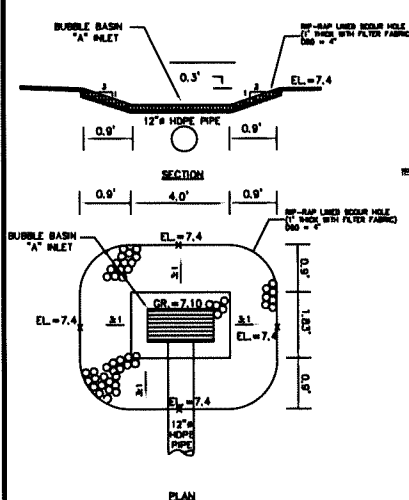
INSPECTION PORT & OVERFLOW FOR PERVIOUS PAVING DETAIL

NOT TO SCALE



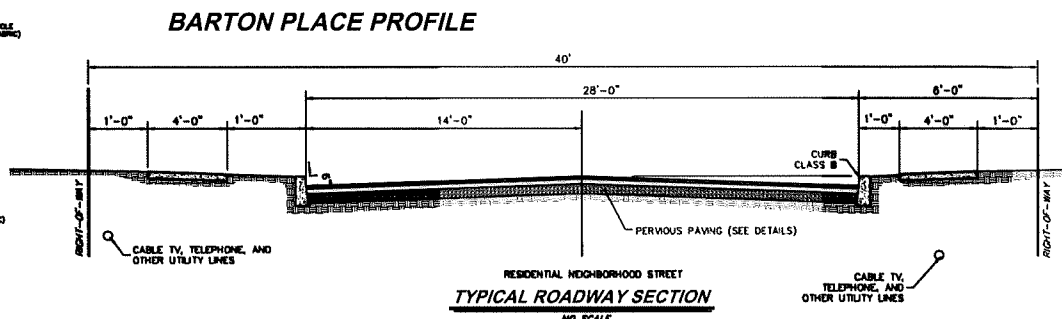
PERVIOUS PAVING DETAIL

NOT TO SCALE



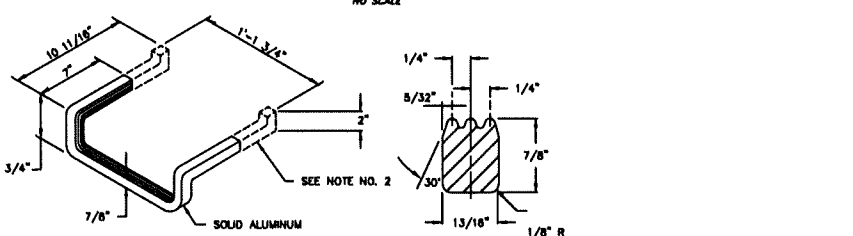
BUBBLER INLET WITH SCOUR HOLE

NOT TO SCALE



TYPICAL ROADWAY SECTION

NO SCALE

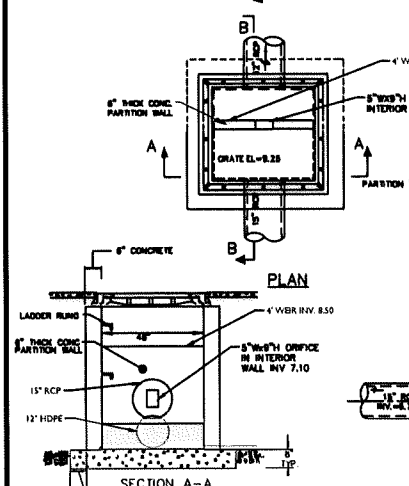


LADDER RUNG

NOT TO SCALE

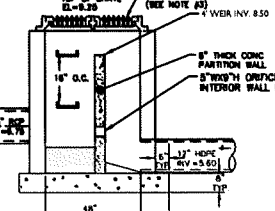
### GENERAL NOTES

- FOOTER TO BE CLASS "B" (4,500 PSI, 28 DAY TEST CONC.)
- INVERT TO BE CLASS "B" (4,500 PSI) CONCRETE.
- CASTING TO BE CAMPBELL FOUNDRY CO. NO. 2016 BICYCLE SAFE GRATE OR APPROVED EQUAL AND TYPE "W" EGG CURB PIECE.
- IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK CEMENT MORTAR.
- PROVIDE 7/8" DIA. ALUMINUM LADDER RUNG AS SHOWN (SEE DETAIL). PORTION OF RUNG SHALL BE EMBEDDED IN CONCRETE AND EPOXY COATED.
- WHEN ADDITIONAL DEPTH IS SCHEDULED WALLS BELOW THE DEPTH OF 8'-0" MEASURED FROM THE INLET OUTER TO INV. DOUBLE BLOCK WALLS ARE REQUIRED.



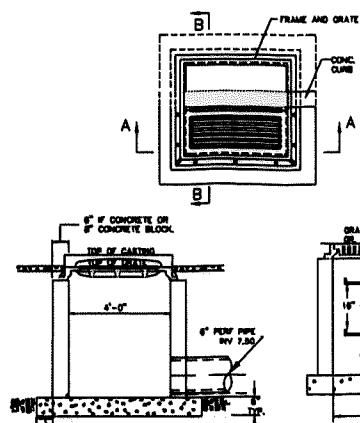
OUTLET CONTROL STRUCTURE NO. 1 (MODIFIED TYPE E INLET DETAIL)

NOT TO SCALE



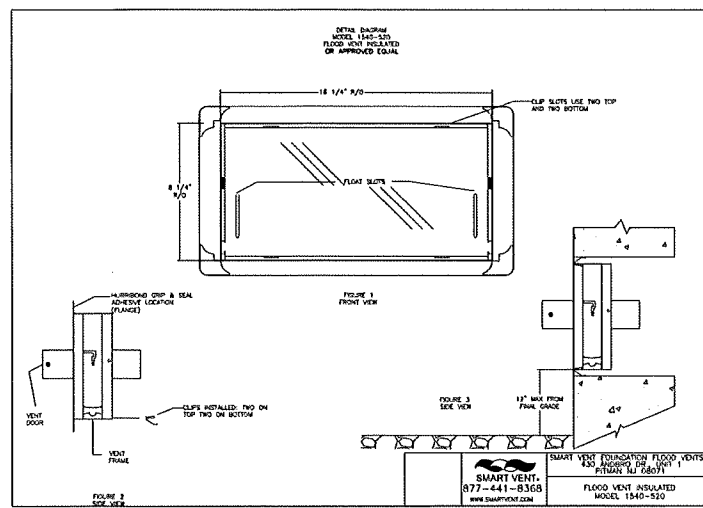
PROPOSED BUBBLER TYPE "A" INLET

NOT TO SCALE



OVERFLOW INLET (TYPE B)

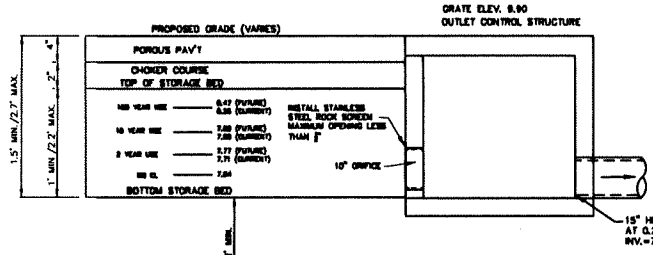
NOT TO SCALE



FLOOD VENT DETAIL

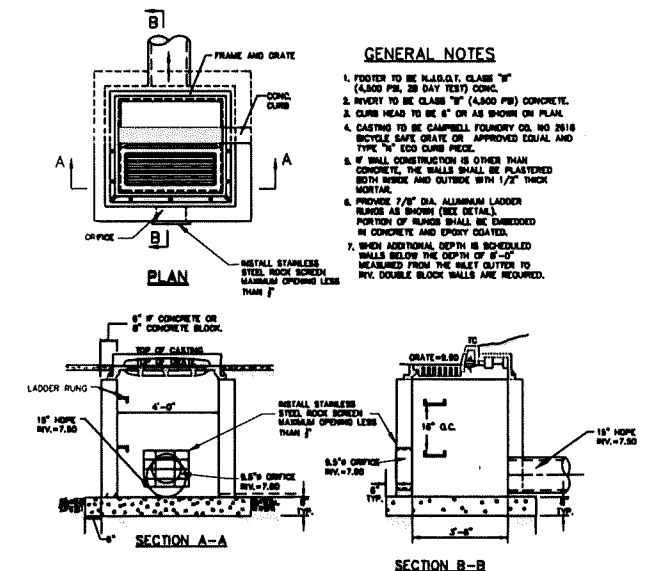
NOT TO SCALE

DETAILED SPECIFICATIONS:  
 MATERIAL: STAINLESS STEEL  
 OPERATION: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION  
 INSTALLATION: SECURED W/ 4 STAINLESS STEEL INSTALLATION CLIPS INCLUDED AND AN ADHESIVE HYDROSTATIC RELIEF: 200 SQ. FT. PER VENT  
 REQUIREMENTS FLOOD: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED ON AT LEAST TWO DIFFERENT WALLS  
 COLORS: STAINLESS (STANDARD)  
 EXTERIOR POWDER COATED WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)  
 MEETS THE REQUIREMENTS FOR ENGINEERED OPENINGS AS SET FORTH BY: FEMA, NFP, ICC, & ASCE  
 SUPPORTIVE DOCUMENTS: TB 1-08, 44CFR 60.3(C)(5), ASCE 24-14  
 ICC EVALUATION # ESR-2074



PERVIOUS PAVING W/ INFILTRATION SECTION

NOT TO SCALE



OUTLET CONTROL STRUCTURE NO. 2 (MODIFIED TYPE B INLET DETAIL)

NOT TO SCALE

| NO. | DESCRIPTION   | DATE     | BY | CHECKED |
|-----|---|----------|----|---------|
| 1   | REV. STORMWATER DESIGN PER NADP CHAL DATED 6/8/24     | 6/27/24  | CR | MS      |
| 2   | REV. STORMWATER DESIGN PER NADP MEETING DATED 12/6/24 | 1/16/25  | CR | MS      |
| 3   | REV. STORMWATER DESIGN PER NADP LETTER DATED 7/26/25  | 10/16/25 | CR | MS      |

**CREST**  
 Engineering Associates Inc.  
 Civil & Environmental Engineers  
 Professional Planners • Surveyors • Landscape Architects  
 CERTIFICATE OF AUTHORIZATION NO. 24627382-000  
 18 KENNEDY BLVD.  
 MILLSTONE TOWNSHIP, N.J. 08540  
 PH: (609) 448-1880  
 FAX: (609) 448-1881  
 AT WATER STREET  
 TOWNSHIP, N.J. 08063  
 PH: (732) 344-3088

**ROBERT D. SIVE**  
 PROFESSIONAL ENGINEER NJ U.C. NO. 43816

DATE: 5/30/23  
 SCALE: AS SHOWN  
 DRAWN: JZ  
 CHECKED: RS  
 SHEET: 8 of 13  
 POCKET:

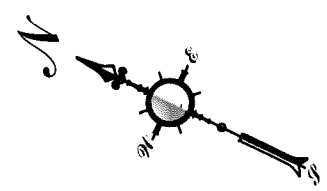
PRELIMINARY & FINAL MAJOR SUBDIVISION  
 BLOCK 158, TAX LOT 1  
 BLOCK 159, TAX LOT 3  
 BLOCK 122, TAX LOT 123  
 MIDDLETOWN TOWNSHIP  
 MONMOUTH COUNTY, NEW JERSEY

PROFILE AND DETAILS  
 & SE & SC DETAILS



LIST OF OWNERS WITHIN 200'

| BLOCK | TAX LOT | OWNER   |
|-------|---------|---|
| 122   | 99      | TWP OF MIDDLETOWN<br>1 KINGS HWY<br>MIDDLETOWN, NJ 07748                          |
| 122   | 100     | BONELLO, GIUSEPPE & JESSICA<br>3 WALADA AVE<br>PORT MONMOUTH, NJ 07758            |
| 122   | 101     | ROSE, WILLIAM & DIANE<br>7 WALADA AVE<br>PORT MONMOUTH, NJ 07758                  |
| 122   | 103     | MILLER, CLAUDE W & NANCY M<br>9 WALADA AVE<br>PORT MONMOUTH, NJ 07758             |
| 122   | 104     | PITTA, VICTOR FELIPE & SAMANTHA LUC<br>11 WALADA AVE<br>PORT MONMOUTH, NJ 07758   |
| 122   | 105     | MDAL, JOHN CHARLES & JOHN JR.<br>15 WALADA AVE<br>PORT MONMOUTH, NJ 07758         |
| 122   | 106     | SMITH, THOMAS & ERICA M<br>17 WALADA AVE<br>PORT MONMOUTH, NJ 07758               |
| 122   | 107     | WALADA ENTERPRISES LLC<br>30 N LAKE DR<br>MIDDLETOWN, NJ 07748                    |
| 122   | 111     | TWP OF MIDDLETOWN<br>1 KINGS HWY<br>MIDDLETOWN, NJ 07748                          |
| 122   | 112     | MARTIN, KATHLEEN R.<br>19 GORDON COURT<br>PORT MONMOUTH, NJ 07758                 |
| 122   | 113     | LEE, HYON K & IN K KIM<br>17 GORDON COURT<br>PORT MONMOUTH, NJ 07758              |
| 122   | 114     | BIBBY, ADAM & COLLEEN<br>15 GORDON COURT<br>PORT MONMOUTH, NJ 07758               |
| 122   | 115     | SEGHAN, WILLIAM J & DEBORAH W<br>13 GORDON COURT<br>PORT MONMOUTH, NJ 07758       |
| 122   | 116     | UNKEL, DANIEL & WERNER, AMY<br>11 GORDON COURT<br>PORT MONMOUTH, NJ 07758         |
| 122   | 117     | FERRANTE, ROBERT C<br>13 KIMBERLY CT, APT. 26<br>RED BANK, NJ 07701               |
| 122   | 118     | MAY, NATHAN & KATELYN<br>7 GORDON CT<br>PORT MONMOUTH, NJ 07758                   |
| 122   | 119     | GLYNN, MICHAEL & GUMMA LAURENE<br>5 GORDON CT<br>PORT MONMOUTH, NJ 07758          |
| 122   | 120     | SHEARER, JOHN C<br>3 GORDON CT<br>PORT MONMOUTH, NJ 07758                         |
| 122   | 121     | HWANG, SOK Y & BETH A HWANG<br>1 GORDON CT<br>PORT MONMOUTH, NJ 07758             |
| 122   | 122     | WALADA ENTERPRISES LLC<br>30 N LAKE DR<br>MIDDLETOWN, NJ 07748                    |
| 122   | 123.01  | BUONG, TORI & VITALE NICHOLAS JOHN<br>180 MAIN ST<br>PORT MONMOUTH, NJ 07758      |
| 122   | 123.02  | MCCARTHY, DENNIS J<br>PO BOX 4252<br>MIDDLETOWN, NJ 07748                         |
| 122   | 123.03  | ZIVAHOVIC, VLADIMIR & WHITNEY LEE<br>158 MAIN ST<br>PORT MONMOUTH, NJ 07758       |
| 122   | 124     | IRWIN, GEORGE<br>158 MAIN ST<br>PORT MONMOUTH, NJ 07758                           |
| 122   | 125     | HOMANN, HENRY & BARBARA<br>154 MAIN ST<br>PORT MONMOUTH, NJ 07758                 |
| 122   | 126     | PETRICHIO, HILDEGARD & PETERSON, CARMEN<br>153 MAIN ST<br>PORT MONMOUTH, NJ 07758 |
| 122   | 127     | LEE, TENG MING & ZOU, MICHELE<br>150 MAIN ST<br>PORT MONMOUTH, NJ 07758           |

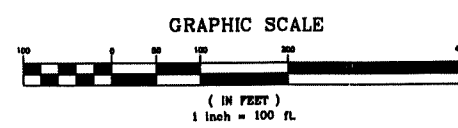


PRELIMINARY & FINAL MAJOR SUBDIVISION

Block 158, Tax Lot 1  
Block 159, Tax Lot 3  
Block 122, Tax Lot 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY



VICINITY MAP



ZONE : RESIDENTIAL ~ R-7 ZONE

| MINIMUMS:                                 | REQUIRED:   | NEW LOT 1:  | NEW LOT 2:  | NEW LOT 3:  | NEW LOT 4:  |
|---|-------------|-------------|-------------|-------------|-------------|
| LOT AREA (interior lot) . . . . .         | 7,500 S.F.  | 13,909 S.F. | 12,800 S.F. | 18,136 S.F. | 13,565 S.F. |
| LOT FRONTAGE (interior lot) . . . . .     | 75 FT.      | 39.27 FT.   | 84.00 FT.   | 39.27 FT.   | 66.45 FT.   |
| CIRCLE DIAMETER . . . . .                 | > 50 FT.    | > 50 FT.    | > 50 FT.    | > 50 FT.    | > 50 FT.    |
| BUILDABLE LOT AREA . . . . .              | 5,000 FT.   | 13,909 S.F. | 12,800 S.F. | 18,136 S.F. | 13,565 S.F. |
| FLOOR AREA, GROSS (Multi-Story) . . . . . | 800 S.F.    | ≥ 800 S.F.  | ≥ 800 S.F.  | ≥ 800 S.F.  | ≥ 800 S.F.  |
| PRINCIPAL BUILDING                        |             |             |             |             |             |
| FRONT SETBACK . . . . .                   | 20 FT.      | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    |
| SIDE SETBACK . . . . .                    | 10 FT.      | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    |
| SIDE, STREET SETBACK . . . . .            | 10 FT.      | N/A         | N/A         | N/A         | N/A         |
| REAR SETBACK . . . . .                    | 20 FT.      | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    | ≥ 20 FT.    |
| ACCESSORY BUILDING                        |             |             |             |             |             |
| SIDE SETBACK . . . . .                    | 10 FT.      | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    |
| REAR SETBACK . . . . .                    | 10 FT.      | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    | ≥ 10 FT.    |
| MAXIMUMS:                                 |             |             |             |             |             |
| BUILDING COVERAGE . . . . .               | 35%         | ≤ 35%       | ≤ 35%       | ≤ 35%       | ≤ 35%       |
| LOT COVERAGE . . . . .                    | 40%         | ≤ 40%       | ≤ 40%       | ≤ 40%       | ≤ 40%       |
| BUILDING HEIGHT . . . . .                 | 2.5 STORIES | ≤ 28 FT.    | ≤ 28 FT.    | ≤ 28 FT.    | ≤ 28 FT.    |

\* VARIANCE REQUIRED

WE HEREBY CERTIFY THAT WE ARE THE RECORD HOLDERS OF TITLE TO THE LANDS DELINEATED ON THIS MAP AND APPROVE THE FILING THEREOF.

SWORN TO AND SUBSCRIBED BEFORE ME.  
DATE \_\_\_\_\_ NOTARY PUBLIC OF NEW JERSEY

GENERAL NOTES:

1. PROPERTY KNOWN AS BLOCK 158, TAX LOT 1, BLOCK 159, TAX LOT 3 & BLOCK 122, TAX LOT 122, AS SHOWN ON SHEET 14, LAST REVISED 12/02/11, OF THE OFFICIAL TAX MAPS OF THE TOWNSHIP OF MIDDLETOWN TOWNSHIP. THE PROPERTY IS SITUATED WITHIN THE R-7 RESIDENTIAL ZONE.
2. BOUNDARY, TOPOGRAPHIC AND EXISTING SITE IMPROVEMENT INFORMATION IS BASED UPON A BOUNDARY AND TOPOGRAPHIC SURVEY BY DPK CONSULTING, DATED 12/11/2021.
3. NO FRESHWATER WETLANDS ARE WITHIN THE AREA OF PROPOSED DEVELOPMENT, AS PER A NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION FRESHWATER WETLANDS LETTER OF INTERPRETATION (LOI) EXTENSION 'ABSENT' LETTER, FILE AND ACTIVITY NUMBER 1331-17-0011, IFW220001, DATED DECEMBER 22, 2022.
4. THE PROPERTY LIES WITHIN THE AE FLOOD HAZARD AREA, WITH A BASE FLOOD ELEVATION OF 1.3, AS SHOWN ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP, MAP NUMBER 34025C0081F, EFFECTIVE DATE SEPTEMBER 25, 2009.
5. THE PROPERTY IS CURRENTLY WOODED AND VACANT. BARTON PLACE AND ARLINGTON AVENUE ARE UNDEVELOPED, PAPER STREETS.
6. THE PROPERTY IS PROPOSED TO BE SUBDIVIDED INTO 4 RESIDENTIAL LOTS AND INCLUDE THE IMPROVEMENT OF BARTON PLACE WITH A 28 FOOT WIDE PAVED DRIVEWAY WITH CURB AND SIDEWALK WHICH MATCHES THE ROADWAY DEVELOPMENT IN THE AREA. A PORTION OF ARLINGTON AVENUE SHALL BE VACATED.
7. BARTON PLACE AND ARLINGTON AVENUE ARE PAPER STREETS (UNIMPROVED) WITH 40 FOOT WIDE RIGHT-OF-WAYS. AS PART OF THIS SUBDIVISION DEVELOPMENT, BARTON PLACE WOULD BE CLASSIFIED AS MEDIUM INTENSITY RESIDENTIAL RIGHT-OF-WAY WITH A 28 FOOT WIDE DRIVEWAY WITH CURB AND SIDEWALK WHICH MATCHES THE ROADWAY DEVELOPMENT IN THE AREA. A PORTION OF ARLINGTON AVENUE RIGHT-OF-WAY WHICH ADJUTS THE SUBJECT TRACT SHALL BE VACATED.
8. PARKING REQUIREMENTS:  
4 BEDROOM SINGLE-FAMILY RESIDENTIAL DWELLINGS  
2.5 PARKING STALLS PER DWELLING  
EACH NEW LOT SHALL PROVIDE 3 ON-SITE PARKING STALLS WITHIN A GARAGE AND/OR DRIVEWAY AREA
9. THE PROPOSED RESIDENTIAL LOTS SHALL BE SERVED BY THE EXISTING PUBLIC POTABLE WATER DISTRIBUTION AND SANITARY SEWER COLLECTION SYSTEMS.
10. WASTE AND RECYCLABLES FROM THE PROPOSED DWELLINGS WILL BE REMOVED BY THE PUBLIC SANITATION SERVICE VIA CURBSIDE PICK-UP.
11. PROPOSED DWELLING ELEVATIONS AND LOT GRADING IS PRELIMINARY. LIMITS OF GRADING AND DISTURBANCE MAY VARY WITH THE IMPLEMENTATION OF RETAINING WALLS, TERRACING, RETENTION OF SLOPES, LANDSCAPING, ETC., WHICH WILL BE DETERMINED AND FINALIZED AT THE TIME OF INDIVIDUAL LOT DEVELOPMENT AND ARCHITECTURAL DESIGN.
12. ALL SIGNS AND PAVEMENT MARKINGS ARE TO BE FABRICATED AND INSTALLED IN ACCORDANCE WITH LOCAL CODE AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST REQUIREMENTS.
13. ALL AREAS NOT DESIGNATED FOR ROADWAYS, DWELLINGS, SIDEWALKS AND/OR DRIVEWAYS SHALL BE PLANTED, LANDSCAPED, OR TOPSOILED IN ACCORDANCE WITH THE LANDSCAPE PLAN. ALL TOPSOIL, FERTILIZER, SEED, SOO, MULCH AND PLACEMENT THEREOF SHALL CONFORM TO THE MOST CURRENT REQUIREMENTS OF THE SOIL CONSERVATION DISTRICT.
14. ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND. LOCATION AND INSTALLATION OF NEW UTILITIES AND SERVICE CONNECTIONS NOT SHOWN ON THIS PLAN ARE THE RESPONSIBILITY OF OTHERS.
15. THERE ARE NO KNOWN EXISTING COVENANTS OR DEED RESTRICTIONS.
16. THERE ARE NO WATER COURSES WITHIN 200 FEET OF THE BOUNDARIES OF THE SITE.
17. NO SWAMPS, BOGS OR PONDS EXIST WITHIN 200 FEET OF THE BOUNDARIES OF THE SITE.
18. ALL EXISTING ON-SITE STRUCTURES ARE TO REMAIN, UNLESS NOTED OTHERWISE. ANY EXISTING FENCE ENCROACHMENTS FROM ADJACENT PROPERTIES ONTO THE SUBJECT PROPERTY SHALL BE RELOCATED, AS REQUIRED.
19. ALL SITE MATERIALS AND/OR IMPROVEMENTS SHALL BE IN ACCORDANCE WITH THE ENCLOSED DETAILS, THE MIDDLETOWN TOWNSHIP LAND USE ORDINANCE AND THE NEW JERSEY DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
20. THE CONTRACTOR OR LAYOUT PARTY SHALL VERIFY ALL ELEVATIONS AND DIMENSIONS ON THE JOB SITE AND SHALL VERIFY THAT THE PLANS BEING UTILIZED ARE FINAL AND APPROVED PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER IF ANY DISCREPANCIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION SHALL BE PAID TO THE CONTRACTOR FOR WORK HAVING TO BE REDONE DUE TO ELEVATIONS AND/OR DIMENSIONS SHOWN INCORRECTLY ON THESE PLANS IF SUCH NOTIFICATION HAS NOT BEEN PROVIDED.
21. THE HORIZONTAL AND VERTICAL LOCATION OF ALL EXISTING UTILITIES SHOWN ARE APPROXIMATE ONLY. THE EXACT LOCATION SHALL BE DETERMINED BY THE CONTRACTOR PRIOR TO INSTALLATION OF PROPOSED IMPROVEMENTS. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY IF 'OTHER' UTILITIES NOT SHOWN ON THE PLAN EXIST WITHIN THE AREAS OF PROPOSED IMPROVEMENTS. SHOULD THERE BE 'OTHER' UTILITIES, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY TO ANALYZE ANY POTENTIAL UTILITY CONFLICTS.
22. THE CONTRACTOR SHOULD CALL 1-800-272-1000 SEVEN (7) DAYS PRIOR TO EXCAVATION FOR FIELD MARK OUT OF UNDERGROUND UTILITIES.
23. PRIOR TO STARTING SITE CLEARING/CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO MAKE SURE ALL REQUIRED PERMITS/APPROVALS HAVE BEEN OBTAINED. ALL SITE WORK SHALL BE COMPLETED IN ACCORDANCE WITH THESE PLANS AND THE REQUIREMENTS AND STANDARDS OF THE PERMITTING AUTHORITY.
24. ANY IMPORTED SOIL SHALL BE CERTIFIED CLEAN FILL/SOIL WHICH MEETS THE DEFINITION OF CLEAN FILL IN ACCORDANCE WITH THE NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION'S SITE REMEDIATION STANDARDS (FOUNDED AT N.J.A.C. 7:26).
25. THE PROPOSED DWELLINGS SHALL BE CONSTRUCTED SUCH THAT THE AREA UNDERNEATH THE FINISHED FIRST FLOOR IS SUFFICIENTLY NET FLOOD PROOFED IN ACCORDANCE WITH NHP TECHNICAL BULLETIN 7 NET FLOODPROOFING REQUIREMENTS AND LIMITATION.

| A  | B                | C   |
|----|------------------|---|
| 1  | Sheet List Table |   |
| 2  | Sheet Number     | Revision  |
| 3  | 1                | Cover Sheet 9/29/2025                                     |
| 4  | 2                | Existing Conditions Plan 9/29/2025                        |
| 5  | 3                | Site Layout Plan 9/27/2024                                |
| 6  | 4                | Grading Plan 9/27/2024                                    |
| 7  | 5                | Utility Plan 9/27/2024                                    |
| 8  | 6                | Landscape Plan 9/27/2024                                  |
| 9  | 7                | Lighting Plan 9/29/2025                                   |
| 10 | 8                | Profile & Detail Sheet 9/27/2024                          |
| 11 | 9                | Detail Sheet 9/27/2024                                    |
| 12 | 10               | Soil Erosion & Sediment Control Plan 9/27/2024            |
| 13 | 11               | Soil Erosion & Sediment Control Compaction Plan 9/27/2024 |
| 14 | 12               | Soil Erosion & Sediment Control Details --                |
| 15 | 13               | Soil Erosion & Sediment Control Notes 10/9/2023           |
| 16 |                  |   |
| 17 | 1 of 1           | Final Plot 9/29/2025                                      |

APPROVED BY  
**OWNER**  
WALADA ENTERPRISES, LLC  
30 N LAKE DRIVE  
MIDDLETOWN, NJ 07748  
DATE \_\_\_\_\_ CHAIRMAN  
**APPLICANT**  
MILANO BROTHERS BUILDERS INC.  
845 BROAD STREET  
SHREWSBURY, NJ 07702  
DATE \_\_\_\_\_ SECRETARY  
DATE \_\_\_\_\_ ENGINEER

CREST

Engineering Associates Inc.

Civil & Environmental Engineers  
Professional Planners & Surveyors & Landscape Architects  
CERTIFICATE OF AUTHORIZATION NO. 246A2788300-1

100 RICE DRIVE  
MILLSBORO, NEW DELAWARE 19966  
(302) 261-1000

15 HUNTERS CREEK  
TOWNSHIP, NEW JERSEY 07033  
(973) 254-1000

ROBERT D. SIVE

PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE  
5/30/23

SCALE  
1" = 100'

DRAWN  
RDS

CHECKED  
RDS

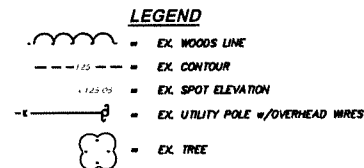
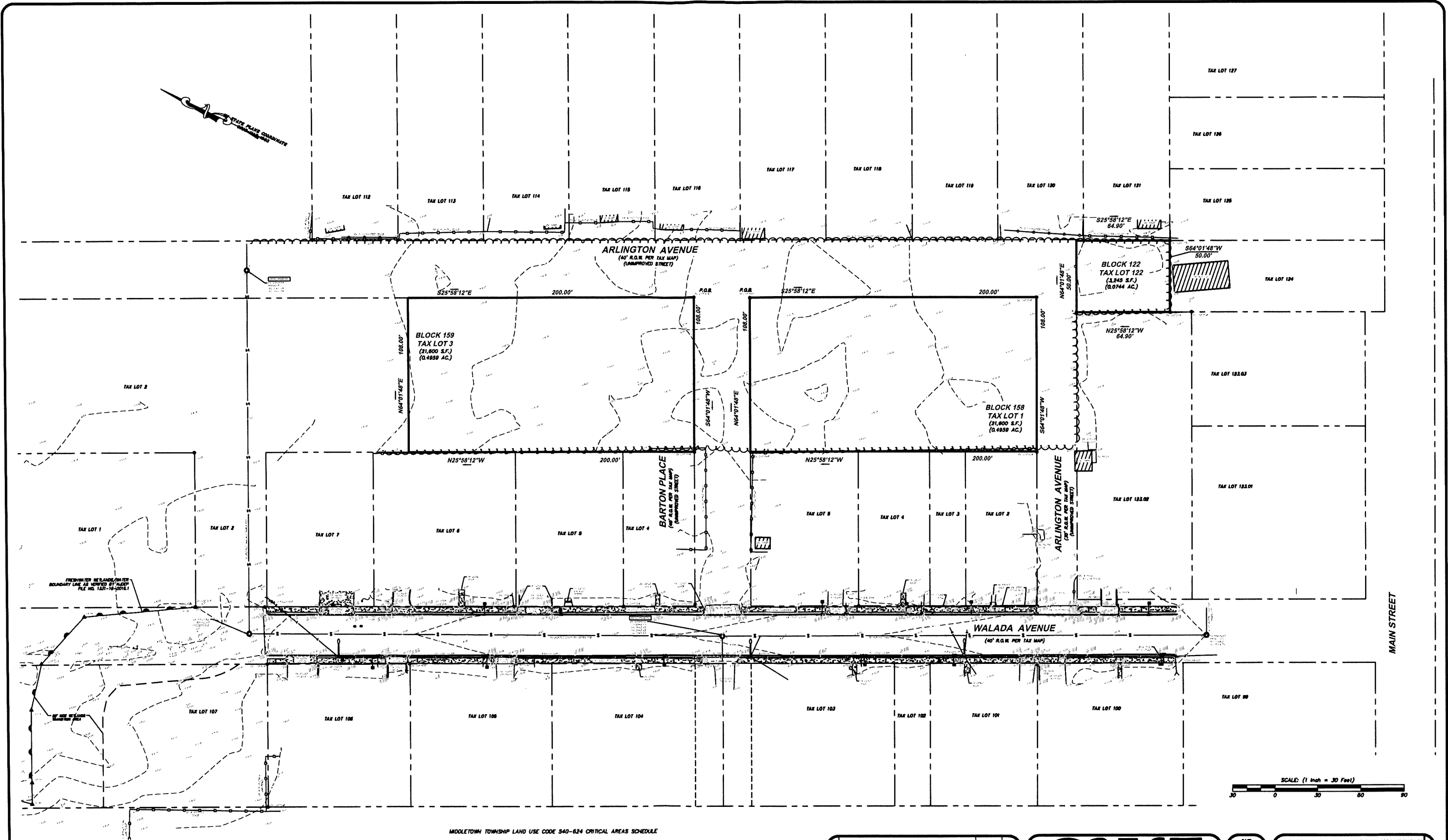
SHEET  
1 OF 13

PROJECT  
COVER SHEET

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
TAX MAP SHEET NO. 14, LAST REV. 12/02/11  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

DATE: 5/30/23  
FILE: 150627

001-155001.15070DESIGN PLANS\SCand.dwg, 9/29/2025, 10:36:52 AM



MIDDLETOWN TOWNSHIP LAND USE CODE 340-624 CRITICAL AREAS SCHEDULE

- A(1)(X)(1) TIDAL WETLANDS -- IN ACCORDANCE WITH NJDEP AUTHORIZATION FOR FRESHWATER WETLANDS LETTER OF INTERPRETATION - EXTENSION, FILE AND ACTIVITY NO. 1331-17-0011, IFWNW220001, DATED DECEMBER 22, 2022, THE SITE DOES NOT CONTAIN TIDAL WETLANDS.
- A(1)(X)(2) NONTIDAL WETLANDS -- IN ACCORDANCE WITH NJDEP AUTHORIZATION FOR FRESHWATER WETLANDS LETTER OF INTERPRETATION - EXTENSION, FILE AND ACTIVITY NO. 1331-17-0011, IFWNW220001, DATED DECEMBER 22, 2022, THE SITE DOES NOT CONTAIN NONTIDAL WETLANDS.
- A(1)(X)(3) STEEP SLOPES -- IN ACCORDANCE WITH THIS EXISTING CONDITIONS PLAN WITH TOPOGRAPHY, THE SITE DOES NOT CONTAIN STEEP SLOPES.
- A(1)(X)(4) SURFACE WATERS -- IN ACCORDANCE WITH THIS EXISTING CONDITIONS PLAN WITH TOPOGRAPHY, THE SITE DOES NOT CONTAIN SURFACE WATERS AND/OR WATERCOURSES.
- A(1)(X)(1) STEEP SLOPES -- IN ACCORDANCE WITH THIS EXISTING CONDITIONS PLAN WITH TOPOGRAPHY, THE SITE DOES NOT CONTAIN STEEP SLOPES.
- A(1)(X)(2) TRANSITION AREAS -- IN ACCORDANCE WITH NJDEP AUTHORIZATION FOR FRESHWATER WETLANDS LETTER OF INTERPRETATION - EXTENSION, FILE AND ACTIVITY NO. 1331-17-0011, IFWNW220001, DATED DECEMBER 22, 2022, THE SITE DOES NOT CONTAIN FRESHWATER WETLANDS TRANSITION AREAS.

| NO. | DESCRIPTION  | DATE    |
|-----|--|---------|
| 1   | REV. PER MIDDLETOWN TOWNSHIP REVIEW LETTER DATED 7/30/25 | 8/26/25 |
| 2   |  |         |
| 3   |  |         |
| 4   |  |         |
| 5   |  |         |
| 6   |  |         |
| 7   |  |         |
| 8   |  |         |
| 9   |  |         |
| 10  |  |         |

**CREST**  
Engineering Associates Inc.  
Civil & Environmental Engineers  
Professional Planners • Surveyors • Landscape Architects  
• CERTIFICATE OF AUTHORIZATION NO. 240A2788300 •

100 FREE DRIVE  
WALLINGTON, TOWNSHIP, N.J. 08090  
PH: (609) 442-1882

15 GREENWAY DRIVE  
WALLINGTON, TOWNSHIP, N.J. 08090  
PH: (609) 442-1882

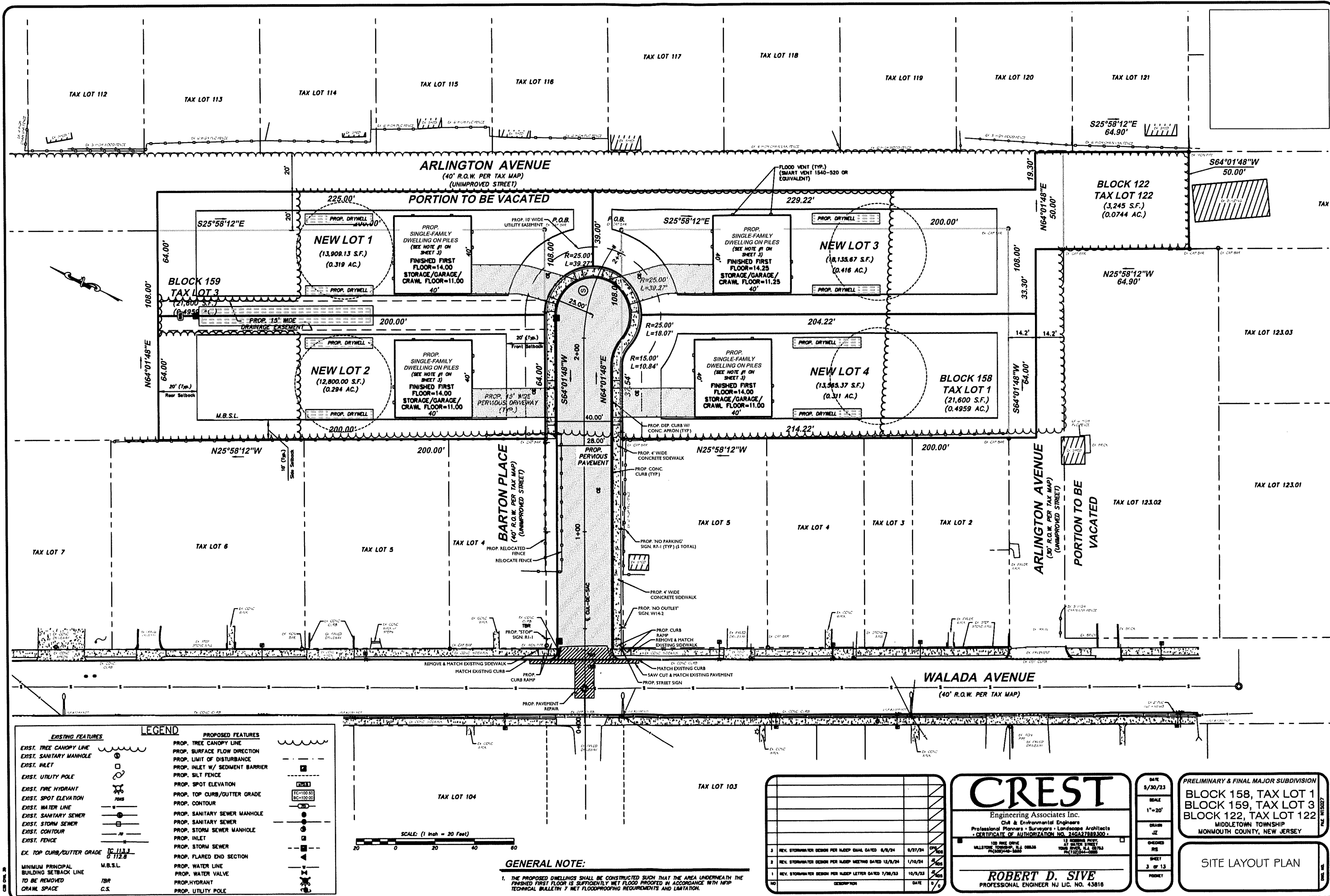
**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 43818

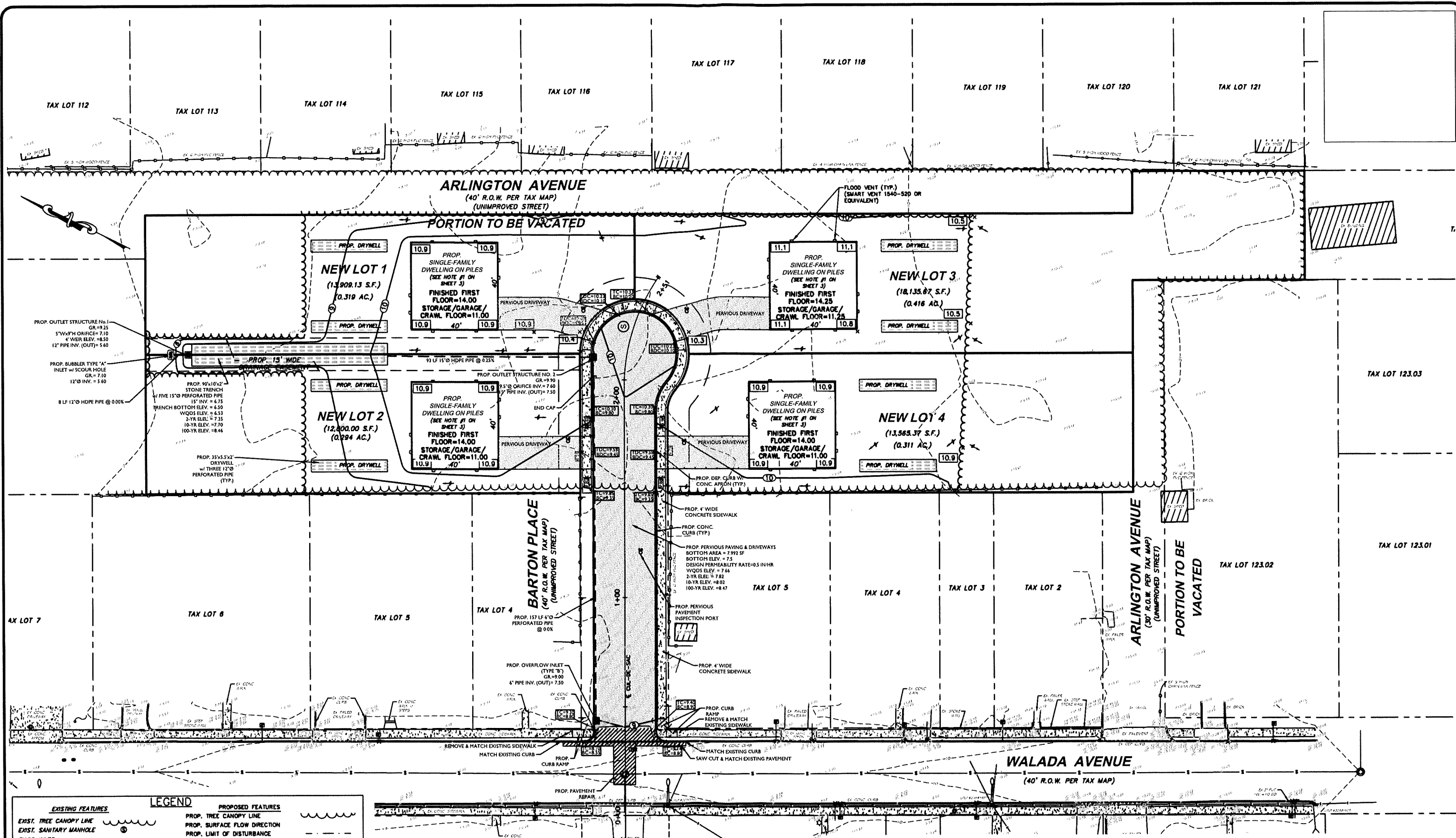
|         |         |
|---------|---------|
| DATE    | 5/30/23 |
| SCALE   | 1"=30'  |
| DRAWN   | RDS     |
| CHECKED | RDS     |
| SHEET   | 2 OF 13 |
| PROJECT |         |

PRELIMINARY & FINAL MAJOR SUBDIVISION

BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

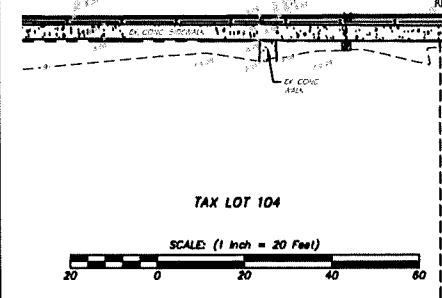
EXISTING  
CONDITIONS PLAN





**LEGEND**

| EXISTING FEATURES                                     | PROPOSED FEATURES               |
|---|---------------------------------|
| EXIST. TREE CANOPY LINE                               | PROP. TREE CANOPY LINE          |
| EXIST. SANITARY MANHOLE                               | PROP. SURFACE FLOW DIRECTION    |
| EXIST. INLET  | PROP. LIMIT OF DISTURBANCE      |
| EXIST. UTILITY POLE                                   | PROP. INLET W/ SEDIMENT BARRIER |
| EXIST. FIRE HYDRANT                                   | PROP. SILT FENCE                |
| EXIST. SPOT ELEVATION                                 | PROP. SPOT ELEVATION            |
| EXIST. WATER LINE                                     | PROP. TOP CURB/GUTTER GRADE     |
| EXIST. SANITARY SEWER                                 | PROP. CONTOUR                   |
| EXIST. STORM SEWER                                    | PROP. SANITARY SEWER MANHOLE    |
| EXIST. CONTOUR  | PROP. SANITARY SEWER            |
| EXIST. FENCE  | PROP. STORM SEWER MANHOLE       |
| EX. TOP CURB/GUTTER GRADE                             | PROP. INLET                     |
| MINIMUM PRINCIPAL BUILDING SETBACK LINE TO BE REMOVED | PROP. STORM SEWER               |
| CRANE SPACE   | PROP. FLARED END SECTION        |
|   | PROP. WATER LINE                |
|   | PROP. WATER VALVE               |
|   | PROP. HYDRANT                   |
|   | PROP. UTILITY POLE              |



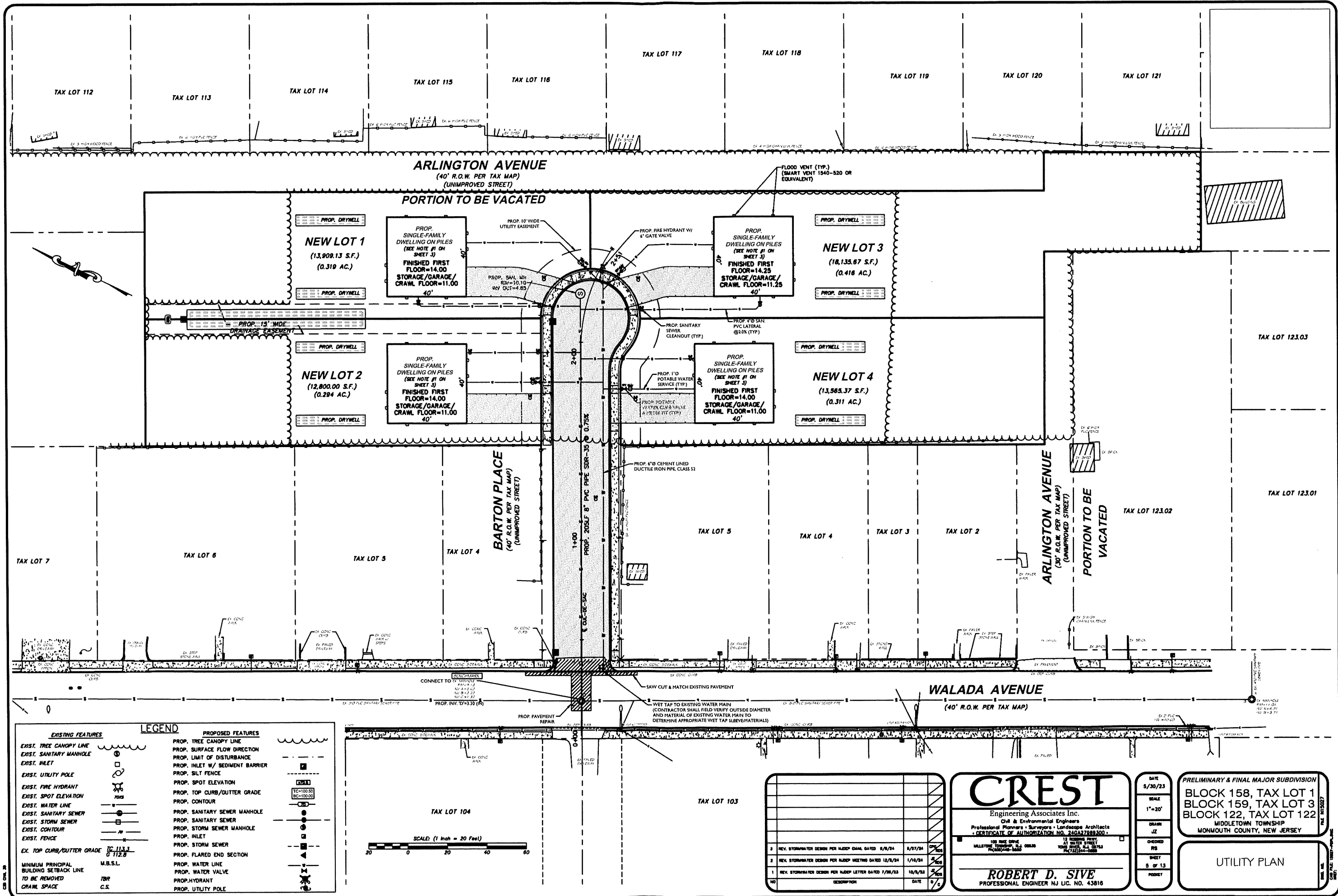
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|-----|---|----------|-----|
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| 2   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
| 3   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
| 4   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
| 5   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
| 6   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
| 7   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
| 8   | REV. STORMWATER DESIGN FOR MEETING DATED 12/24/24 | 12/24/24 | 100 |
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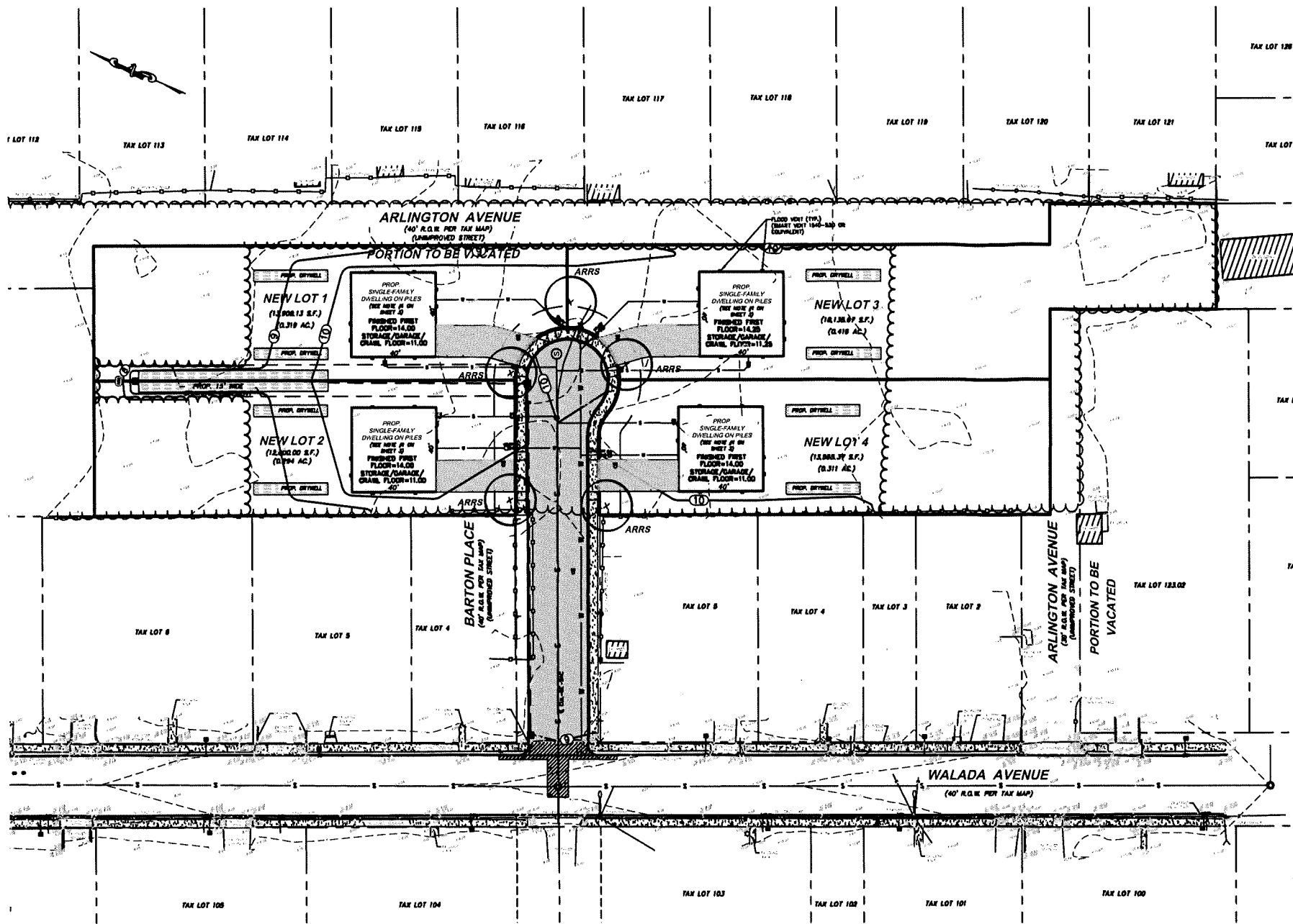
**CREST**  
Engineering Associates Inc.  
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CERTIFICATE OF AUTHORIZATION NO. 240A27889-300  
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**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43616

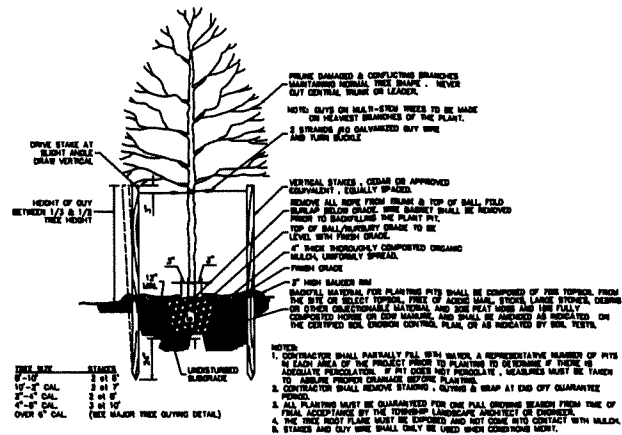
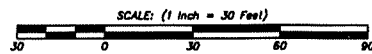
DATE: 5/30/23  
SCALE: 1"=20'  
DRAWN: JZ  
CHECKED: RS  
SHEET: 4 OF 13  
PROJECT: GRADING AND DRAINAGE PLAN

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY





- LEGEND**
- EXIST. WOODS LINE
  - PROP. LIMIT OF CLEARING
  - EXIST. CONTOUR
  - PROP. CONTOUR
  - EX. UTILITY POLE W/OVERHEAD WIRES
  - X --- PROP. ACER RUBRUM "RED SUNSET", RED SUNSET RED MAPLE, 2 1/2"-3" CAL., B&B



**LANDSCAPE NOTES**

- 1. GENERAL NOTES:**
- A. THIS PLAN TO BE USED ONLY FOR THE PURPOSES OF LANDSCAPING.
  - B. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. NOTIFY THE LANDSCAPE DESIGNER IMMEDIATELY IN REFERENCE TO DISCREPANCIES OR LOCATION CONFLICTS PRIOR TO PLANTING.
  - C. IN THE EVENT THAT PLANT QUANTITY DISCREPANCIES OR MATERIAL OMISSIONS OCCUR IN THE PLANTING SCHEDULE, THE PLAN SHALL SUPERSEDE.
  - D. ALL PLANTING MATERIALS AND METHODS SHALL MEET OR EXCEED THE REQUIREMENTS OF THE MUNICIPAL ORDINANCES OF MIDDLETOWN TOWNSHIP AND AINS 12-80.1 (CURRENT VERSION), THE AMERICAN STANDARD FOR NURSERY STOCK, PUBLISHED BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION. IN THE EVENT OF CONFLICTS BETWEEN THE A.N.L.A. STANDARDS AND MUNICIPAL STANDARDS, THE MUNICIPAL STANDARDS SHALL SUPERSEDE.
  - E. ALL EXISTING TREES AND SHRUBS TO BE PRESERVED AT THE PERIMETER OF THE SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY APPROVED TREE PROTECTION FENCING. SEE TREE SAVE/TREE CLEAR PLAN FOR LOCATION AND DETAILS PERTAINING TO TREE PROTECTION.
  - F. ALL LANDSCAPING SHALL BE PLANTED SO AS TO NOT INTERFERE WITH UTILITY LINES, SIGHT TRIANGLES, UNDERGROUND UTILITIES, OR PUBLIC WALKWAYS OR ANY OTHER EXISTING OR PROPOSED STRUCTURE. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESSES, OR WITHIN REQUIRED SIGHT DISTANCES OR SIGHT TRIANGLE EASEMENTS SHALL NOT BE BRANCHED ANY LOWER THAN 7'-0" ABOVE GRADE, AND MUST BE APPROPRIATELY PRUNED.
  - G. THE APPLICANT SHALL MAINTAIN THE AREA WHERE THE EXISTING TREES CURRENTLY ACTS AS A BUFFER TO THE RESIDENTIAL COMMUNITY ALONG POTTER ROAD AFTER PRELIMINARY SITE CLEARING AND SUPPLEMENT PLANTINGS TO THE SATISFACTION OF THE TOWNSHIP ENGINEER.
- 2. PLANT MATERIAL:**
- A. NO PLANT SUBSTITUTION WITH REGARD TO SIZE, SPECIES, NAMED VARIETY OR CULTIVAR SHALL BE ALLOWED WITHOUT THE PERMISSION OF THE TOWNSHIP ENGINEER OR APPROVING AUTHORITY PRIOR TO INSTALLATION. ALL PLANT RELOCATIONS SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION.
  - B. ALL PLANTS SHALL BE DUG, PACKED, TRANSPORTED AND HANDLED WITH THE UTMOST CARE TO ENSURE ADEQUATE PROTECTION FROM INJURY AND DESICCATION.
  - C. ALL PLANTS SHALL BE FREE FROM DISEASE AND INFESTATION AND BEAR ALL LEGALLY REQUIRED AGRICULTURAL CERTIFICATIONS.
  - D. ALL PLANTS SHALL BE PRUNED TO ENHANCE MOOR PRIOR TO, OR UPON INSTALLATION, WHILE RETAINING THE NATURAL GROWTH HABIT OF THE PLANTS. THE CENTRAL LEADER SHALL NOT BE CUT. MATERIAL PROVIDED IN THIS CONDITION SHALL NOT BE ACCEPTED. DAMAGED, BROKEN OR CONFLICTING BRANCHES SHALL BE PRUNED CLEANLY, FLUSH WITH THE MAIN TRUNK OR BRANCH.
  - E. ALL PLANTS SHALL BE NURSERY-GROWN AND TAGGED WITH A DURABLE LABEL INDICATING THE GENUS, SPECIES, NAMED VARIETY OR CULTIVAR, "JERSEY GROWN" PLANT MATERIAL PREFERRED.
- 3. PLANTING:**
- A. SOIL MUST BE FROST-FREE, FRIABLE AND NOT MUDDY AT THE TIME OF PLANTING. PLANTING HOLES SHOULD BE A MINIMUM OF 12 INCHES LARGER IN DIAMETER THAN THE SOIL BALL OR ROOT MASS.
  - B. BACKFILL MATERIAL FOR PLANTING PITS SHALL BE COMPOSED OF 70% TOPSOIL, FROM THE SITE OR SELECT TOPSOIL, FREE OF ACIDIC MATERIAL, STICKS, LARGE STONES, DEBRIS OR OTHER OBJECTIONABLE MATERIAL AND 20% PEAT MOSS AND 10% FULLY COMPOSTED HORSE OR COW MANURE, AND SHALL AMENDED AS INDICATED ON THE CERTIFIED SOIL EROSION CONTROL PLAN, OR AS INDICATED BY SOIL TESTS.
  - C. PLANTS SHALL BE SET TO ULTIMATE FINISHED GRADE SO THAT THEY WILL BE LEFT IN THE RELATIONSHIP TO THE SURROUNDING GROUND AS THEY HAD, PRIOR TO BEING DUG. A RING OF PACKED SOIL SHALL BE PLACED AROUND THE FINISHED PLANTING HOLE OF EACH TREE. THIS SAUCER SHALL BE A MINIMUM OF FOUR INCHES DEEPER THAN THE FINISHED GRADE. IF EVIDENCE OF SATURATED SOILS IS ENCOUNTERED DURING EXCAVATION OF THE PLANTING PITS, UPON DIRECTION BY THE LANDSCAPE DESIGNER, PLANTS SHALL BE SET SO THAT THEIR ROOT CROWNS ARE APPROXIMATELY THREE INCHES ABOVE THE FINAL GRADE, WITH TOPSOIL AND MULCH GENTLY MOUND TO AVOID EXCESSIVE DRYING AT THE SURFACE. UNDER NO CIRCUMSTANCES SHALL PLANTINGS AT RELATIVELY DRY LOCATIONS BE PERFORMED IN A MOUNDING MANNER.
  - D. THE CORD BINDING THE BALL OF ALL BALLED AND BURLAPPED (B&B) PLANTS SHALL BE CUT AND REMOVED, AND BURLAP ON THE UPPER PORTION OF THE ROOT BALL SHALL BE REMOVED. PLANTS WITH SYNTHETIC NON-DEGRADABLE ROOT BALL WRAPS SHALL NOT BE ACCEPTED. WIRE BASKETS ARE TO BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.
  - E. ALL TREES SHALL RECEIVE A 4" THICK APPLICATION OF THOROUGHLY COMPOSTED ORGANIC, SHREDDED HARDWOOD MULCH FREE OF ANY OBJECTIONABLE MATERIALS, SPREAD TO A MAXIMUM THICKNESS OF 1 INCH WITHIN 12 INCHES OF PLANT TRUNK OR STEM. ALL PROPOSED TREES SHALL BE SET IN BEDS MULCHED TO THE LIMIT OF THEIR PLANTING PITS. FOR EVERGREEN TREES, THE MULCH BED SHALL EXTEND A MINIMUM OF 12" BEYOND THE DRIP LINE OF THE LOWEST TIER OF BRANCHES. ALL PROPOSED SHRUBS SHALL BE SET IN CONTINUOUS MASSED PLANTING BEDS, RATHER THAN AS ISOLATED INDIVIDUALS.
  - F. THE CONTRACTOR SHALL WATERED PLANTS THOROUGHLY ON THE SAME DAY AS INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT AND GROWTH OF ALL PLANTS.
- 4. MAINTENANCE**
- A. OWNER IS RESPONSIBLE FOR ENSURING THAT PLANT MATERIALS SHALL RECEIVE PERIODIC MAINTENANCE BY WATERING, FEEDING, SPRAYING, FERTILIZING, PRUNING OR OTHER HORTICULTURAL PRACTICES, AS REQUIRED TO ENSURE VIABILITY.
  - B. REGULAR WATERING SHALL BE PROVIDED TO ENSURE ESTABLISHMENT AND GROWTH. WATER ALL PLANT MATERIAL AS NEEDED THROUGH FIRST AND SECOND GROWING SEASON. IF RAINFALL IS INSUFFICIENT, WATER THOROUGHLY TWO TIMES PER WEEK TO ENSURE PROPER ESTABLISHMENT.
  - C. PLANTS SHALL BE INSPECTED PERIODICALLY AND DAMAGED, BROKEN OR CONFLICTING BRANCHES SHALL BE PRUNED CLEANLY, FLUSH WITH THE MAIN TRUNK OR BRANCH, WHILE RETAINING THE NATURAL GROWTH HABIT OF THE PLANT. SHRUBS SHOULD BE PERMITTED TO GROW INTO CONTINUOUS MASSED PLANTING BEDS AND NOT BE PRUNED INTO ISOLATED INDIVIDUALS.
  - D. ONE YEAR AFTER INSTALLATION OF ALL PLANT MATERIALS, STAKING AND TREE WRAPS SHALL BE REMOVED.

**GENERAL SEEDING NOTES**

- TOPSOIL** TOPSOIL SHALL BE SPREAD OVER ALL DISTURBED AREAS TO MINIMUM DEPTH OF 6 INCHES.
- FERTILIZATION/AMEND** SHALL BE APPLIED AT SUCH RATES AS DETERMINED NECESSARY FOR GOOD PLANT GROWTH PER SOIL TEST FINDINGS. AT LEAST 40% OF THE FERTILIZER NITROGEN SHALL BE OF AN ORGANIC ORIGIN.
- SEED:** SEED WITH SELECT HIGH QUALITY SEED. SEED MIXTURE AND RATES SHALL BE AS SPECIFIED BELOW, TO ENSURE AN EVEN UNIFORM COVERAGE. SEED SHALL BE APPLIED IN TWO SUCCESSIVE BROADCASTS, WITH THE SECOND BROADCAST PERPENDICULAR TO THE FIRST. THE RATE OF EACH BROADCAST SHALL BE 1/2 OF THE TOTAL SEEDING RATE SPECIFIED. TO ENSURE GOOD GERMINATION SEED SHALL BE RAKED INTO THE SOIL TO A DEPTH OF 1/2 INCH.
- SEED MIXTURE:** PERKIE, KENTUCKY BLUEGRASS, PERENNIAL RYEGRASS.
- SEE SHEET 10, SOIL EROSION AND SEDIMENT CONTROL, NOTES AND DETAILS, FOR SEEDING SPECIFICATIONS.
- MULCHING:** ALL SEEDING AREAS SHALL BE MULCHED IMMEDIATELY AFTER SEEDING. MULCH MAY BE EITHER DRY STRAW OR HAY FREE OF BIRD SEEDS. APPLY AT A RATE OF 100 LBS. PER 1,000 SQ. FT.
- WATERING:** SEEDING AREAS SHALL BE WATERED DAILY TO ENSURE GOOD GERMINATION. UPON GERMINATION IRRIGATION MAY BE CONTINUED FOR APPROXIMATELY THREE WEEKS FOLLOWING GERMINATION OR UNTIL GRASS HAS BECOME SUFFICIENTLY ESTABLISHED.
- PLANTING DATES:** MARCH 15 TO MAY 15 OR AUGUST 15 TO OCTOBER 15.

THIS DRAWING IS TO BE USED FOR LANDSCAPE PURPOSES ONLY

| NO. | DESCRIPTION  | DATE    | BY  |
|-----|--|---------|-----|
| 1   | REV. STORMWATER DESIGN PER NJ DEP LETTER DATED 7/26/23 | 10/9/23 | R/S |
| 2   | REV. STORMWATER DESIGN PER NJ DEP LETTER DATED 8/8/24  | 8/21/24 | R/S |

# CREST

Engineering Associates Inc.

Civil & Environmental Engineers

Professional Planners • Surveyors • Landscape Architects

CERTIFICATE OF AUTHORIZATION NO. 240A2788300

108 BOX DRIVE  
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13 NORMAN DRIVE  
TOWNSHIP, NJ 07063  
(908) 254-0888

**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE: 5/30/23

SCALE: 1"=30'

DRAWN: JZ

CHECKED: R/S

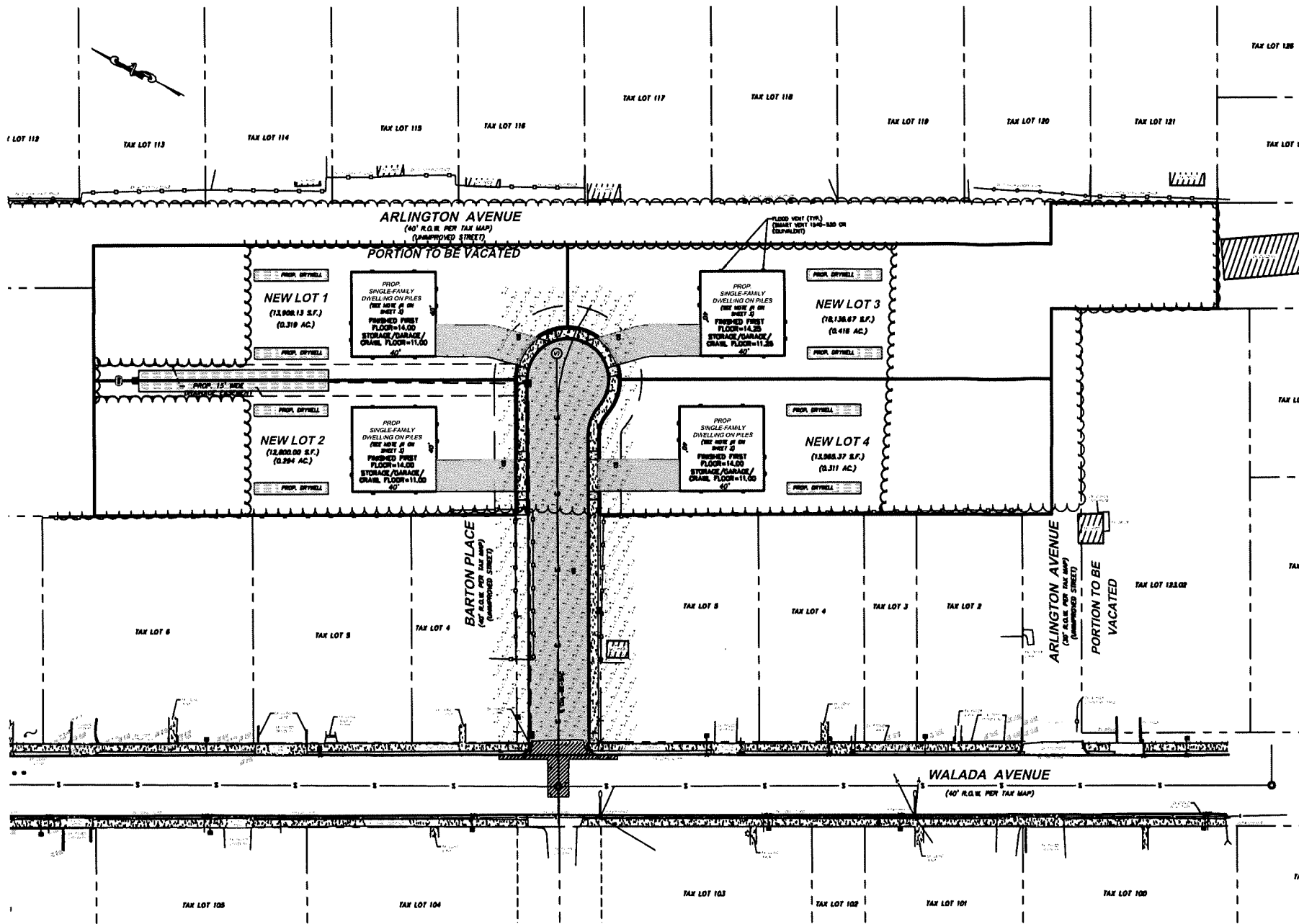
SHEET: 6 OF 13

PROJECT: PRELIMINARY & FINAL MAJOR SUBDIVISION

BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122

MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

LANDSCAPE PLAN



COLONIAL POST TOP STANDARD LUMINAIRE  
WITH 16 FOOT FIBERGLASS POLE  
BLACK FIBERGLASS POLE  
100 WATT  
HIGH PRESSURE SODIUM  
6 TOTAL STREET LIGHTS

Jersey Central  
Power & Light  
Colonial Post Top Standard Luminaire  
TYPICAL LIGHT FIXTURE DETAIL  
NO SCALE  
CONTACT JCP&L FOR PURCHASE AND INSTALLATION INFORMATION

- LIGHTING NOTES
1. AN AVERAGE OF 0.1 FOOTCANDLES SHALL BE PROVIDED WITHIN THE ROADWAY.
  2. LIGHT POLES AND FIXTURES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURE'S SPECIFICATIONS AND THE UTILITY COMPANY'S REQUIREMENTS.
  3. STREET LIGHTING ELECTRICAL PLANS AND CIRCUIT DIAGRAMS ARE THE RESPONSIBILITY OF OTHERS.
  4. JCP&L SHALL DETERMINE DIRECT BURIAL POLE LENGTH TO ENSURE A 16 FOOT MOUNTING HEIGHT, AS REQUIRED BY MANALAPAN TOWNSHIP.

LEGEND

+ 1.7 = PROP. SPOT FOOTCANDLE

| Luminaire Schedule |     |                             |                 |             |                   |                 |
|--------------------|-----|-----------------------------|-----------------|-------------|-------------------|-----------------|
| Symbol             | Qty | Label                       | Mounting Height | Arrangement | Total Lamp Lumens | LLF Description |
|                    | 5   | RHL-LPT2-10W-4000-UNV-BX-PT | 16 FT.          | SINGLE      | 3115.2            | 0.900 4000K     |

| Calculation Summary |             |       |      |     |     |         |         |
|---------------------|-------------|-------|------|-----|-----|---------|---------|
| Label               | CalcType    | Units | Avg  | Max | Min | Avg/Min | Max/Min |
| New Layout          | Illuminance | Fc    | 0.86 | 1.9 | 0.0 | N.A.    | N.A.    |

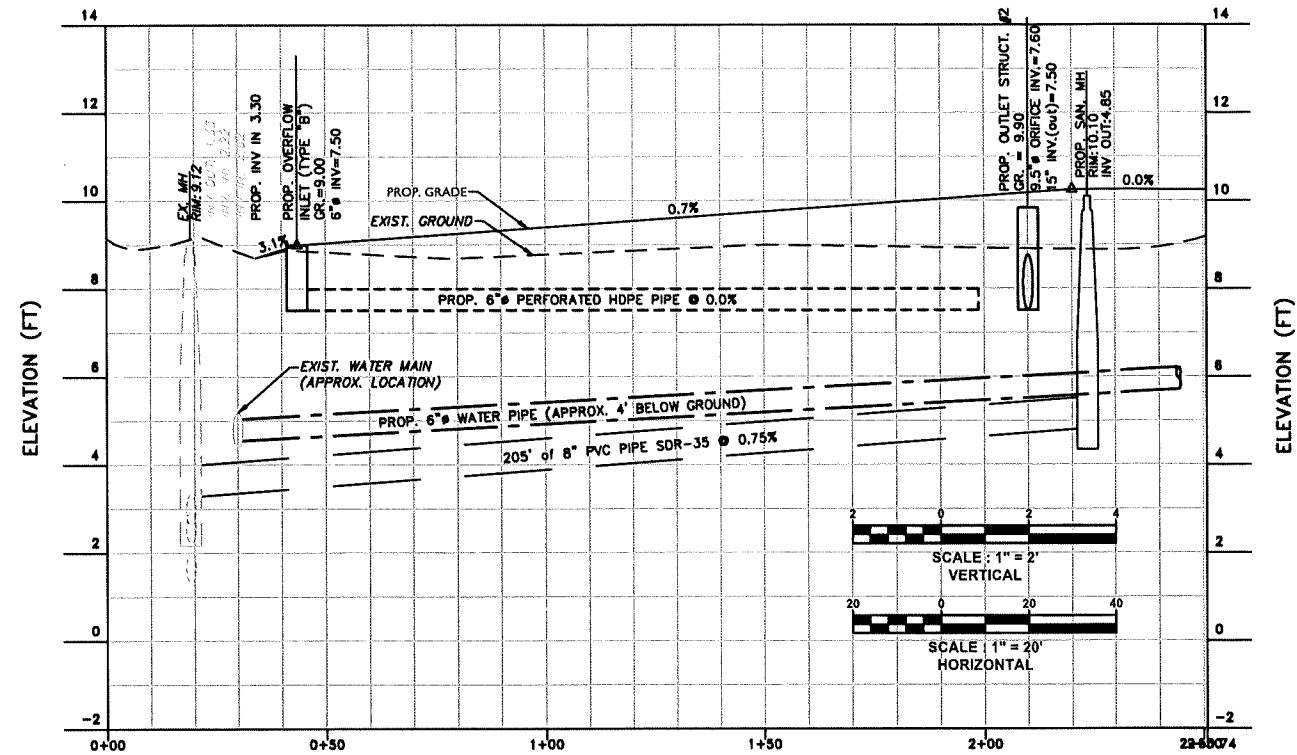
THIS DRAWING IS TO BE USED  
FOR LIGHTING PURPOSES ONLY

| NO | DESCRIPTION  | DATE    |
|----|--|---------|
| 1  | REV. PER MIDDLETOWN TOWNSHIP REVIEW LETTER DATED 7/23/20 | 8/28/20 |
| 2  | REV. STORMWATER DESIGN PER NJDEP CHAS. DATED 8/18/24     | 8/27/24 |
| 3  | REV. STORMWATER DESIGN PER NJDEP LETTER DATED 7/26/23    | 10/9/23 |

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PROFESSIONAL ENGINEER NJ LIC. NO. 43816

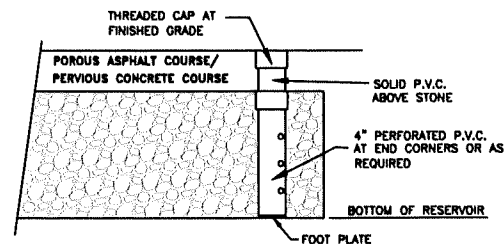
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5/30/23  
SCALE  
1"=30'  
DRAWN  
RS  
CHECKED  
RS  
SHEET  
7 OF 13  
PROJECT

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY  
FILE: 1815027  
LIGHTING PLAN

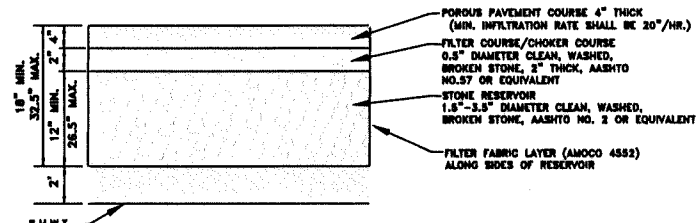


### GENERAL NOTES FOR POROUS PAVEMENT:

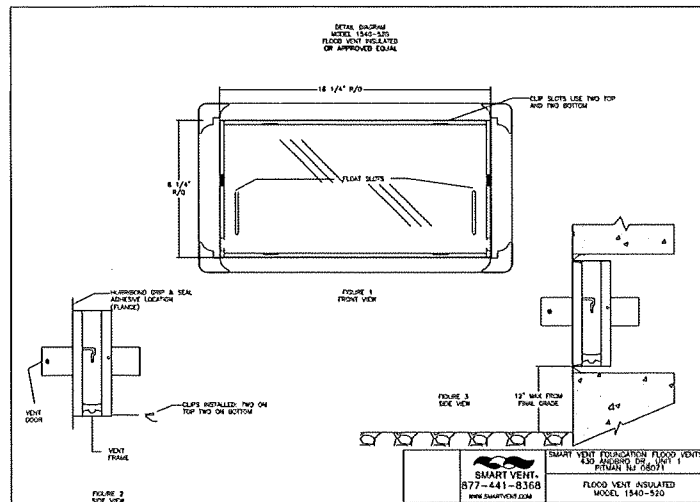
- PERVIOUS PAVEMENT AREAS SHALL BE COMPACTED IF CONSTRUCTED ON IN-SITU SOILS OR DEEP FILLED IF CONSTRUCTED ON FILL SOILS, WHICH SHOULD BE A STRUCTURAL SAND BASED FILL.
- STORAGE BED AND AGGREGATE MUST BE PLACED IN 6" MAXIMUM THICKNESS LIFTS & COMPACTED USING PLATE COMPACTORS IN ACCORDANCE WITH BMAP MANUAL REQUIREMENTS.
- PERVIOUS PAVEMENT AREAS SHALL BE PROTECTED FROM RUNOFF UNTIL THE CONTRIBUTORY AREAS HAVE BEEN STABILIZED.
- FILTER FABRIC SHOULD BE A NON-WOVEN GEOTEXTILE AMOCO 4552 OR APPROVED EQUAL.
- POROUS PAVEMENT SHOULD CONSIST OF COURSE AGGREGATE MIX WITH 100% PASSING #3", 95% PASSING #4", 55% PASSING #4, 15% PASSING #4, 10% PASSING #16 AND 5% PASSING #30 U.S. STANDARD SIEVE SIZES WITH A 5.75%-8.00% ASPHALT BINDER BY WEIGHT.
- DEPTH FROM THE BOTTOM OF THE BMAP TO THE CURB MUST BE MINIMUM 2 FEET SEPARATION.
- THE POROSITY OF THE PERMEABLE ASPHALT SURFACE MUST BE 15-25%.
- THE BINDER USED IN THE SURFACE COURSE MUST BE PERFORMANCE GRADED FOR THE TYPE OF USE; THEREFORE, THE ASPHALT PLANT MUST ALSO BE ADVISED OF THE TYPE OF SURFACE COURSE SPECIFIED IN ORDER TO USE THE CORRECT BINDER FOR THE INSTALLATION. FOR PARKING LOTS, POLYMER MODIFIED BINDER PG 64E-22 MUST BE SPECIFIED AS IT HAS BEEN SHOWN TO MINIMIZE SCUFFING CAUSED BY AUTOMOBILES WITH POWER STEERING.
- THE POROSITY OF ANY PERMEABLE ASPHALT BASE COURSE MUST BE 25%.
- MINIMUM AIR TEMPERATURE FOR PAVING: 50° F.
- INSTALLATION OF PERMEABLE ASPHALT REQUIRES DIFFERENT TEMPERATURE GUIDELINES, AS FOLLOWS, THAN THOSE OF IMPERVIOUS ASPHALT:  
ASPHALT BASE COURSE: 200-245° F.  
FINISH ROLLING BASE COURSE: 140-180° F.  
ASPHALT SURFACE COURSE: 200-220° F. AND  
FINISH ROLLING SURFACE COURSE: 110-140° F.
- VEHICULAR USE IS PROHIBITED FOR AT LEAST 48 HOURS ONCE THE PAVEMENT INSTALLATION IS COMPLETE.
- POST-CONSTRUCTION TESTING OF THE PERMEABLE ASPHALT SURFACE COURSE IS REQUIRED AND MUST CONFORM TO THE METHODS OF EITHER ASTM C1701 STANDARD TEST METHOD FOR INFILTRATION RATE OF IN PLACE PERVIOUS CONCRETE OR ASTM C1781 STANDARD TEST METHOD FOR SURFACE INFILTRATION RATE OF PERMEABLE UNIT PAVEMENT SYSTEMS. AT LEAST THREE LOCATIONS MUST BE USED FOR THE TEST, AND THEY SHOULD BE SPACED EVENLY ACROSS THE PERVIOUS PAVING SYSTEM. FAILURE TO ACHIEVE THE MINIMUM DESIGN INFILTRATION RATE OF THE SURFACE COURSE AT ONE OR MORE LOCATION INDICATES THE SYSTEM CANNOT BE PUT IN SERVICE UNTIL THE SYSTEM IS CORRECTED TO YIELD ALL PASSING VALUES.
- DO NOT USE DE-ICING COMPOUNDS/SALT/BAWD OVER PERVIOUS PAVEMENT TO CONTROL SNOW/ICE.
- DO NOT DUMP/STORE ANY CONSTRUCTION/LANDSCAPING/HAZARDOUS MATERIALS OVER PERVIOUS PAVEMENT. ELIMINATE INTRUSION OF HEAVY EQUIPMENT/VEHICLES FROM ENTERING PERVIOUS PAVEMENT AREA.
- PERFORM REGULAR MAINTENANCE OF THE PERVIOUS PAVEMENT AREA PER "OPERATION AND MAINTENANCE MANUAL" PREPARED FOR THE SITE COVERING PERVIOUS PAVEMENT AREA. GENERAL MAINTENANCE FOR POROUS PAVEMENT SHALL ALSO FOLLOW HJDEP BMAP MANUAL CHAPTER 8.6.
- PERFORM TESTING OF THE SURFACE COURSE OF THE PERVIOUS PAVEMENT FOR INFILTRATION RATE EACH SPRING, AS SPECIFIED IN THE "OPERATION AND MAINTENANCE MANUAL" PREPARED FOR THE SITE COVERING THE PERVIOUS PAVEMENT AREA.
- TESTING MUST BE PERFORMED ON THE SUBSOIL BELOW THE STORAGE BED AFTER EXCAVATION BUT PRIOR TO PLACEMENT OF THE STONE IN ACCORDANCE WITH THE CONSTRUCTION AND POST-CONSTRUCTION OVERSIGHT AND SOIL PERMEABILITY TESTING SECTION IN APPENDIX E OF THE BMAP MANUAL. TESTING RESULTS MUST BE PROVIDED TO THE TOWNSHIP ENGINEER AND WHERE AS-BUILT TESTING SHOWS A LONGER DRAIN TIME THAN DESIGNED, CORRECTIVE ACTIONS MUST BE TAKEN.
- THE SURFACE COURSE MUST BE INSPECTED AFTER EVERY STORM EXCEEDING ONE INCH OF RAINFALL.



INSPECTION PORT & OVERFLOW FOR PERVIOUS PAVING DETAIL  
NOT TO SCALE

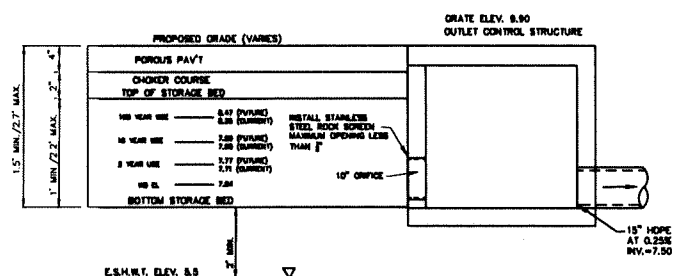


PERVIOUS PAVING DETAIL  
NOT TO SCALE

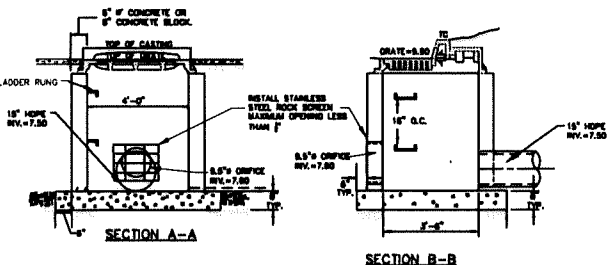
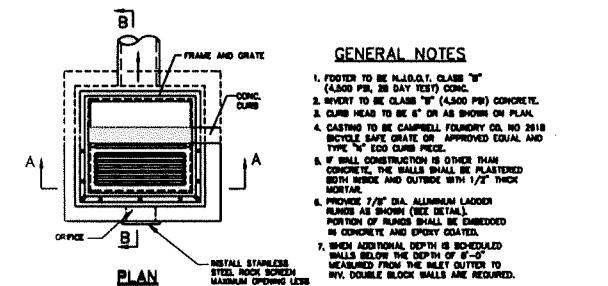


- DETAILED SPECIFICATIONS:**  
MATERIAL: STAINLESS STEEL  
OPERATION FLOOD: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION  
INSTALLATION: SECURED W/ 4 STAINLESS STEEL INSTALLATION CLIPS INCLUDED AND AN ADHESIVE HYDROSTATIC RELIEF: 200 SQ. FT PER VENT  
REQUIREMENTS FLOOD: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED ON AT LEAST TWO DIFFERENT WALLS  
COLORS: STAINLESS (STANDARD)  
EXTERIOR POWDER COATED WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)  
MEETS THE REQUIREMENTS FOR ENGINEERED OPENINGS AS SET FORTH BY: FEMA, NFIP, ICC, & ASCE  
SUPPORTIVE DOCUMENTS: TB 1-08, 44CFR 60.3(C)(5), ASCE 24-14  
ICC EVALUATION # ESR-2074

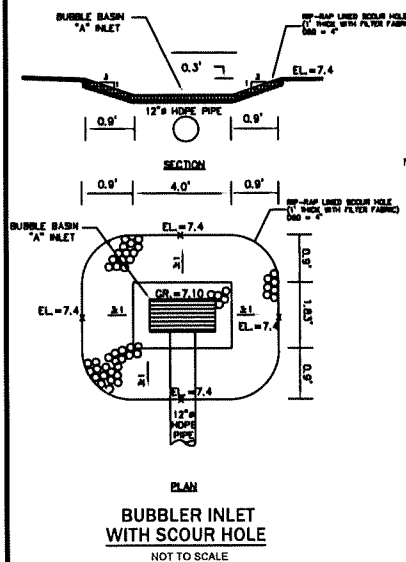
FLOOD VENT DETAIL  
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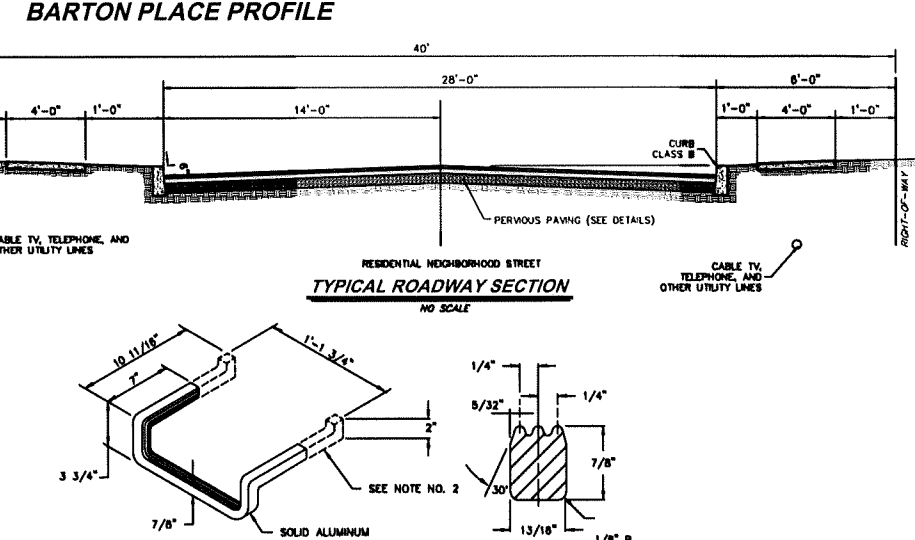
PERVIOUS PAVING W/ INFILTRATION SECTION  
NOT TO SCALE



OUTLET CONTROL STRUCTURE NO. 2  
(MODIFIED TYPE B INLET DETAIL)  
NOT TO SCALE

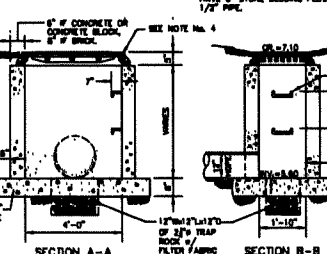
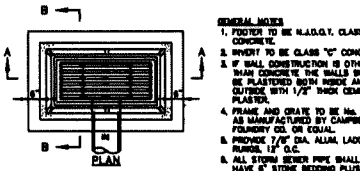


OUTLET CONTROL STRUCTURE NO. 1  
(MODIFIED TYPE E INLET DETAIL)  
NOT TO SCALE

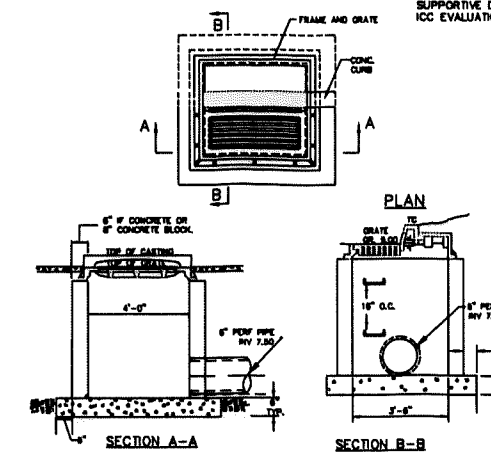


- NOTES:**  
1. ALUMINUM STEP SHALL BE EXTRUDED ALUM. 6061-T6 ALLOY DROP FRONT DESIGN OR APPROVED EQUAL.  
2. THE PORTION TO BE IMBEDDED IN THE CONCRETE SHALL BE COATED WITH COALTAR PITCH OR OTHER APPROVED MATERIAL.

LADDER RUNG  
NOT TO SCALE



PROPOSED BUBBLER TYPE \"A\" INLET  
NOT TO SCALE



OVERFLOW INLET (TYPE B)  
NOT TO SCALE

| NO. | DESCRIPTION  | DATE    | BY |
|-----|--|---------|----|
| 1   | REV. STORMWATER DESIGN PER HJDEP EMAIL DATED 6/8/24    | 6/27/24 | CH |
| 2   | REV. STORMWATER DESIGN PER HJDEP MEETING DATED 12/8/24 | 1/10/25 | CH |
| 3   | REV. STORMWATER DESIGN PER HJDEP LETTER DATED 1/24/25  | 10/8/25 | CH |

# CREST

Engineering Associates Inc.  
Civil & Environmental Engineers  
Professional Planners • Surveyors • Landscape Architects  
• CERTIFICATE OF AUTHORIZATION NO. 246A2788300 •

100 NINE DRIVE  
MILLSBORO TOWNSHIP, NJ 08230  
(609) 683-1800

13 ROXBURY DRIVE  
AT WATER STREET  
TOWNE SQUARE, NJ 07033  
(973) 264-1000

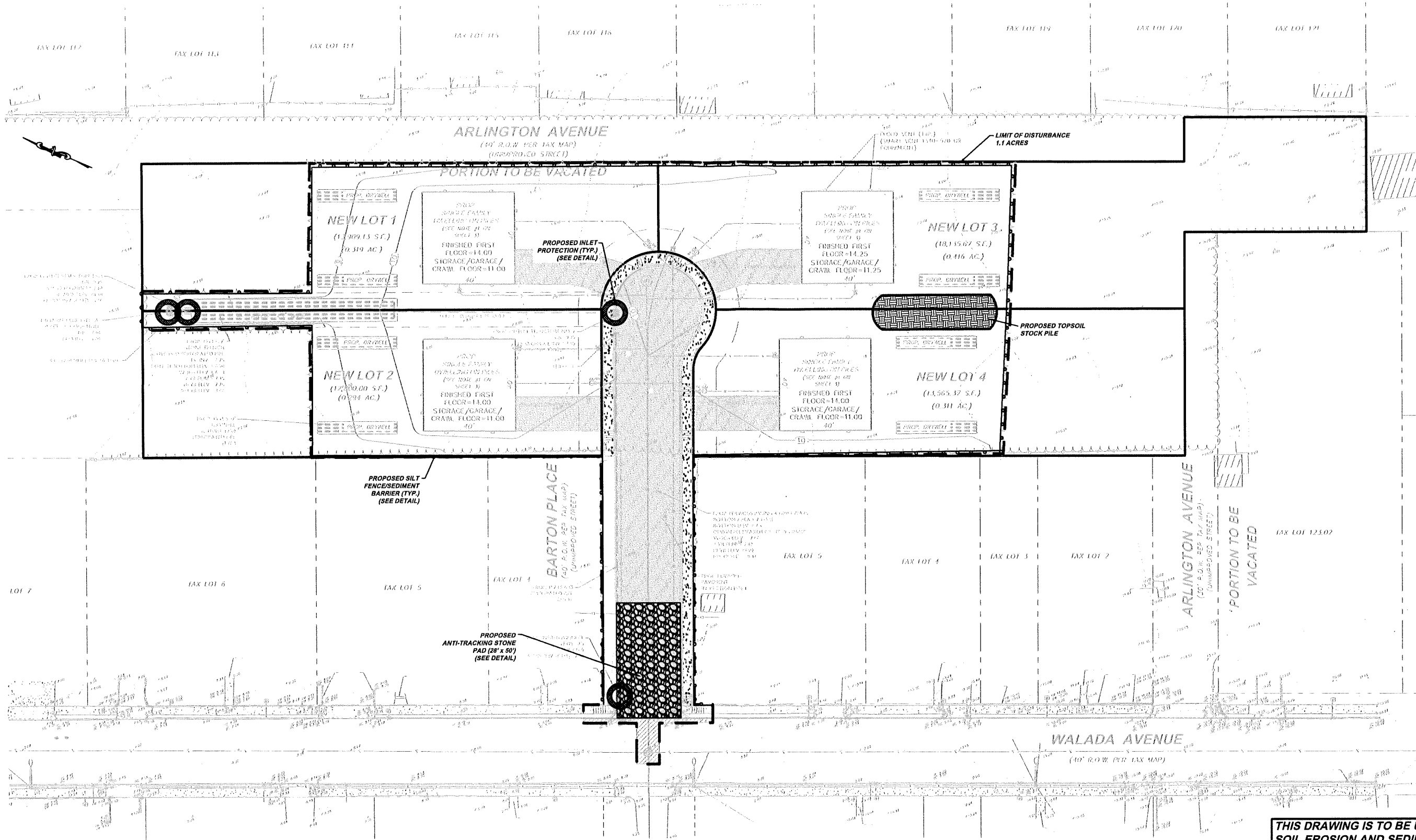
**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43818

DATE: 5/30/23  
SCALE: AS SHOWN  
DRAWN: JZ  
CHECKED: RS  
SHEET: 8 OF 13  
PROJECT:

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

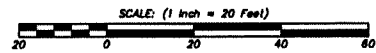
PROFILE AND DETAILS  
§ SE & SC DETAILS





THIS DRAWING IS TO BE USED FOR  
SOIL EROSION AND SEDIMENT CONTROL  
PURPOSES ONLY.

- LEGEND**
- EXIST. WOODS LINE
  - PROP. LIMIT OF CLEARING
  - EXIST. CONTOUR
  - PROP. CONTOUR
  - EX. UTILITY POLE W/OVERHEAD WIRES



| NO | DESCRIPTION   | DATE    | BY |
|----|---|---------|----|
| 1  | REV. STORMWATER DESIGN PER ADEP LETTER DATED 7/26/23  | 10/5/23 | RS |
| 2  | REV. STORMWATER DESIGN PER ADEP MEETING DATED 12/8/24 | 1/10/24 | RS |
| 3  | REV. STORMWATER DESIGN PER ADEP EMAIL DATED 6/6/24    | 6/27/24 | RS |

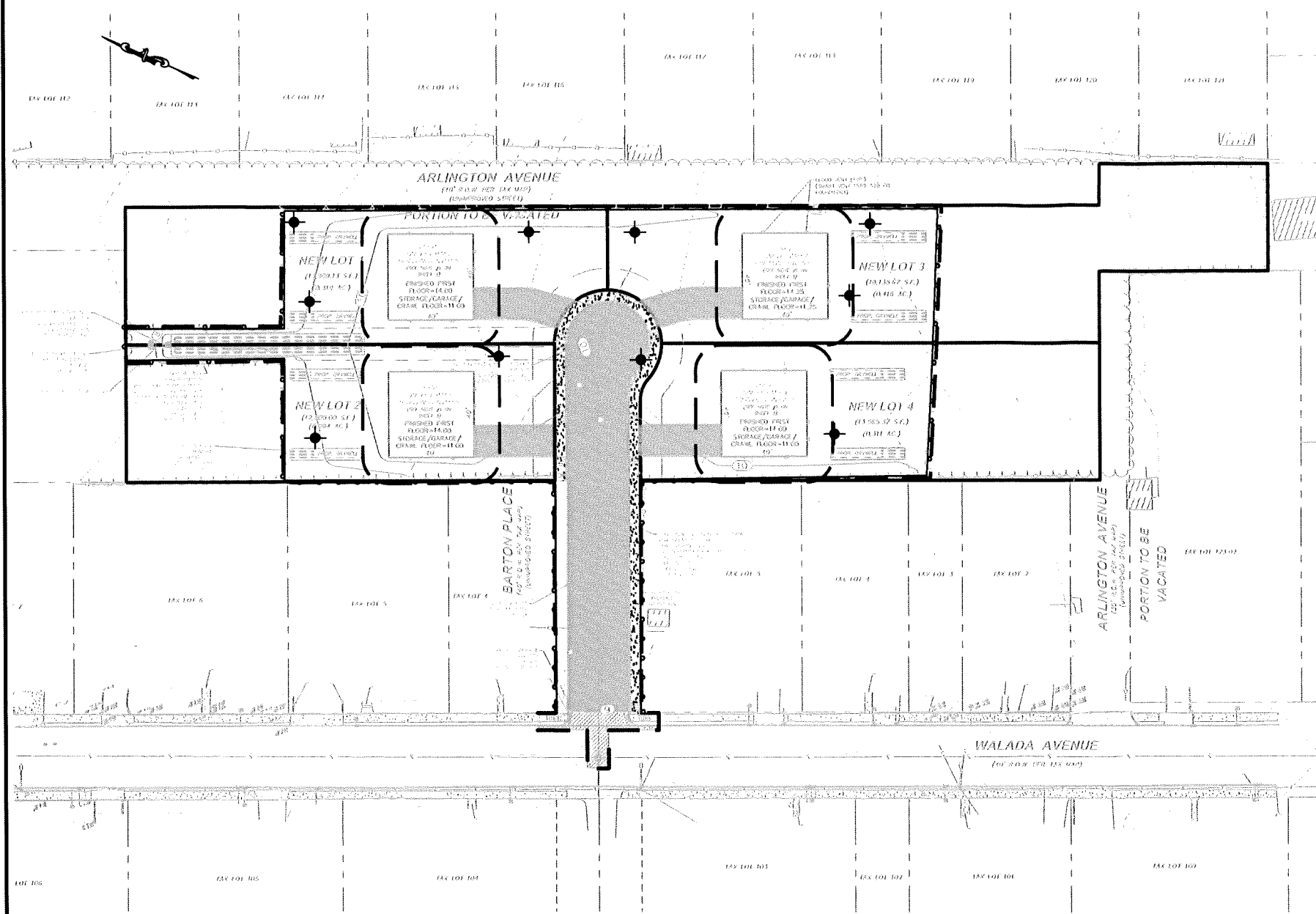
**CREST**  
Engineering Associates Inc.  
Civil & Environmental Engineers  
Professional Planners • Surveyors • Landscape Architects  
- CERTIFICATE OF AUTHORIZATION NO. 246A27889-300 -  
100 FREE DRIVE  
MILLSTONE TOWNSHIP, NJ 08540  
AT WATER STREET  
TOWNSHIP OF MONMOUTH  
PHILADELPHIA, PA 19106

**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

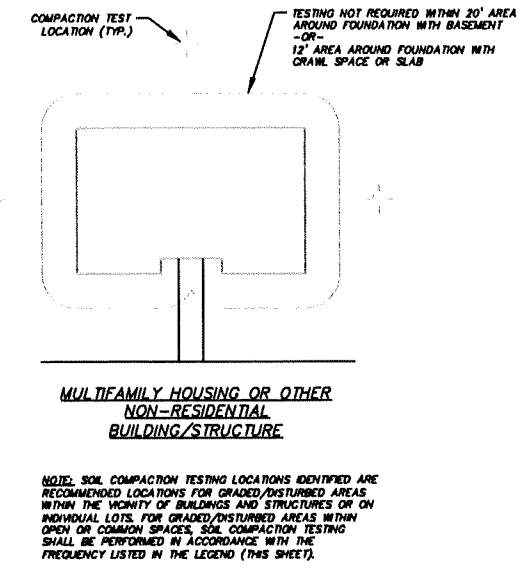
|         |          |
|---------|----------|
| DATE    | 5/30/23  |
| SCALE   | 1"=20'   |
| DRAWN   | JZ       |
| CHECKED | RS       |
| SHEET   | 10 OF 13 |
| PROJECT |          |

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

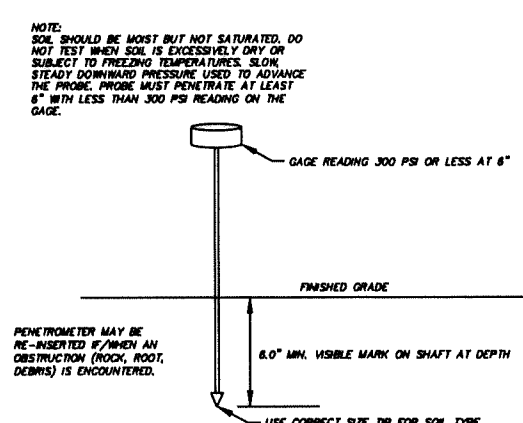
SOIL EROSION &  
SEDIMENT  
CONTROL PLAN



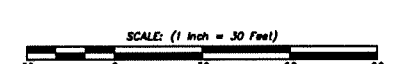
- SOIL DE-COMPACTION AND TESTING REQUIREMENTS**
- A. SOIL COMPACTION TESTING REQUIREMENTS**
- SUBGRADE SOILS PRIOR TO THE APPLICATION OF TOPSOIL (SEE PERMANENT RECORDING AND STABILIZATION NOTES FOR TOPSOIL REQUIREMENTS) SHALL BE FREE OF EXCESSIVE COMPACTION TO A DEPTH OF 6.0 INCHES TO ENSURE THE ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
  - AREAS OF THE SITE WHICH ARE SUBJECT TO COMPACTION TESTING AND/OR MITIGATION ARE GRAPHICALLY IDENTIFIED ON THE CERTIFIED SOIL EROSION CONTROL PLAN.
  - COMPACTION TESTING LOCATIONS ARE DENOTED ON THE PLAN. A COPY OF THE PLAN OR PORTION OF THE PLAN SHALL BE USED TO MARK LOCATIONS OF TESTS, AND ATTACHED TO THE COMPACTION REMEDIATION FORM, AVAILABLE FROM THE LOCAL SOIL CONSERVATION DISTRICT. THIS FORM MUST BE FILLED OUT AND SUBMITTED PRIOR TO RECEIVING A CERTIFICATE OF COMPLIANCE FROM THE DISTRICT.
  - IN THE EVENT THAT TESTING INDICATES COMPACTION IN EXCESS OF THE MAXIMUM THRESHOLD INDICATED FOR THE SPECIFIED METHODS (SEE DETAILS BELOW), THE CONTRACTOR/OWNER SHALL HAVE THE OPTION TO PERFORM EITHER (1) COMPACTION MITIGATION OVER THE ENTIRE MITIGATION AREA DENOTED ON THE PLAN (EXCLUDING EXEMPTED AREAS), OR (2) PERFORM ADDITIONAL, MORE DETAILED TESTING TO ESTABLISH THE LIMITS OF EXCESSIVE COMPACTION WHEREUPON ONLY THE EXCESSIVELY COMPACTED AREAS WOULD REQUIRE COMPACTION MITIGATION. ADDITIONAL DETAILED TESTING SHALL BE PERFORMED BY A TRAINED, LICENSED PROFESSIONAL.
- B. COMPACTION TESTING METHODS**
- PROBING WIRE TEST (SEE DETAIL)
  - HAND-HELD PENETROMETER TEST (SEE DETAIL)
  - TUBE BULK DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
  - NUCLEAR DENSITY TEST (LICENSED PROFESSIONAL ENGINEER REQUIRED)
  - ADDITIONAL TESTING METHODS WHICH CONFORM TO ASTM STANDARDS AND SPECIFICATIONS, AND WHICH PRODUCE A DRY WEIGHT, SOIL BULK DENSITY MEASUREMENT MAY BE ALLOWED SUBJECT TO DISTRICT APPROVAL.
  - DETAILED REQUIREMENTS FOR EACH COMPACTION TESTING METHOD CAN BE FOUND IN SECTION 19 "STANDARD FOR LAND GRADING" OF THE NJ STANDARDS FOR SOIL EROSION AND SEDIMENT CONTROL, LATEST EDITION.
  - SOIL COMPACTION TESTING IS NOT REQUIRED IF/WHEN SUBSOIL COMPACTION REMEDIATION (DECOMPACTION/TILLAGE TO MINIMUM DEPTH OR BULKER) IS PROPOSED AS PART OF THE SEQUENCE OF CONSTRUCTION.
- C. PROCEDURES FOR SOIL COMPACTION MITIGATION**
- PROCEDURES SHALL BE USED TO MITIGATE EXCESSIVE SOIL COMPACTION PRIOR TO PLACEMENT OF TOPSOIL AND ESTABLISHMENT OF PERMANENT VEGETATIVE COVER.
  - RESTORATION OF COMPACTED SOILS SHALL BE SUBSOIL TILLAGE/DECOMPACTION/TILLAGE TO MINIMUM DEPTH. MORE THERE IS NO DANGER TO UNDERGROUND UTILITIES (CABLES, IRRIGATION SYSTEM, ETC.), IN THE ALTERNATIVE, ANOTHER METHOD AS SPECIFIED BY A NEW JERSEY LICENSED PROFESSIONAL ENGINEER MAY BE SUBSTITUTED, SUBJECT TO DISTRICT APPROVAL.



**TYPICAL SOIL COMPACTION TESTING LOCATIONS**  
NO SCALE



**HANDHELD SOIL PENETROMETER TEST**  
NO SCALE



- LEGEND**
- SOIL COMPACTION TESTING AREAS
  - RECOMMENDED SOIL COMPACTION TESTING LOCATION (APPROX. 2 PER/ACRE)

**THIS DRAWING IS TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL COMPACTION PURPOSES ONLY.**

| NO. | DESCRIPTION                                       | DATE    | CHECKED |
|-----|---|---------|---------|
| 1   | REV. STORMWATER DESIGN FOR MEETING DATED 7/24/23  | 10/9/23 | 10/9/23 |
| 2   | REV. STORMWATER DESIGN FOR MEETING DATED 12/19/24 | 1/10/24 | 1/10/24 |
| 3   | REV. STORMWATER DESIGN FOR MEETING DATED 8/16/24  | 8/27/24 | 8/27/24 |

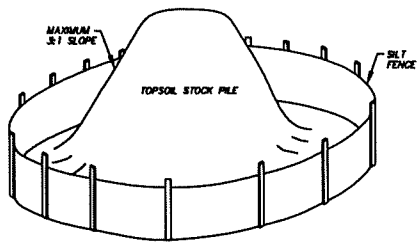
**CREST**  
Engineering Associates Inc.  
Civil & Environmental Engineers  
Professional Planners • Surveyors • Landscape Architects  
• CERTIFICATE OF AUTHORIZATION NO. 340427880-000 •  
100 NEW YORK  
MILLSBORO, DE 19966  
PH: (302) 445-1600  
12 TOWNSHIP PIKE  
AT WATER STREET  
TOWNSHIP, N.J. 08033  
PH: (732) 344-0080

**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER N.J. LIC. NO. 43816

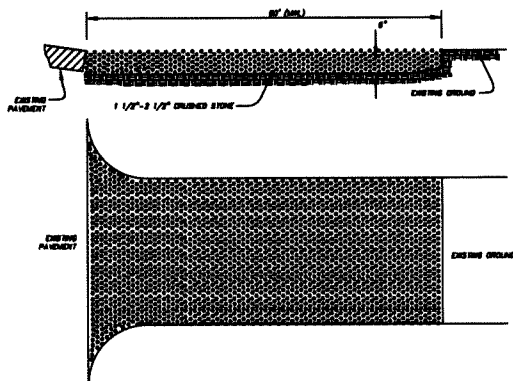
DATE: 8/30/23  
SCALE: 1"=30'  
DRAWN: JZ  
CHECKED: RDS  
SHEET: 11 OF 13  
PROJECT:

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY

SOIL EROSION & SEDIMENT CONTROL COMPACTION PLAN



TOPSOIL STOCKPILE DETAIL  
NO SCALE



| PERCENT SLOPE OF ROADWAY | MINIMUM WIDTH OF STOCKPILING |
|--------------------------|------------------------------|
| 3 to 10                  | 10' MIN.                     |
| 10 to 15                 | 15' MIN.                     |
| 15 to 20                 | 20' MIN.                     |
| 20 to 25                 | 25' MIN.                     |
| 25 to 30                 | 30' MIN.                     |
| 30 to 35                 | 35' MIN.                     |
| 35 to 40                 | 40' MIN.                     |
| 40 to 45                 | 45' MIN.                     |
| 45 to 50                 | 50' MIN.                     |
| 50 to 55                 | 55' MIN.                     |
| 55 to 60                 | 60' MIN.                     |
| 60 to 65                 | 65' MIN.                     |
| 65 to 70                 | 70' MIN.                     |
| 70 to 75                 | 75' MIN.                     |
| 75 to 80                 | 80' MIN.                     |
| 80 to 85                 | 85' MIN.                     |
| 85 to 90                 | 90' MIN.                     |
| 90 to 95                 | 95' MIN.                     |
| 95 to 100                | 100' MIN.                    |

(\*) AS PRESCRIBED BY LOCAL ORDINANCE OR OTHER GOVERNING AUTHORITY.

#### GENERAL NOTES

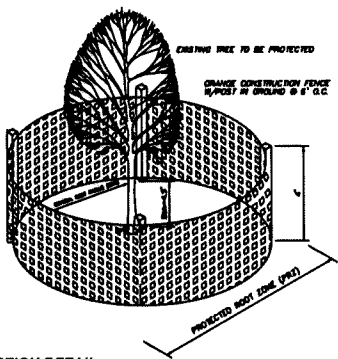
1. INITIAL LOT ENTRANCE AND EXITS - AFTER INTERIOR ROADWAYS ARE PAVED, INITIAL LOT ENTRANCE/EXITS SHOULD BE MAINTAINED AS STABILIZED CONSTRUCTION ENTRANCE/EXITS. THE ENTRANCE/EXIT SHALL BE 10' TO 15' WIDE AND SHALL BE A MINIMUM OF 10' FEET IN LENGTH.
2. THE ENTRANCE - IF SPACE IS LIMITED, VEHICLES SHOULD BE TURNED IN BY CLEAN WHEELS BEFORE ENTERING A PAVED AREA. A PAVED STATION MUST BE LOCATED SUCH THAT WHEN WHEELS ARE NOT PLACED ONTO PAVED ROADWAYS OR INTO UNPROTECTED STORM DRAINAGE SYSTEMS.
3. WHEN THE CONSTRUCTION ACCESS ENDS ONTO A MAJOR ROADWAY, A PAVED BARRIAGE AREA MAY BE INSTALLED BETWEEN THE MAJOR ROADWAY AND THE STORM DRAINAGE. TO PREVENT LOOSE STONES FROM BEING TRANSPORTED ONTO THE ROADWAY BY HEAVY EQUIPMENT ENTERING OR LEAVING THE SITE.

#### MAINTENANCE NOTES

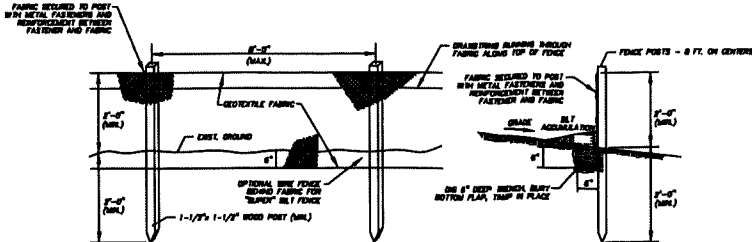
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOES OF SEDIMENT ONTO ROADWAYS. THE MAINTENANCE PERSONNEL SHALL MAINTAIN THE ENTRANCE/EXIT AS STABILIZED CONSTRUCTION ENTRANCE/EXITS. THE ENTRANCE/EXIT SHALL BE 10' TO 15' WIDE AND SHALL BE A MINIMUM OF 10' FEET IN LENGTH. ALL SEDIMENT SHALL BE REMOVED FROM THE ENTRANCE/EXIT. THE ENTRANCE/EXIT SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOES OF SEDIMENT ONTO ROADWAYS. THE MAINTENANCE PERSONNEL SHALL MAINTAIN THE ENTRANCE/EXIT AS STABILIZED CONSTRUCTION ENTRANCE/EXITS. THE ENTRANCE/EXIT SHALL BE 10' TO 15' WIDE AND SHALL BE A MINIMUM OF 10' FEET IN LENGTH. ALL SEDIMENT SHALL BE REMOVED FROM THE ENTRANCE/EXIT.
2. WHERE ACCUMULATION OF DIRT/SEDIMENT IS RANDOMLY CLEANED OR REMOVED BY CONVENTIONAL METHODS, A POWER BROOM OR STREET SWEEPING SHALL BE REQUIRED TO CLEAN PAVED OR ASPHALT SURFACES. ALL OTHER ACCESS POINTS WHICH ARE NOT STABILIZED SHALL BE CLEANED BY.

ANTI-TRACKING STONE PAD DETAIL  
NO SCALE

1. THE TREE PROTECTION FENCING SHALL BE INSTALLED AROUND THE TREES AT A DISTANCE DETERMINED BY THE CRITICAL ROOT RADIUS (CRR). THE CRR (IN FEET) SHALL BE ONE AND ONE-HALF (1.5) TIMES THE DIAMETER OF THE TREE (IN INCHES) WHEN MEASURED FOUR AND ONE-HALF (4.5) FEET ABOVE THE GROUND. (FOR EXAMPLE, A TREE WITH A DIAMETER OF FOUR (4) INCHES WOULD HAVE A CRITICAL ROOT RADIUS OF SIX (6) FEET.)
2. WARNING SIGNALS, TO BE OBTAINED FROM THE TOWNSHIP CONSTRUCTION OFFICE, SHALL BE ATTACHED TO THE FENCE AT TEN (10) FOOT INTERVALS IN THE TOP THIRD OF THE FENCING.
3. THE PROTECTED ROOT ZONE SHALL REMAIN CLOSED TO ANY ACTIVITY, INCLUDING THE STAGING OF MATERIALS.
4. NO FENCING SHALL BE DISTURBED OR REMOVED FROM THE LOT UNTIL A CERTIFICATE OF OCCUPANCY IS ISSUED OR WRITTEN APPROVAL IS OBTAINED FROM THE TOWNSHIP ENGINEER.
5. TREES TO BE PROTECTED SHALL BE IDENTIFIED PRIOR TO CONSTRUCTION.
6. THE TREE PROTECTION FENCING SHALL BE ERECTED PRIOR TO CONSTRUCTION.
7. TREE PROTECTION FENCING SHALL BE MAINTAINED DURING CONSTRUCTION.



TREE PROTECTION DETAIL  
NO SCALE



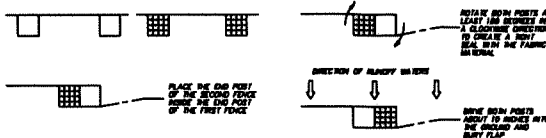
#### GENERAL NOTES

1. FENCE POSTS SHALL BE SPACED 8 FEET CENTER-TO-CENTER ON GROUND. THEY SHALL EXTEND AT LEAST 3 FEET INTO THE GROUND AND EXTEND AT LEAST 3 FEET ABOVE GROUND ON A SLOPE OF 3:1 OR STEEPER. FENCE POSTS SHALL BE CONSTRUCTED OF HARDWOOD WITH A MINIMUM DIAMETER INCREASED TO 1-1/2 INCHES.
2. TEMPORARY FENCE - A METAL FENCE WITH A RICH OR SMALLER METAL OPENINGS AND AT LEAST 3 FEET HIGH MAY BE UTILIZED. FENCING SHALL BE 10 FEET HIGH. TO PROVIDE STRENGTH AND SUPPORT TO THE SEDIMENT FENCING, POSTS MAY BE SPACED LESS THAN 8 FEET ON GROUND AND MAY BE CONSTRUCTED OF HEAVY WOOD OR METAL, AS NECESSARY TO MAINTAIN STRENGTH. FENCING SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOES OF SEDIMENT ONTO ROADWAYS. THE MAINTENANCE PERSONNEL SHALL MAINTAIN THE ENTRANCE/EXIT AS STABILIZED CONSTRUCTION ENTRANCE/EXITS. THE ENTRANCE/EXIT SHALL BE 10' TO 15' WIDE AND SHALL BE A MINIMUM OF 10' FEET IN LENGTH. ALL SEDIMENT SHALL BE REMOVED FROM THE ENTRANCE/EXIT.
3. SEDIMENT FENCING - SEDIMENT FENCING SHALL BE 10 FEET HIGH. TO PROVIDE STRENGTH AND SUPPORT TO THE SEDIMENT FENCING, POSTS MAY BE SPACED LESS THAN 8 FEET ON GROUND AND MAY BE CONSTRUCTED OF HEAVY WOOD OR METAL, AS NECESSARY TO MAINTAIN STRENGTH. FENCING SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOES OF SEDIMENT ONTO ROADWAYS. THE MAINTENANCE PERSONNEL SHALL MAINTAIN THE ENTRANCE/EXIT AS STABILIZED CONSTRUCTION ENTRANCE/EXITS. THE ENTRANCE/EXIT SHALL BE 10' TO 15' WIDE AND SHALL BE A MINIMUM OF 10' FEET IN LENGTH. ALL SEDIMENT SHALL BE REMOVED FROM THE ENTRANCE/EXIT.

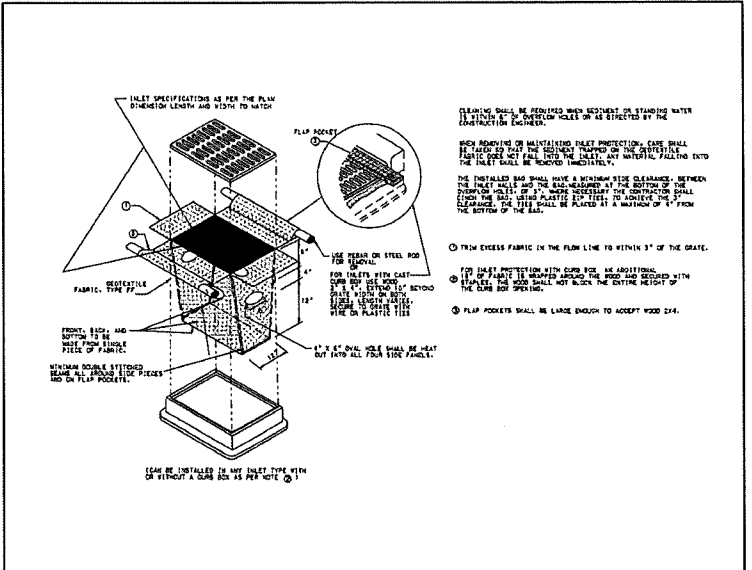
#### MAINTENANCE NOTES

1. SEDIMENT SHALL BE REMOVED FROM THE UPRIGHT FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF 1/2 THE BARRIER HEIGHT.
2. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, SALES, ETC.) WHEN DAMAGED.
3. BARRIERS SHALL BE INSPECTED DAILY FOR SIGNS OF DETERIORATION AND SEDIMENT REMOVAL.

SILT FENCE / SEDIMENT BARRIER DETAIL  
NO SCALE

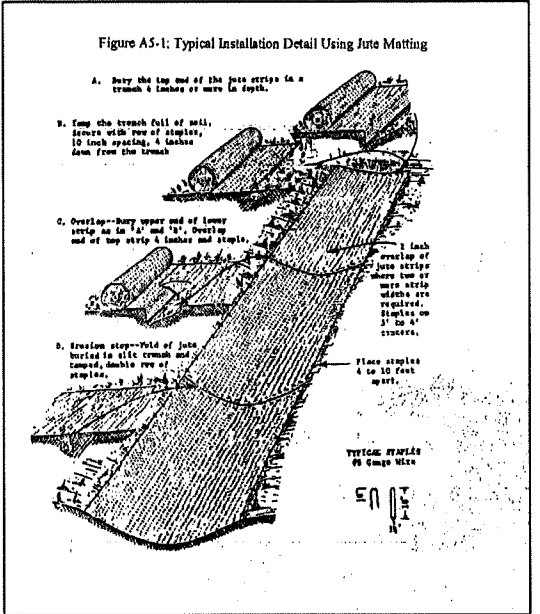


ATTACHING TWO SILT FENCES DETAIL  
NO SCALE



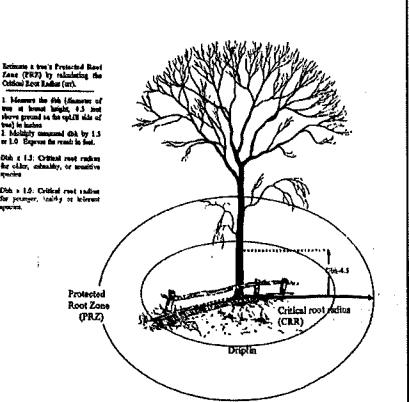
INLET PROTECTION INSPECTIONS SHALL BE FREQUENT. MAINTENANCE, REPAIR, AND REPLACEMENT SHALL BE MADE PROMPTLY, AS NEEDED. THE FILTER SHALL BE REMOVED WHEN THE AREA DRAINING TOWARD THE INLET HAS BEEN STABILIZED.

INLET PROTECTION DETAIL  
NO SCALE



JUTE MATTING DETAIL  
NO SCALE

Figure 9-3: Root Protection During Construction Guide



| NO. | DESCRIPTION | DATE | % |
|-----|-------------|------|---|
| 1   |             |      |   |
| 2   |             |      |   |
| 3   |             |      |   |
| 4   |             |      |   |
| 5   |             |      |   |
| 6   |             |      |   |
| 7   |             |      |   |
| 8   |             |      |   |
| 9   |             |      |   |
| 10  |             |      |   |

**CREST**  
Engineering Associates Inc.  
Professional Engineers & Surveyors • Landscaping Architects  
• CERTIFICATE OF AUTHORIZATION NO. 246A27889300 •  
100 RUE DU  
MILITARY TOWNSHIP, N.J. 07033  
PH: (609) 442-1000  
13 ROSSING RD.  
ATLANTA, GA 30328  
PH: (770) 442-0000  
**ROBERT D. SIVE**  
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

|         |          |
|---------|----------|
| DATE    | 9/30/23  |
| SCALE   | NO SCALE |
| DRAWN   | JZ       |
| CHECKED | RS       |
| SHEET   | 12 OF 13 |
| PROJECT |          |

PRELIMINARY & FINAL MAJOR SUBDIVISION  
BLOCK 158, TAX LOT 1  
BLOCK 159, TAX LOT 3  
BLOCK 122, TAX LOT 122  
MIDDLETOWN TOWNSHIP  
MONMOUTH COUNTY, NEW JERSEY  
SOIL EROSION & SEDIMENT CONTROL DETAILS

| Application  | PLANTING MIXTURES BY SOIL DRAINAGE CLASS <sup>(1)</sup><br>(see Table 4-3) |                                |                          |                 |
|--|--|--------------------------------|--------------------------|-----------------|
|  | Excessively Overlaid   | Moderately Well Overlaid       | Somewhat Poorly Overlaid | Poorly Overlaid |
| Residential/commercial lots                        | 12, 14, 17   | 12, 14, 15, 16, 17             | 18                       |                 |
| Drainage ditches, swales, detention basins         | 2, 7, 8, 12  | 7, 8, 9, 10, 11, 17            | 2, 10, 18, 19            |                 |
| Drainage ditches, swales, detention basins         | 2, 11, 13  | 2, 8, 11, 13, 14, 18           | 2, 10, 18, 19            |                 |
| Filter strips                                      | 14   | 13, 14                         | 13, 14                   |                 |
| Grassway/roadway shoulders                         | 2, 3, 4, 12, 14  | 8, 9, 11, 12, 13, 14           | 2, 11, 13, 14            |                 |
| Recreation areas, athletic fields                  | 7, 14, 17, 20  | 14, 15, 16, 17, 20             | 18                       |                 |
| Special Problem Sites                              |  |                                |                          |                 |
| Slope erosion and bank stabilization, borrow areas | 2, 3, 4, 8   | 2, 3, 7, 8, 10, 11, 12, 17, 20 | 2, 11, 12, 13, 14        |                 |
| Sand and gravel pits, sanitary landfills           | 1, 2, 3, 4, 5, 6, 21   | 1, 2, 3, 4, 5, 6, 10, 17, 20   | 2, 10                    |                 |
| Drainage material, spoilbanks, borrow areas        | 2, 3, 8, 20  | 2, 3, 8, 11                    | 2, 10                    |                 |
| Streambanks & shorelines <sup>(2)</sup>            | 2, 10, 22, 23a   | 2, 10, 21a, 22, 23a, 23b       | 2, 10, 21a, 23a, & c, d  |                 |
| Utility rights-of-way                              | 2, 3, 8, 20  | 3, 9                           | 10, 11, 18               |                 |

1. Refer to Soil Survey for drainage class descriptions.  
2. Refer to Soil Bioengineering Standard for additional seed mixtures.  
3. Subways only.  
4. See Appendix E for description of turf grasses and cultivars.

| SEED MIXTURE (2)   | PLANTING RATE (3) | PLANTING DATES  |       |       |         |       |       |             |       |       |  | REMARKS |
|--|-------------------|---|-------|-------|---------|-------|-------|-------------|-------|-------|--|---------|
|  |                   | O=Optimal Planting period    A=Acceptable Planting period |       |       |         |       |       |             |       |       |  |         |
|  |                   | PLANT HARDINESS ZONES                                     |       |       |         |       |       |             |       |       |  |         |
|  |                   | Zone 1a, 1b   |       |       | Zone 2a |       |       | Zone 3a, 3b |       |       |  |         |
| O=Area   | 1a/1b             | 1a/1b   | 2a/2b | 2a/2b | 2a/2b   | 3a/3b | 3a/3b | 3a/3b       | 3a/3b | 3a/3b |  |         |
| WARM SEASON SEED MIXTURES  |                   |   |       |       |         |       |       |             |       |       |  |         |
| Hybrid bermuda seed mixture for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and for<br>Steady, acceptable and 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#### Footnotes:

- See Appendix B for descriptions of turf grass mixtures and cultivars. The actual amount of warm season grass mixture used in Table 3 (seed mix 1-7) shall be adjusted to reflect the amount of Pure Live Seed (PLS) as determined by germination testing results. No adjustment is required for cool season grasses (seed mixtures 8-20).
- Seeding mixtures and/or rates not listed above may be used if recommended by the local Soil Conservation District, Natural Resources Conservation Service, recommendations of Rutgers Cooperative Extension may be used if approved by the Soil Conservation District. Legumes (clover, alfalfa, timothy, etc.) should be mixed with proper inoculant prior to planting.
- Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage of the seeded area and mowed once. Grass seed mixture checked by the State of New Jersey Department of Agriculture, Trenton, New Jersey, will certify the purchase that the mixture obtained is the mixture ordered, pursuant to the N.J. State Seed Law, N.J.S.A. 4:8-17.13 et. seq.  
O = optimal planting period    A = acceptable planting period
- Maintenance Level:
  - Intensive mowing (2-4 days), fertilization, lime, pest control and irrigation (Examples - high maintenance lawns, commercial and recreation areas, public facilities).
  - Frequent mowing (4-7 days), occasional fertilization, lime and weed control (Examples - home lawns, commercial sites, school sites).
  - Periodic mowing (7-14 days), occasional fertilization and lime (Examples - home lawns, parks).
  - Infrequent or no mowing, fertilization and lime the first year of establishment (Examples - roadsides, recreation areas, public open spaces).
- Summer seedlings should only be conducted when site is irrigated. Mises including white clover require that at least six weeks of growing season remain after seeding to ensure establishment before freezing conditions.
- Seeding in the spring is best. Do not seed after mid-November. Sites ready for seeding in the late summer or fall can be seeded to grass and mulched and the overwintered seedlings the following spring.
- Plant Hardiness Zone - Properly in question is within Zone 6a.

#### STANDARDS FOR MANAGEMENT OF HIGH ACID PRODUCING SOILS:

- LIMIT THE EXCAVATION AREA AND EXPOSURE TIME WHEN HIGH ACID-PRODUCING SOILS ARE ENCOUNTERED.
- TOPSOIL STRIPPED FROM THE SITE SHALL BE STORED SEPARATELY FROM TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOILS.
- STOCKPILES OF HIGH ACID-PRODUCING SOIL SHOULD BE LOCATED ON LEVEL LAND TO MINIMIZE ITS MOVEMENT, ESPECIALLY WHEN THIS MATERIAL HAS A HIGH CLAY CONTENT.
- TEMPORARILY STOCKPILED HIGH ACID-PRODUCING SOIL MATERIAL TO BE STORED MORE THAN 48 HOURS SHOULD BE COVERED WITH PROPERLY ANCHORED, HEAVY DUTY POLYETHYLENE PLASTIC FILM OR EQUIVALENT. IF NOT POSSIBLE, STOCKPILES SHALL BE COVERED WITH A MINIMUM OF 3 TO 6 INCHES OF WOOD CHIPS TO MINIMIZE EROSION OF THE STOCKPILE. SILT FENCE SHALL BE INSTALLED AT THE TOE OF THE SLOPE TO CONTAIN MOVEMENT OF THE STOCKPILED MATERIAL. TOPSOIL SHALL NOT BE APPLIED TO THE STOCKPILES TO PREVENT TOPSOIL CONTAMINATION WITH HIGH ACID-PRODUCING SOILS.
- HIGH ACID-PRODUCING SOILS WITH A PH OF 4.0 OR LESS OR CONTAINING IRON SULFIDE (INCLUDING BORROW FROM CUTS OR DREDGED SEDIMENT) SHALL BE ULTIMATELY PLACED OR BURIED WITH LIMESTONE APPLIED AT THE RATE OF 10 TONS PER ACRE (OR 100 POUNDS PER 1,000 SQUARE FEET OF SURFACE AREA) AND COVERED WITH A MINIMUM OF 12 INCHES OF SETTLED SOIL WITH A PH OF 5.0 OR MORE EXCEPT AS FOLLOWS:
  - AREAS WHERE TREES OR SHRUBS ARE TO BE PLANTED SHALL BE COVERED WITH A MINIMUM OF 24 INCHES OF SOIL WITH A PH OF 5.0 OR MORE.
  - DISPOSAL AREAS SHALL NOT BE LOCATED WITHIN 50 FEET OF ANY SURFACE OF A SLOPE OR BANK, SUCH AS DITCH, STREAM BANKS, DITCHES, AND OTHERS, TO PREVENT POTENTIAL LATERAL LEACHING DAMAGES.
- EQUIPMENT USED FOR MOVEMENT OF HIGH ACID-PRODUCING SOILS SHOULD BE CLEANED AT THE END OF EACH DAY TO PREVENT SPREADING OF HIGH ACID-PRODUCING SOIL MATERIALS TO OTHER PARTS OF THE SITE. WASH WATER OR LUBRICANT OILS SHOULD BE COLLECTED AND STORED SEPARATELY FROM ACIDIC WASH WATER.
- NON-VEGETATIVE EROSION CONTROL MEASURES (STONE TRAPPING PADS, STRATEGICALLY PLACED LIMESTONE CHECK DAMS, SEDIMENT BARRIERS, WOOD CHIPS) SHOULD BE INSTALLED TO LIMIT THE MOVEMENT OF HIGH ACID-PRODUCING SOILS FROM AROUND, OR OFF THE SITE.
- FOLLOWING BURNING OR REMOVAL OF HIGH ACID-PRODUCING SOIL, TOPSOIL AND SEEDING OF THE SITE (SEE TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION, PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION, AND TOPSOIL) SHOULD BE COMPLETED WITHIN A MINIMUM OF 6 MONTHS TO DISPERSE THERE IS ADEQUATE STABILIZATION AND THAT NO HIGH ACID-PRODUCING SOIL PROBLEMS EMERGE. IF PROBLEMS STILL EXIST, THE AFFECTED AREA MUST BE TREATED AS INDICATED ABOVE TO CORRECT THE PROBLEM.

#### PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

##### 1. Site Preparation

- Grass seed and fertilizer to permit the use of conventional equipment for seeded preparation, seeding, mulch application, and mulch covering. All grading shall be done in accordance with the Standard for Soil Grading and Sediment Control in New Jersey (R1000000) for Land Grading, pg. 10-1.
- Immediately prior to seeding and liquid application, the seedbed shall be leveled for compaction in accordance with the Standard for Land Grading.
- Topsoil should be handled only when it is dry enough to work without clogging the soil structure. A uniform application to a depth of 6 inches (minimum) is required in all areas. Topsoil shall be amended with organic matter, as needed, in accordance with the Standard for Land Grading.
- Include needed erosion control practices or facilities such as diversion, grass stabilization structures, channel stabilization structures, sediment basins, and waterways.

##### 2. Seeding Preparation