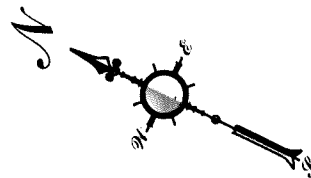


LIST OF OWNERS WITHIN 200'

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

BLOCK	TAX LOT	OWNER
158	1	WALADA ENTERPRISES LLC 30 N LAKE DR MIDDLETOWN, NJ 07748
158	2	LI, KENNY WEN-CHIEH 8 WALADA AVE PORT MONMOUTH, NJ 07758
158	4	PEREZ, LAURA 8 WALADA AVE PORT MONMOUTH, NJ 07758
158	5	HEDDT, BRIAN R & MELORE JACQUELYN 10 WALADA AVE PORT MONMOUTH, NJ 07758
159	1	WALADA ENTERPRISES LLC 30 N LAKE DR MIDDLETOWN, NJ 07748
159	2	TWP OF MIDDLETOWN 1 KINGS HWY MIDDLETOWN, NJ 07748
159	3	WALADA ENTERPRISES LLC 30 N LAKE DR MIDDLETOWN, NJ 07748
159	4	SADERI, DEAN D & PETERSON 12 WALADA AVE PORT MONMOUTH, NJ 07758
159	5	MAYER, JUSTIN & CORINEY 12 WALADA AVE PORT MONMOUTH, NJ 07758
159	6	HURL, ROBERT M JR. & RAUCHBACH STEPH 16 WALADA AVE PORT MONMOUTH, NJ 07758
159	7	PARLEY, SCOTT & AMEE 18 WALADA AVE PORT MONMOUTH, NJ 07758
264	5	NANNEY, SANDRA A 181 MAIN STREET PORT MONMOUTH, NJ 07758
272	17	ESCOBAR, ROXANNA B 738 CAMPBELL AVE PORT MONMOUTH, NJ 07758
272	18	ROBERTSON, TRISHA 157 MAIN ST PORT MONMOUTH, NJ 07758
272	19	STEFANSKI, DANIEL & DOMINGUEZ, REBECCA 155 MAIN ST PORT MONMOUTH, NJ 07758



VICINITY MAP

GRAPHIC SCALE



(IN FEET)

1 inch = 100 ft.

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.
REAR SETBACK	10 FT.	≥ 10 FT.	≥ 10 FT.	≥ 10 FT.	≥ 10 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

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

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

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.

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

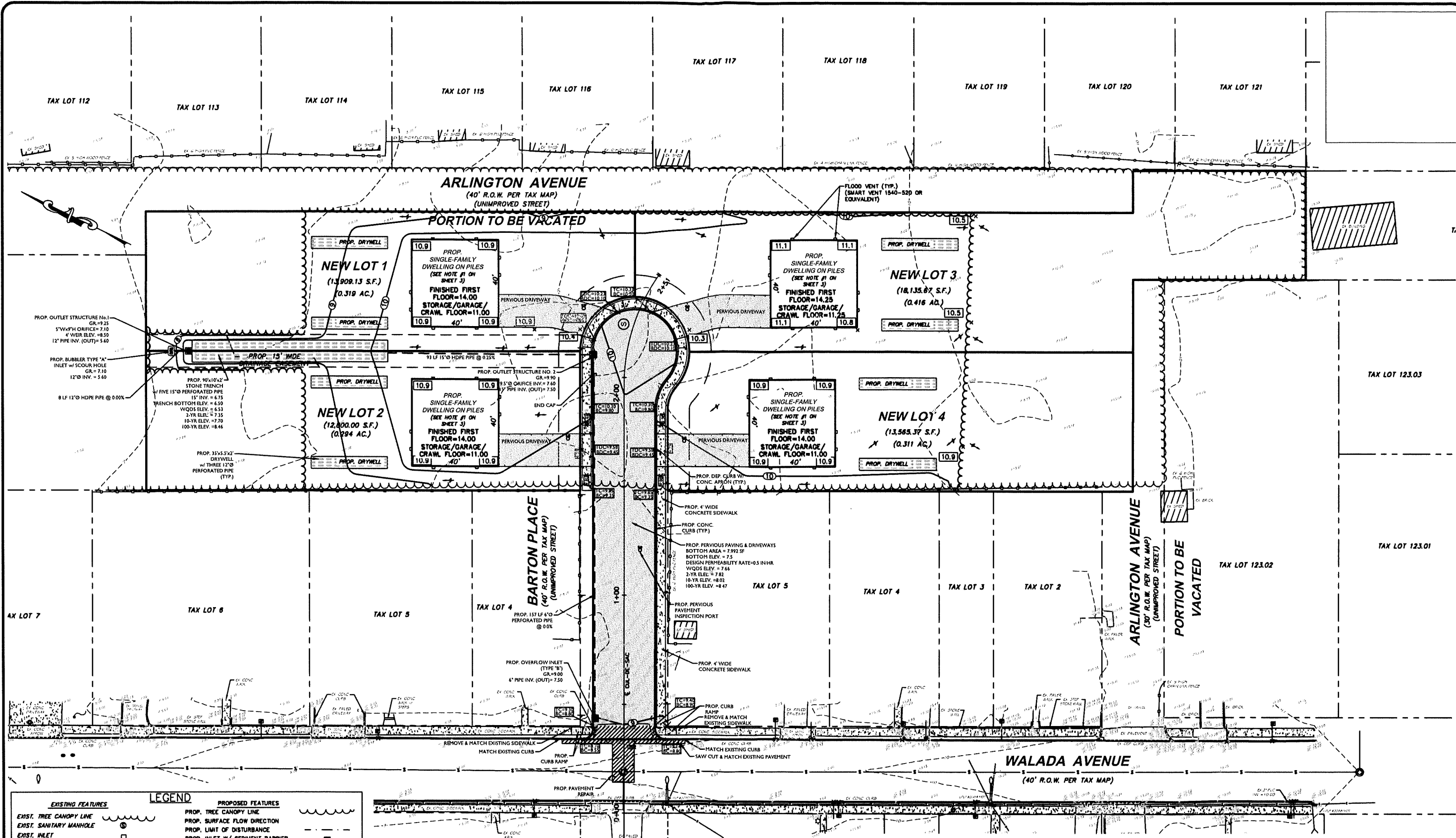
OWNER	MIDDLETOWN TOWNSHIP PLANNING BOARD
WALADA ENTERPRISES, LLC 30 N LAKE DRIVE MIDDLETOWN, NJ 07748	DATE _____ CHAIRMAN _____
APPLICANT	ATTEST _____ SECRETARY _____
MILANO BROTHERS BUILDERS INC. 845 BROAD STREET SHREWSBURY, NJ 07702	DATE _____ ENGINEER _____

NO.	DESCRIPTION	DATE	BY
1	REV. PER MIDDLETOWN TOWNSHIP REVIEW LETTER DATED 7/22/23	9/29/23	RS
2	REV. PER TOWNSHIP PLANNING BOARD SUBMISSION	4/28/24	RS
3	REV. STORMWATER DESIGN PER NADP EMAIL DATED 8/6/24	9/27/24	DP
4	REV. STORMWATER DESIGN PER NADP MEETING DATED 12/6/24	1/16/25	RS
5	REV. STORMWATER DESIGN PER NADP LETTER DATED 7/26/25	10/9/25	RS

CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Engineers - Surveyors - Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 246637889300
100 FREE DRIVE
MILSTONE TOWNSHIP, NJ 08858
(908) 448-3880
18 SCHUMER DRIVE
TOWNSHIP OF MONMOUTH, NJ 07758
(732) 244-0880
ROBERT D. SIVE
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

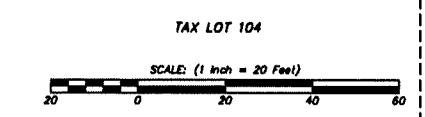
DATE	5/30/23
SCALE	1" = 100'
DRAWN	RS
CHECKED	RS
SHEET	1 OF 13
PROJECT	

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



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 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

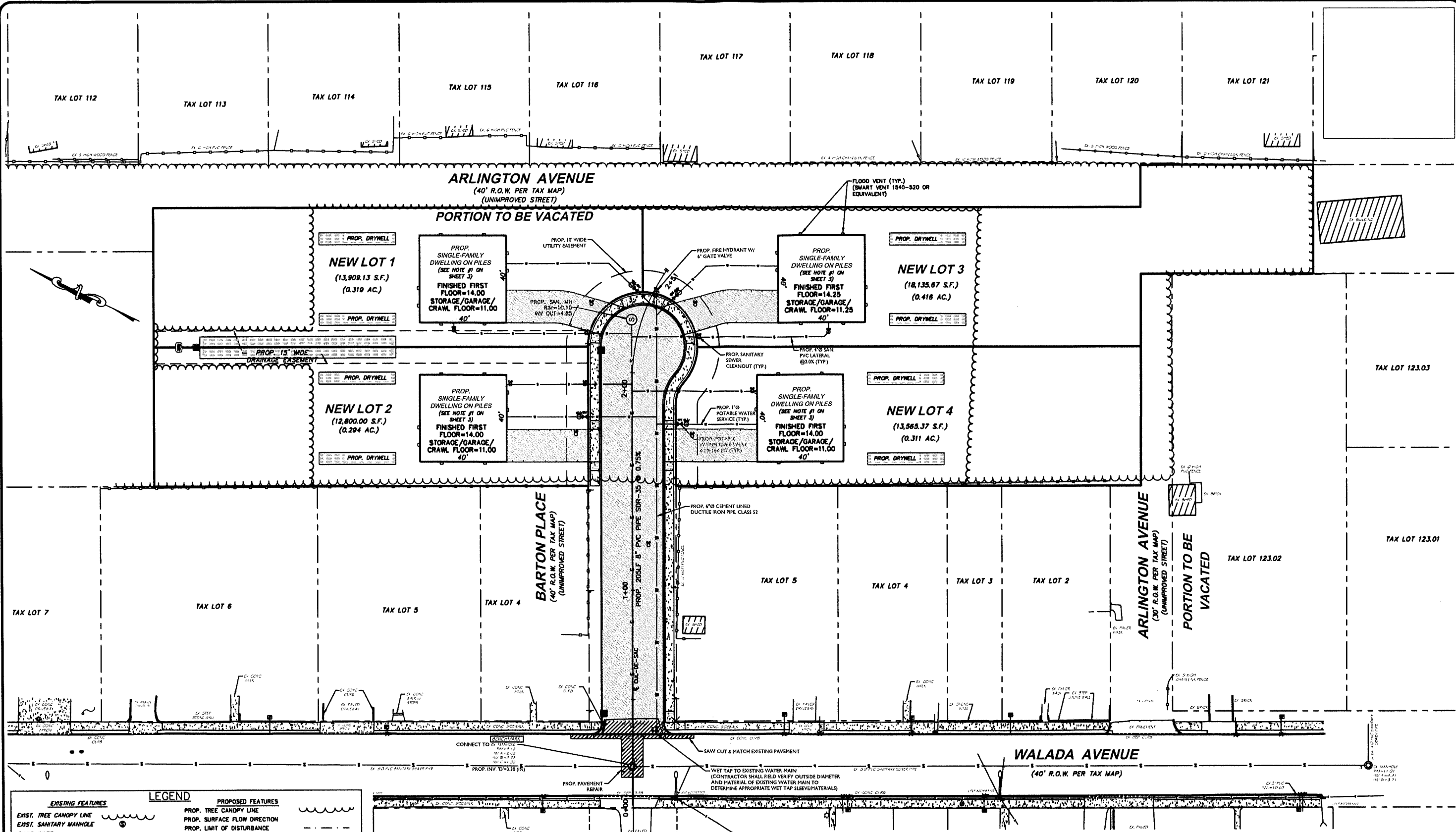
CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 265427000-000
100 WINE DRIVE
MILLSBORO, DELETION, DE. 19966
(302) 446-1880

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



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

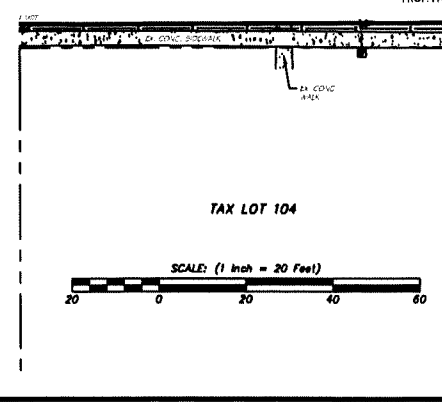
LEGEND

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

SYMBOLS

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



NO.	DESCRIPTION	DATE	BY
3	REV. STORMWATER DESIGN PER ADEP EMAIL DATED 8/6/24	8/27/24	RS
2	REV. STORMWATER DESIGN PER ADEP MEETING DATED 12/8/24	1/16/25	RS
1	REV. STORMWATER DESIGN PER ADEP LETTER DATED 7/26/23	10/9/23	RS

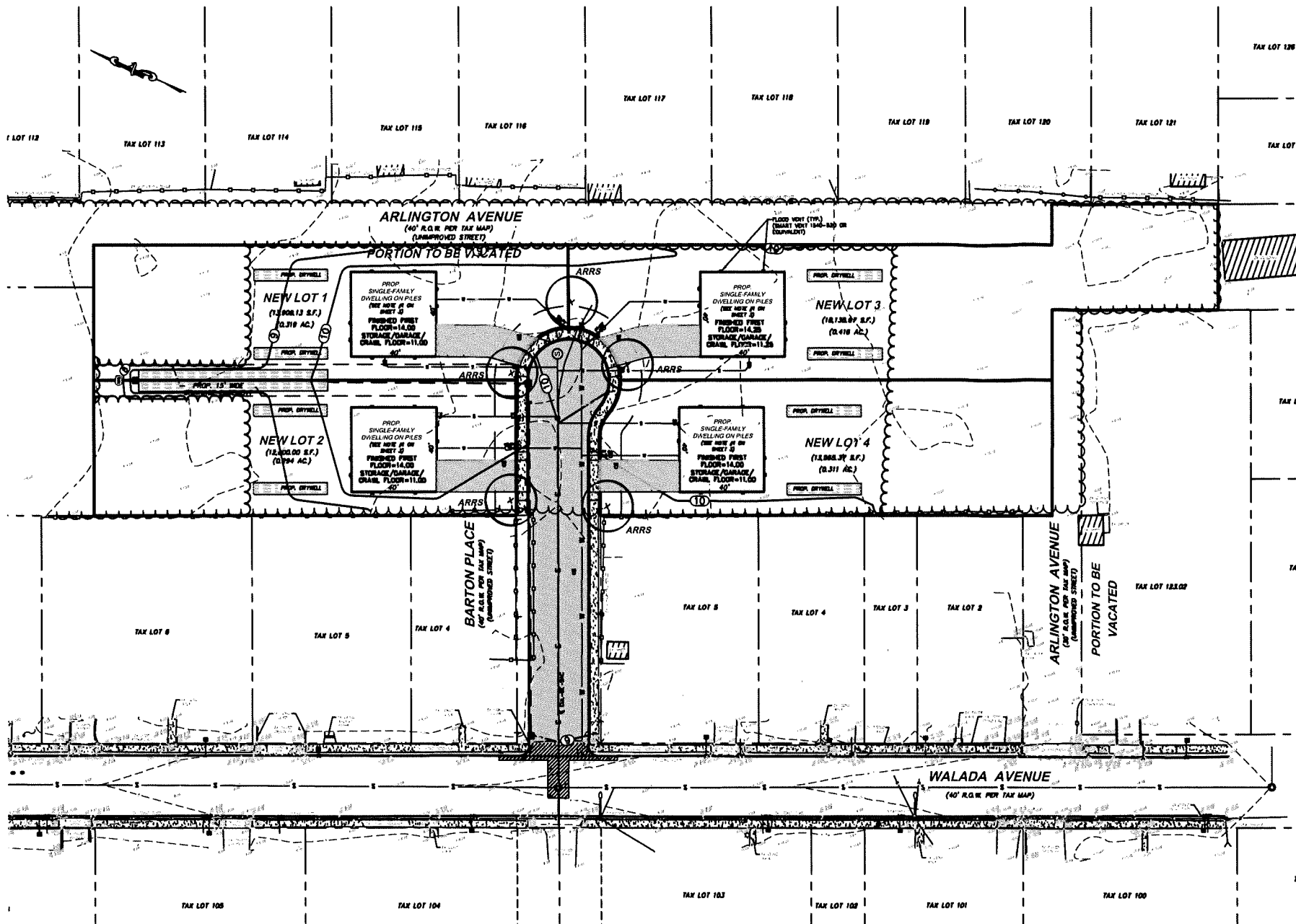
CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 246827889-000
100 FREE DRIVE
MILLSBORO, DELAWARE 19966
(302) 261-1000

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

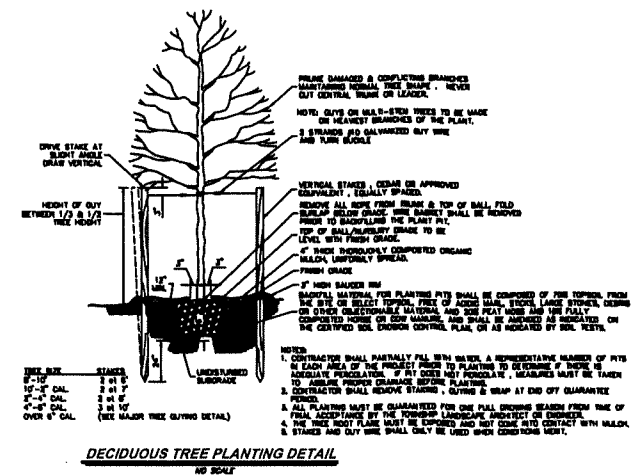
PRELIMINARY & FINAL MAJOR SUBDIVISION
BLOCK 158, TAX LOT 1
BLOCK 159, TAX LOT 3
BLOCK 122, TAX LOT 122
MIDDLETOWN TOWNSHIP
MONMOUTH COUNTY, NEW JERSEY

UTILITY PLAN

DATE: 5/30/23
SCALE: 1"=20'
DRAWN: JZ
CHECKED: RS
SHEET: 5 OF 13
PROJECT: 246827889-000



- 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:**
- 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 DURING 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 30% PEAT MOSS AND 10% FULLY COMPOSTED HORSE OR COW MANURE, AND SHALL BE ADDED 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 SET 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 PLANTED 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 SEEDLING 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

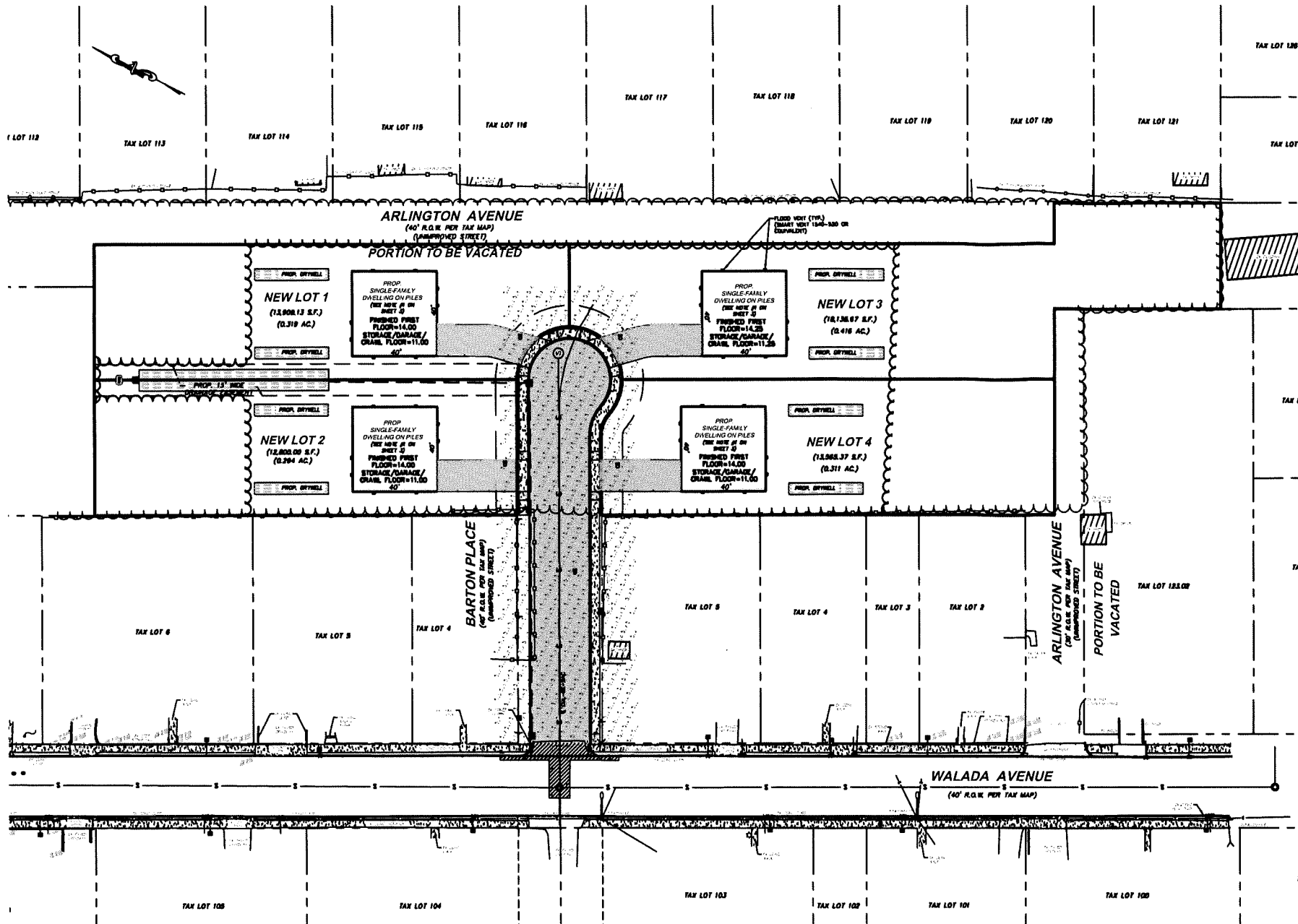
CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 24642788300
100 HICK DRIVE, SUITE 200, MIDDLETOWN, NJ 07063-4400
AT WATER STREET, SUITE 200, MIDDLETOWN, NJ 07063-4400

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'
DRAWN: JZ
CHECKED: RS
SHEET: 6 OF 13
PROJECT: 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	NHL-LPT2-30W-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	0.66	1.9	0.0	N.A.	N.A.

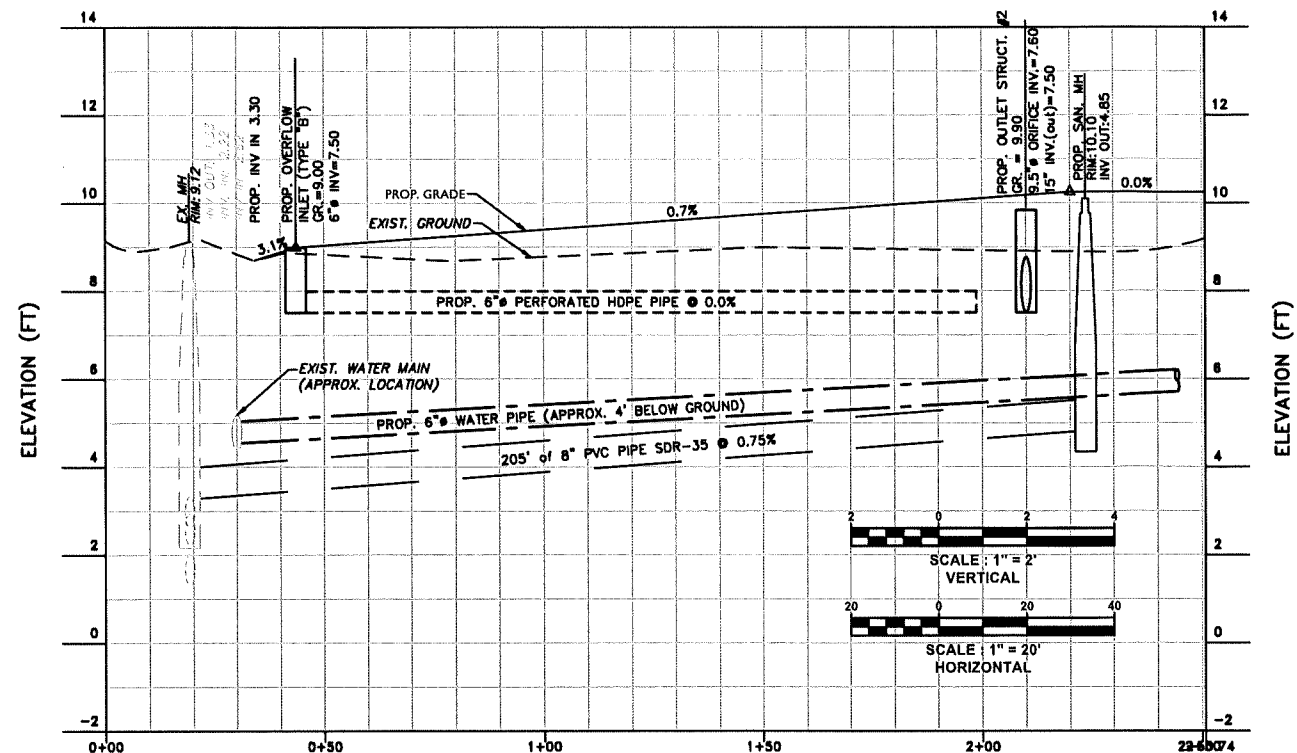
SCALE: (1 Inch = 30 Feet)

THIS DRAWING IS TO BE USED
FOR LIGHTING PURPOSES ONLY

NO.	DESCRIPTION	DATE	BY
1	REV. STORMWATER DESIGN PER NJDEP LETTER DATED 7/26/23	10/9/23	R/S
2	REV. STORMWATER DESIGN PER NJDEP LETTER DATED 8/16/24	8/27/24	R/S
3	REV. PER MIDDLETOWN TOWNSHIP REVIEW LETTER DATED 7/23/25	8/29/25	R/S

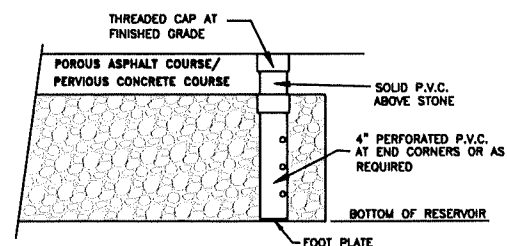
CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 260472883-000
100 BINE DRIVE
MILLSTONE TOWNSHIP, N.J. 08540
PH: (609) 448-1880
18 FORDHAM STREET
AT WATER STREET
TOWNSHIP OF MIDDLETOWN, N.J. 08043
PH: (732) 244-0880
ROBERT D. SIVE
PROFESSIONAL ENGINEER N.J. LIC. NO. 43816

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



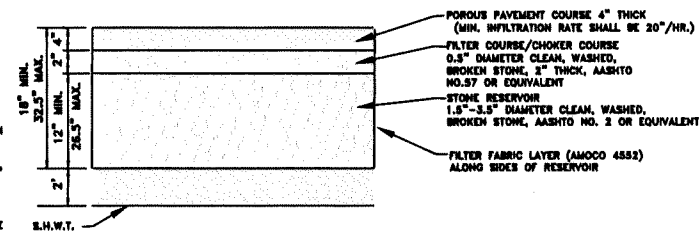
GENERAL NOTES FOR POROUS PAVEMENT:

- 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 $\frac{3}{4}$ ", 85% PASSING $\frac{1}{2}$ ", 35% PASSING #4, 15% PASSING #10, 10% PASSING #20 AND 2% PASSING #30 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 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: 200-240° F.
 - FINISH ROLLING BASE COURSE: 140-180° F.
 - ASPHALT SURFACE COURSE: 200-230° F.
 - 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 9.8.
- 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.



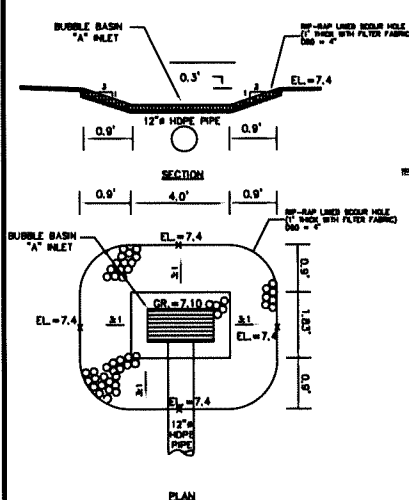
INSPECTION PORT & OVERFLOW FOR PERVIOUS PAVING DETAIL

NOT TO SCALE



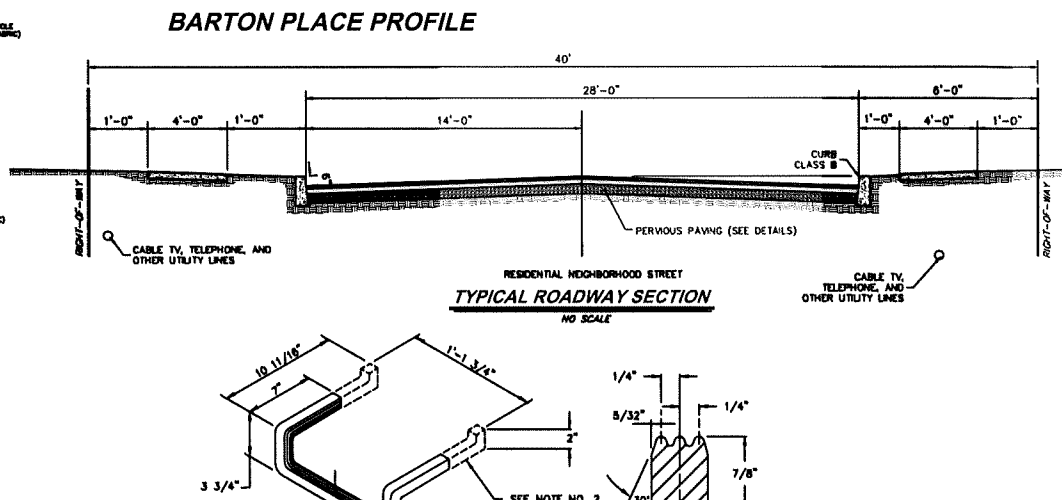
PERVIOUS PAVING DETAIL

NOT TO SCALE



BUBBLER INLET WITH SCOUR HOLE

NOT TO SCALE



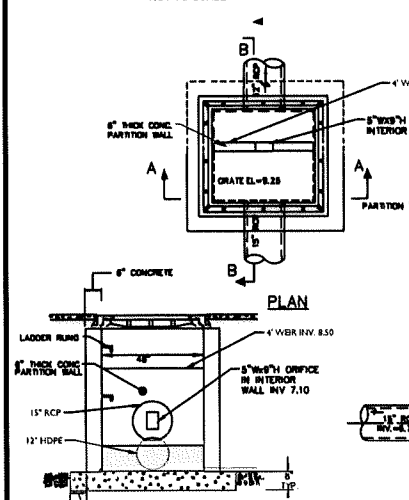
TYPICAL ROADWAY SECTION

NO SCALE

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

LADDER RUNG

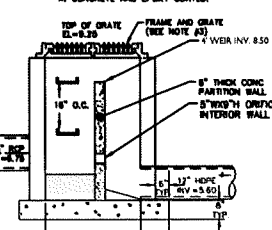
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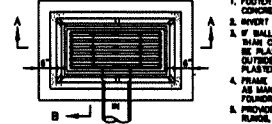
OUTLET CONTROL STRUCTURE NO. 1 (MODIFIED TYPE E INLET DETAIL)

NOT TO SCALE

- GENERAL NOTES
- FOOTER TO BE H.A.B.G.T. 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 "H" EGG CLUMP 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 OUTLET TO INV. DOUBLE BLOCK WALLS ARE REQUIRED.



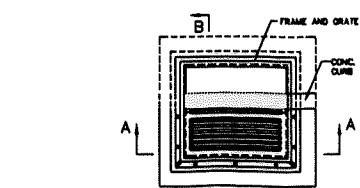
SECTION A-A



SECTION B-B

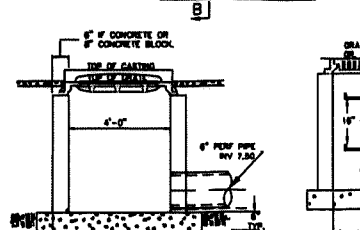
PROPOSED BUBBLER TYPE "A" INLET

NOT TO SCALE

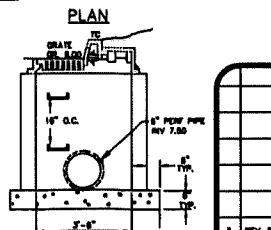


FLOOD VENT DETAIL

NOT TO SCALE



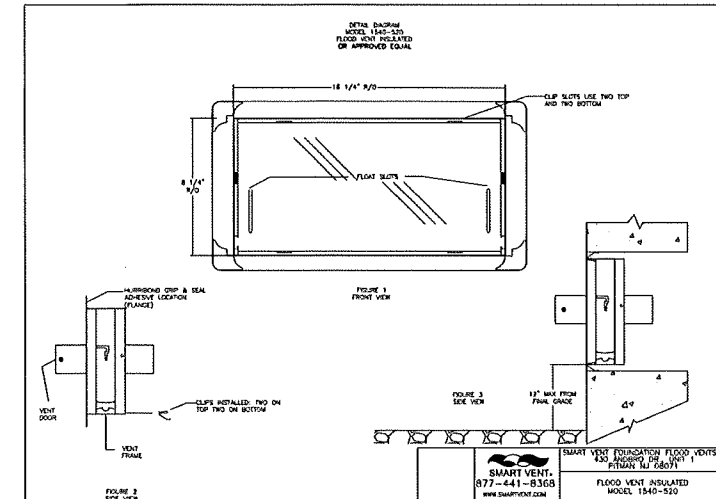
SECTION A-A



SECTION B-B

OVERFLOW INLET (TYPE B)

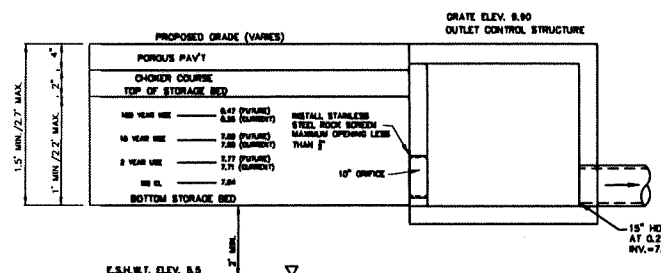
NOT TO SCALE



DETAILED SPECIFICATIONS:
MATERIAL: STAINLESS STEEL
OPERATION FLOOD: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION

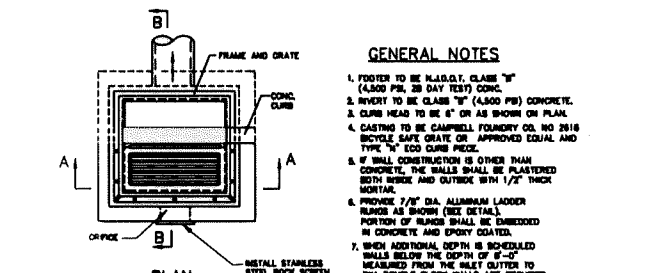
INSTALLATION: SECURED W/ 4 STAINLESS STEEL INSTALLATION CLIPS INCLUDED AND AN ADHESIVE HYDROSTATIC RELIEF: 200 SQ. FT. PER VENT
REQUIREMENTS FLOOD: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED ON AT LEAST TWO DIFFERENT WALLS
COLORS: STAINLESS (STANDARD)
EXTERIOR POWDER COATED WHITE, WHEAT, GRAY, AND BLACK (AVAILABLE)

MEETS THE REQUIREMENTS FOR ENGINEERED OPENINGS AS SET FORTH BY: FEMA, 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	10/3/25	CR	MS

CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 24627582-000
18 HICKORY HILL
AT WATER STREET
TOWNSHIP, N.J. 08063
PH: (609) 448-1880

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:

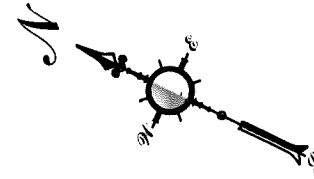
PRELIMINARY & FINAL MAJOR SUBDIVISION
BLOCK 158, TAX LOT 1
BLOCK 159, TAX LOT 3
BLOCK 122, TAX LOT 123
MIDDLETOWN TOWNSHIP
MONMOUTH COUNTY, NEW JERSEY

PROFILE AND DETAILS
SE & SC DETAILS

LIST OF OWNERS WITHIN 200'

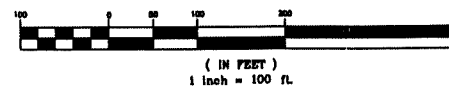
BLOCK	TAX LOT	OWNER
122	99	TWP OF MIDDLETOWN 1 KINGS HWY MIDDLETOWN, NJ 07748
122	100	BONELLO, GIUSEPPE & JESSICA 3 WALADA AVE PORT MONMOUTH, NJ 07758
122	101	ROSE, WILLIAM & DIANE 7 WALADA AVE PORT MONMOUTH, NJ 07758
122	103	MILLER, CLAUDE W & NANCY M 9 WALADA AVE PORT MONMOUTH, NJ 07758
122	104	PITTA,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

BLOCK	TAX LOT	OWNER
158	1	WALADA ENTERPRISES LLC 30 N LAKE DR MIDDLETOWN, NJ 07748
158	2	LIN, KENNY WEN-CHEN 8 WALADA AVE PORT MONMOUTH, NJ 07758
158	4	PEREZ, LAURA 8 WALADA AVE PORT MONMOUTH, NJ 07758
158	5	HEIDT, BRIAN R & MELORE JACQUELYN 10 WALADA AVE PORT MONMOUTH, NJ 07758
159	1	WALADA ENTERPRISES LLC 30 N LAKE DR MIDDLETOWN, NJ 07748
159	2	TWP OF MIDDLETOWN 1 KINGS HWY MIDDLETOWN, NJ 07748
159	3	WALADA ENTERPRISES LLC 30 N LAKE DR MIDDLETOWN, NJ 07748
159	4	SADLER, DEAN D & PETERSON 12 WALADA AVE PORT MONMOUTH, NJ 07758
159	5	MAYER, JUSTIN & COURTNEY 12 WALADA AVE PORT MONMOUTH, NJ 07758
159	6	HURL, ROBERT M JR. & RAUCHBACH STEPH 18 WALADA AVE PORT MONMOUTH, NJ 07758
159	7	FARLEY, SCOTT & AMEE 18 WALADA AVE PORT MONMOUTH, NJ 07758
284	5	NANNY, SANDRA A 181 MAIN STREET PORT MONMOUTH, NJ 07758
272	17	ESCOBAR, ROXANNA B 738 CAMPBELL AVE PORT MONMOUTH, NJ 07758
272	18	ROBERTSON, TRISHA 157 MAIN ST PORT MONMOUTH, NJ 07758
272	19	STEFANSKI, DANIEL & DOMINGUEZ, REBECCA 155 MAIN ST PORT MONMOUTH, NJ 07758



VICINITY MAP

GRAPHIC SCALE



A	B	C
1	Sheet List Table	
2	Sheet Number	Revision
3	1	Cover Sheet 9/28/2025
4	2	Existing Conditions Plan 9/28/2025
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 9/28/2025
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 10/9/2025
16		
17	1 of 1	Final Plot 9/28/2025

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:

- 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.
- 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, IFW220001, DATED DECEMBER 22, 2022.
- 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.
- 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 DRIVEWAY 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 RIGHT-OF-WAY WITH A 40 FOOT WIDE RIGHT-OF-WAY. A 40 FOOT WIDE DRIVEWAY 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 SPACES PER DWELLING
EACH NEW LOT SHALL PROVIDE 3 ON-SITE PARKING SPACES 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, SOO, 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. 7:26).
- 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.

OWNER

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

MIDDLETOWN TOWNSHIP PLANNING BOARD

DATE CHAIRMAN

APPLICANT

MILANO BROTHERS BUILDERS INC.
845 BROAD STREET
SHREWSBURY, NJ 07702

ATTEST SECRETARY

DATE ENGINEER

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

CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners & Surveyors & Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 246427883001

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

15 HUNTERS PT.
TOWNSHIP, N.J. 07093
(732) 644-1000

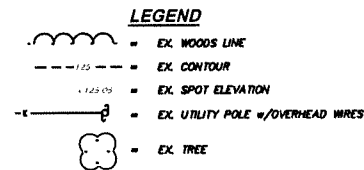
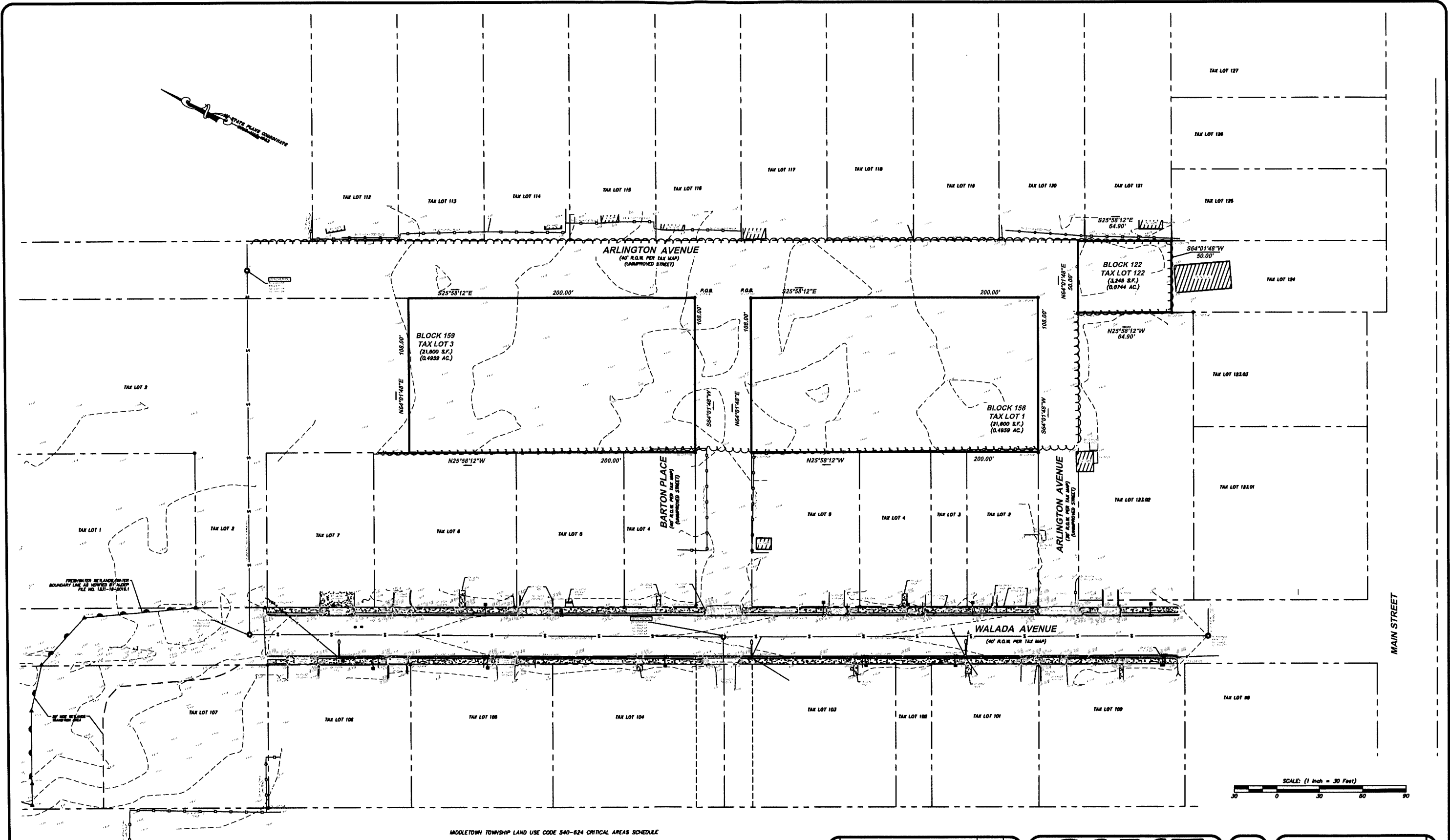
ROBERT D. SIVE
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

DATE
5/30/23
SCALE
1" = 100'
DRAWN
RDS
CHECKED
RDS
SHEET
1 OF 13
PROJECT

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

001-155001.15070DESIGN 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, IFWNNW220001, 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, IFWNNW220001, 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, IFWNNW220001, DATED DECEMBER 22, 2022, THE SITE DOES NOT CONTAIN FRESHWATER WETLANDS TRANSITION AREAS.

NO.	DESCRIPTION	DATE	BY
1	REV. PER MIDDLETOWN TOWNSHIP REVIEW LETTER DATED 7/31/25	8/26/25	RDS
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 RINE DRIVE
MILLSBORO, DELETION, N.J. 08066
PH: (609) 442-1882
FAX: (609) 442-1883
E-MAIL: info@cresteng.com
www.cresteng.com

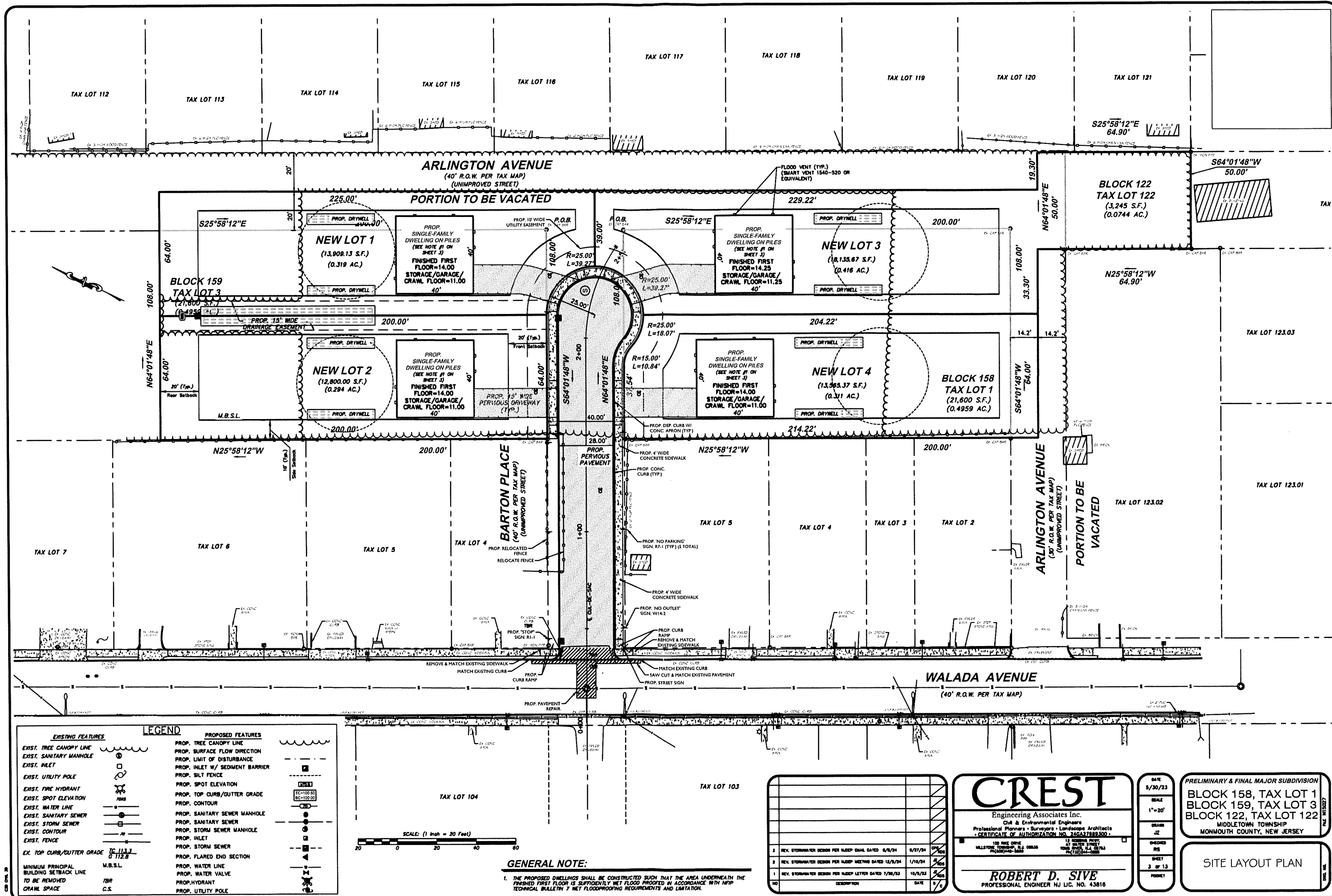
ROBERT D. SIVE
PROFESSIONAL ENGINEER NJ LIC. NO. 43818

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



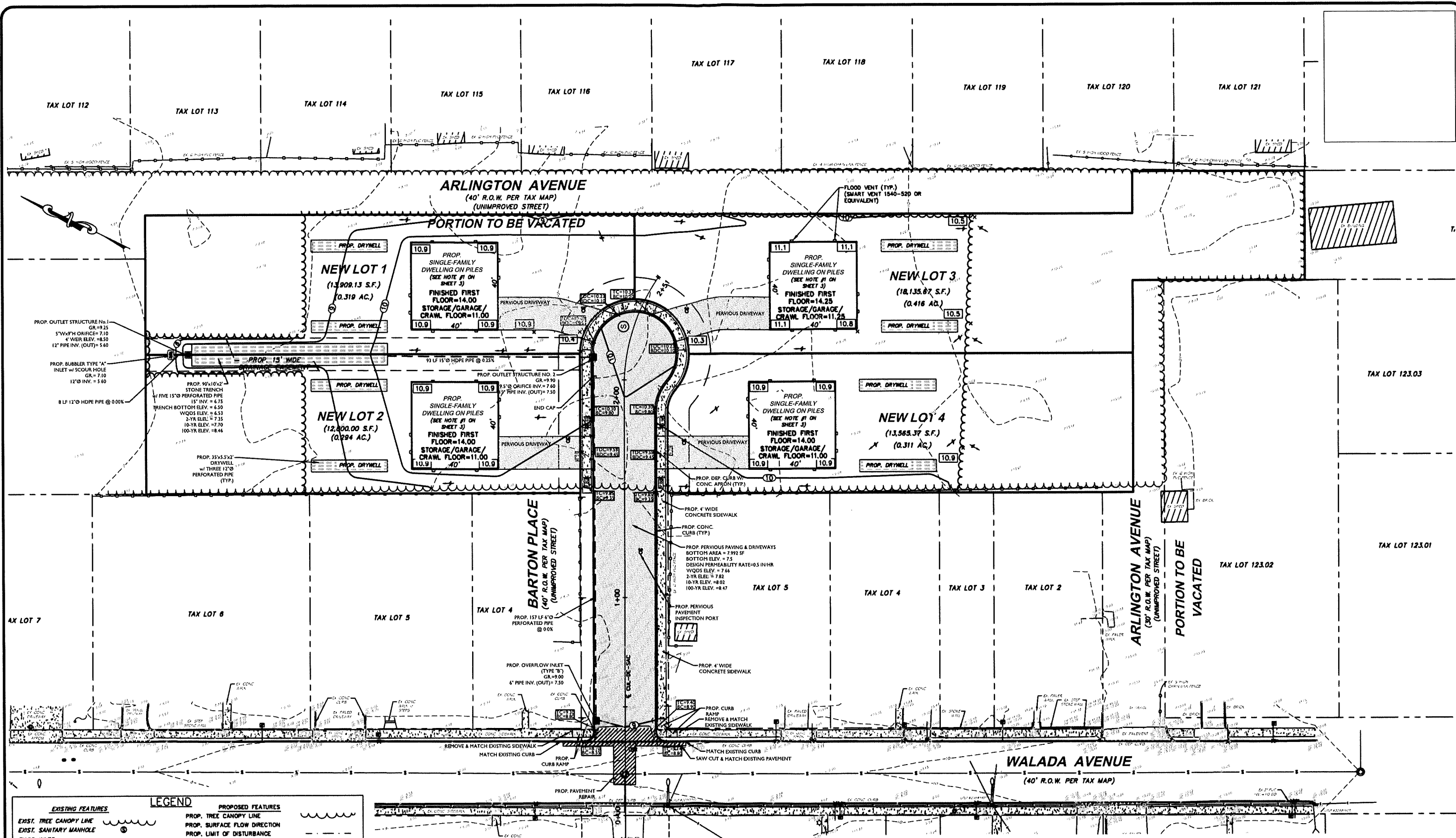
CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 240A2700300
100 FREE DRIVE
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TEL: 856-234-1234
FAX: 856-234-5678
WWW.CREST-PA.COM

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

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

SITE LAYOUT PLAN

DATE: 5/30/23
SCALE: 1"=20'
DRAWN: JZ
CHECKED: RS
SHEET: 3 OF 13
PROJECT:



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
- CRANE SPACE

LEGEND

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

NO.	DESCRIPTION	DATE	%
1	REV. STORMWATER DESIGN FOR MEETING DATED 6/16/24	6/17/24	100
2	REV. STORMWATER DESIGN FOR MEETING DATED 12/2/24	1/10/25	100
3	REV. STORMWATER DESIGN FOR MEETING DATED 1/28/25	10/9/25	100

CREST

Engineering Associates Inc.

Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects

CERTIFICATE OF AUTHORIZATION NO. 240A27889-300

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MILLSBORO, DE 19966
(302) 446-1800

11 WATER STREET
PO BOX 100
PO 10000-0000

ROBERT D. SIVE
PROFESSIONAL ENGINEER NJ LIC. NO. 43616

DATE
5/30/23

SCALE
1"=20'

DRAWN
JZ

CHECKED
RS

SHEET
4 OF 13

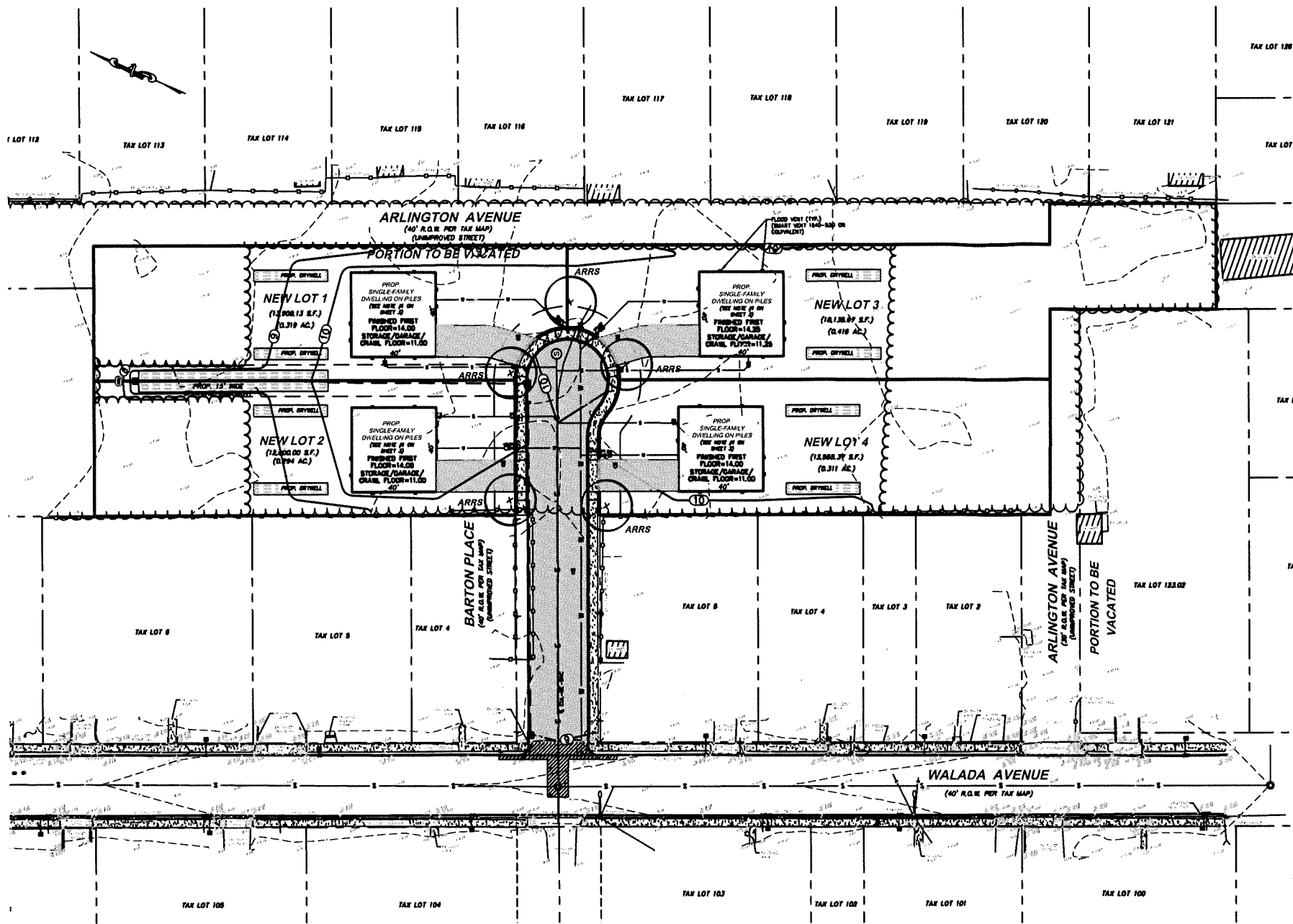
PROJECT

PRELIMINARY & FINAL MAJOR SUBDIVISION

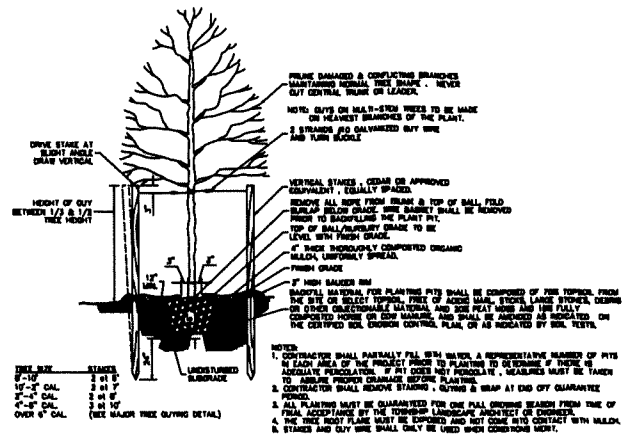
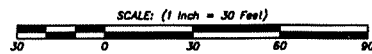
BLOCK 158, TAX LOT 1
BLOCK 159, TAX LOT 3
BLOCK 122, TAX LOT 122

MIDDLETOWN TOWNSHIP
MONMOUTH COUNTY, NEW JERSEY

GRADING AND DRAINAGE PLAN



- LEGEND**
- 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**
- 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 AHS 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 TRIANGLE 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 ALONG 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. ALL PLANT RELOCATIONS SHALL BE SUBMITTED TO THE TOWNSHIP ENGINEER FOR REVIEW AND APPROVAL 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, 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.
 - BACKFILL MATERIAL FOR PLANTING PITS SHALL BE COMPOSED OF 70% TOPSOIL FROM THE SITE OR SELECT TOPSOIL, FREE OF ACIDIC MATERIAL, STONES, LARGE ROCKS, DEBRIS OR OTHER OBJECTIONABLE MATERIAL AND 30% 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.
 - 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 AT RELATIVELY DRY LOCATIONS BE PERFORMED IN A MOUNDING MANNER.
 - 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.
 - 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 MASSES 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, FEEDING, 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 MASSES 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/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**
- PERCUT 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 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 NJ DEP LETTER DATED 7/26/23	10/9/23	R/S
2	REV. STORMWATER DESIGN PER NJ DEP LETTER DATED 8/8/24	8/27/24	R/S

CREST

Engineering Associates Inc.

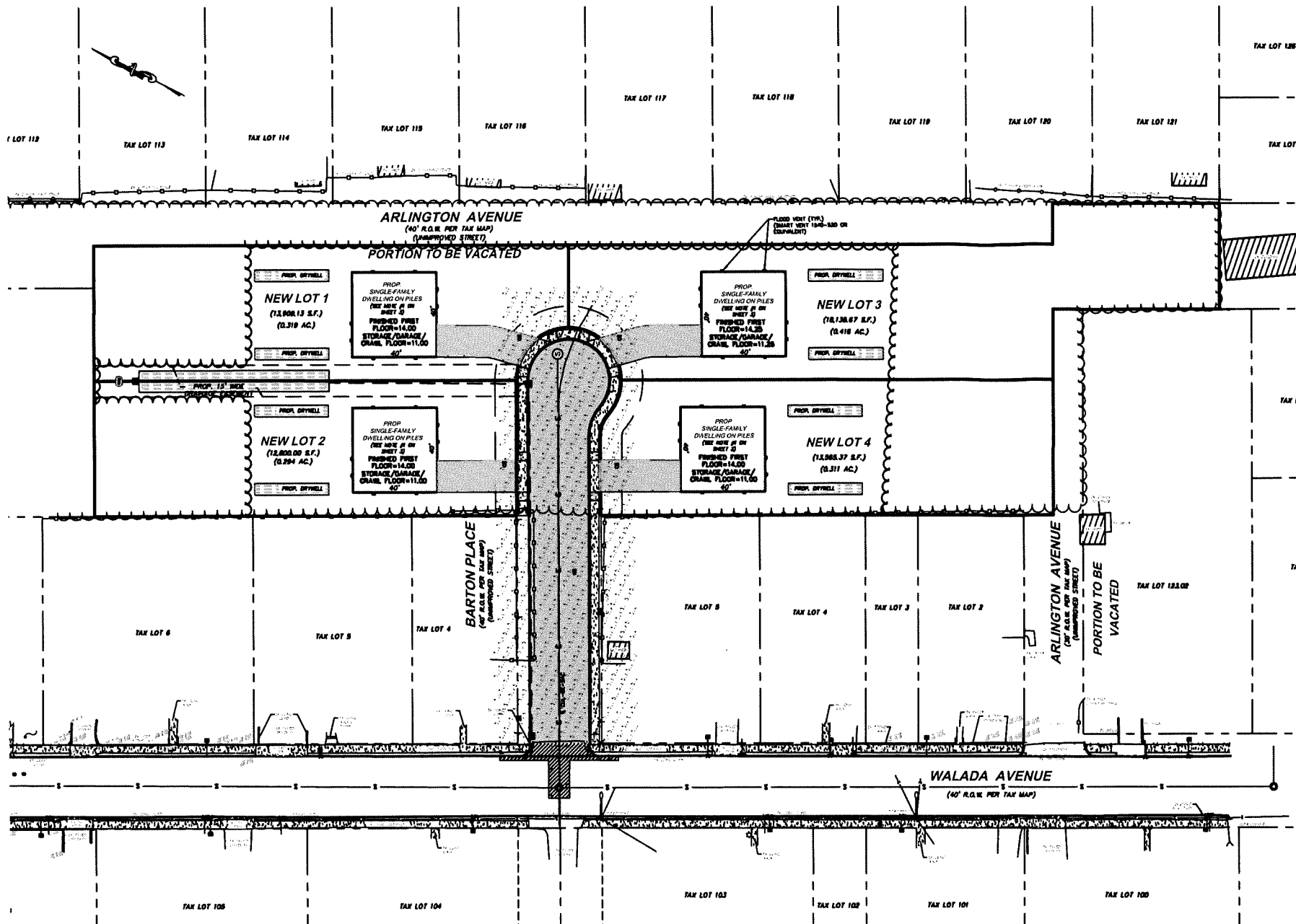
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 240A2788300

108 BOX DRIVE
MILLSTONE TOWNSHIP, N.J. 08538
(609) 448-1880

13 NORMAN DRIVE
TOWNSHIP, N.J. 08533
(609) 254-0888

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

DATE 5/30/23	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
SCALE 1"=30'	
DRAWN JZ	
CHECKED R/S	
SHEET 6 OF 13	
POCKET	
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.

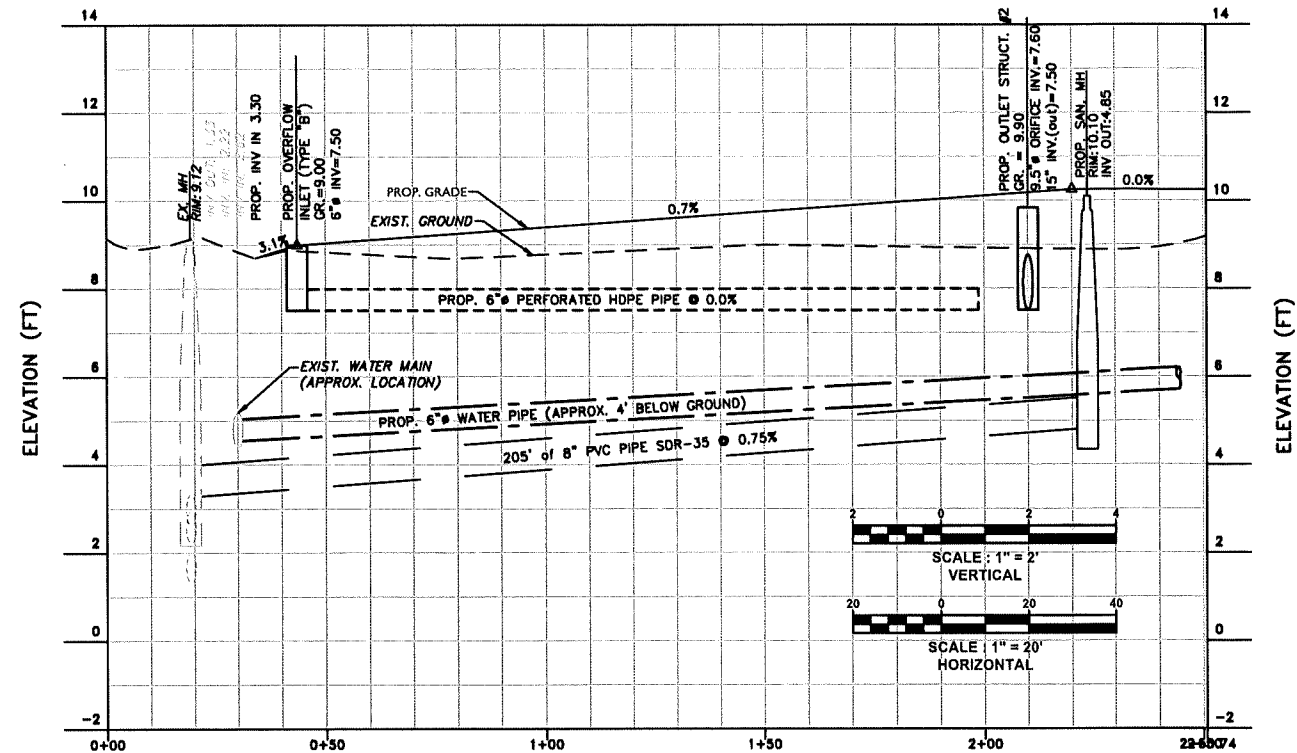
THIS DRAWING IS TO BE USED
FOR LIGHTING PURPOSES ONLY

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

CREST
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
CERTIFICATE OF AUTHORIZATION NO. 246A27883300
100 RICE DRIVE
MILLSBORO, NEW JERSEY 08040
PH: 735.244-1000
15 HOBOKEN PIKE
AT WATER STREET
TOMBS RIVER, N.J. 08053
PH: 735.244-0080
ROBERT D. SIVE
PROFESSIONAL ENGINEER NJ LIC. NO. 43816

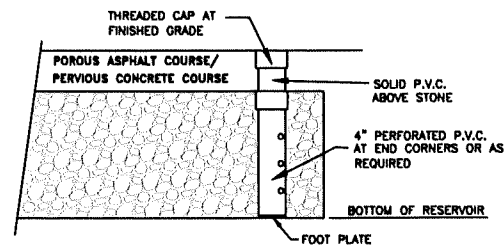
DATE
5/30/23
SCALE
1"=30'
DRAWN
RS
CHECKED
RS
SHEET
7 OF 13
PROJECT

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
LIGHTING PLAN

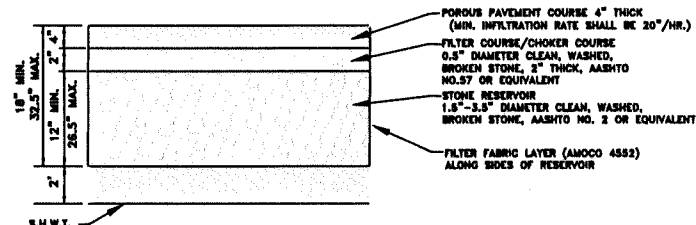


GENERAL NOTES FOR POROUS PAVEMENT:

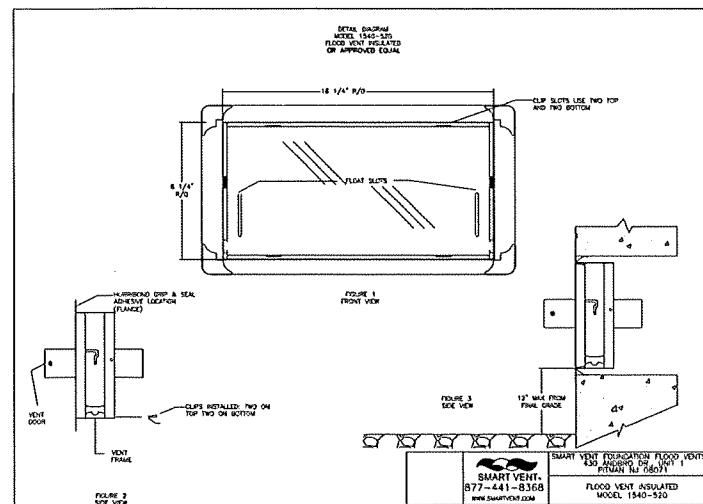
- PERVIOUS PAVEMENT AREAS SHALL BE COMPACTED IF CONSTRUCTED ON IN-SITU SOILS OR DEEP FILLED IF CONSTRUCTED ON FILL SOILS, WHICH SHOULD BE A STRUCTURAL SAND BASED FILL.
- STORAGE BED AND AGGREGATE MUST BE PLACED IN 6" MAXIMUM THICKNESS LIFTS & COMPACTED USING PLATE COMPACTORS IN ACCORDANCE WITH BMAP MANUAL 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 #4, 95% PASSING #10, 55% PASSING #20, 15% PASSING #40, 10% PASSING #60 AND 5% PASSING #80 U.S. STANDARD SIEVE SIZES WITH A 5.75%-8.00% ASPHALT BINDER BY WEIGHT.
- DEPTH FROM THE BOTTOM OF THE BMP 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 C1761 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 PERVIOUS 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

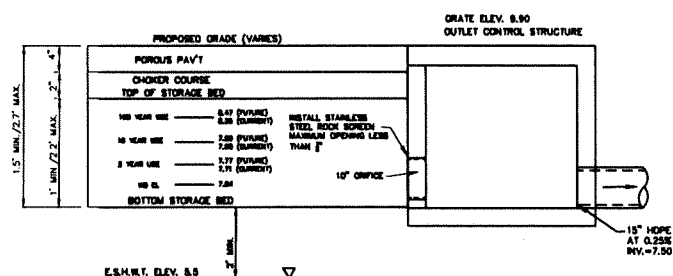


PERVIOUS PAVING DETAIL
NOT TO SCALE

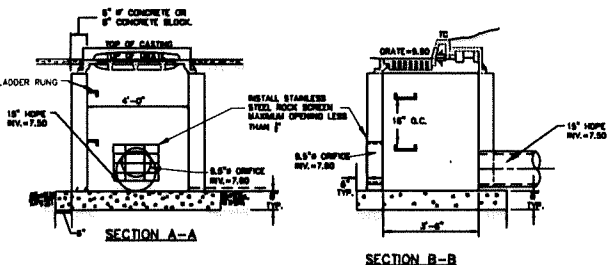
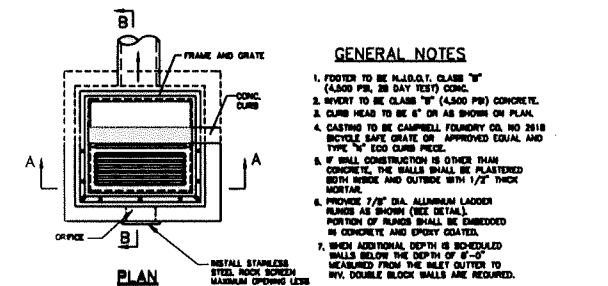


DETAILED SPECIFICATIONS:
MATERIAL: STAINLESS STEEL
OPERATION FLOOD: AUTOMATIC NON-POWERED ACTIVATION AND OPERATION
INSTALLATION: SECURED W/ 4 STAINLESS STEEL INSTALLATION CLIPS INCLUDED AND AN ADHESIVE HYDROSTATIC RELIEF: 200 SQ. FT PER VENT
REQUIREMENTS FLOOD: MINIMUM OF 2 VENTS PER ENCLOSED AREA MOUNTED 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

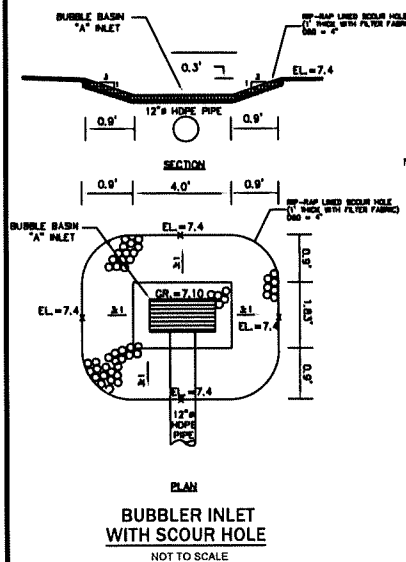
FLOOD VENT DETAIL
NOT TO SCALE



PERVIOUS PAVING W/ INFILTRATION SECTION
NOT TO SCALE

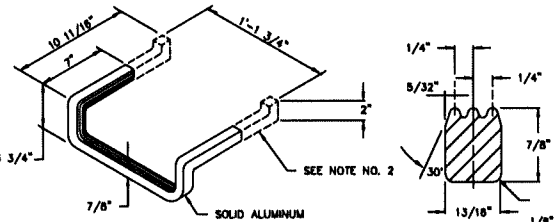
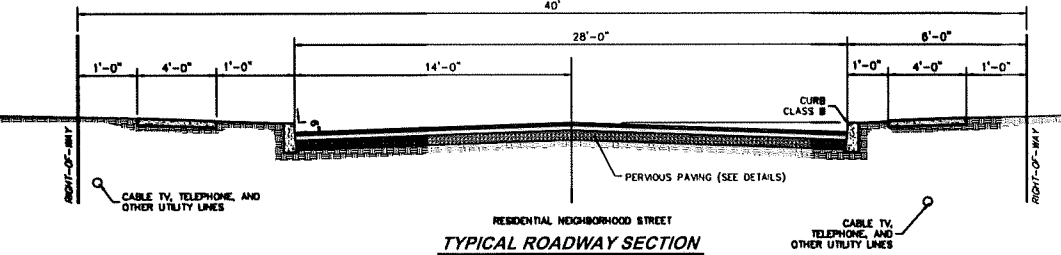


OUTLET CONTROL STRUCTURE NO. 2
(MODIFIED TYPE B INLET DETAIL)
NOT TO SCALE



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

BARTON PLACE PROFILE

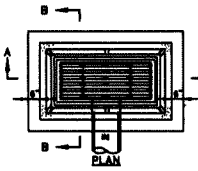
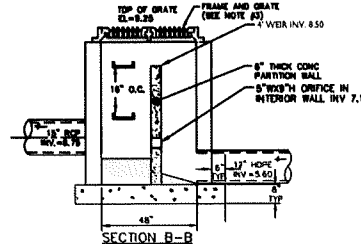


NOTES:
1. ALUMINUM STEP SHALL BE EXTRUDED ALUM. 6061-T6 ALLOY DROP FRONT DESIGN OR APPROVED EQUAL.
2. THE PORTION TO BE IMBEDDED IN THE CONCRETE SHALL BE COATED WITH COALTAR PITCH OR OTHER APPROVED MATERIAL.

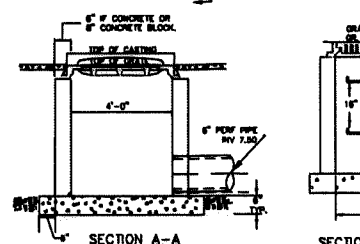
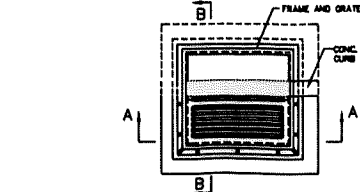
LADDER RUNG
NOT TO SCALE

GENERAL NOTES

- FOOTER TO BE H.A.B.T. CLASS 'B' (4500 PSI, 28 DAY TEST) CONC.
- CURB HEAD TO BE 6" OR AS SHOWN ON PLAN.
- CASTING TO BE CAMPBELL FOUNDRY CO. NO. 2818 BICYCLE SAFE GRATE OR APPROVED EQUAL AND TYPE 'H' EGG CURB PIECE.
- IF WALL CONSTRUCTION IS OTHER THAN CONCRETE, THE WALLS SHALL BE PLASTERED BOTH INSIDE AND OUTSIDE WITH 1/2" THICK MORTAR.
- PROVIDE 7/8" DIA. ALUMINUM LADDER RUNGS AS SHOWN (SEE DETAIL). PORTION OF RUNGS SHALL BE EMBEDDED IN CONCRETE AND EPOXY COATED.
- SHOWN ADDITIONAL DEPTH IS SCHEDULED WALLS BELOW THE DEPTH OF 8'-0" MEASURED FROM THE INLET OUTLET TO INV. DOUBLE BLOCK WALLS ARE REQUIRED.



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	6/21/24	CH
2	REV. STORMWATER DESIGN PER HJDEP MEETING DATED 12/2/24	1/10/25	CH
3	REV. STORMWATER DESIGN PER HJDEP LETTER DATED 1/24/25	10/9/25	CH
4		0/0	

CREST

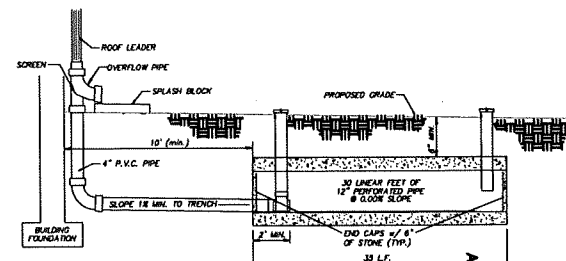
Engineering Associates Inc.
Civil & Environmental Engineers
Professional Planners • Surveyors • Landscape Architects
• CERTIFICATE OF AUTHORIZATION NO. 246A2788300 •
100 NINE DRIVE
MILLSBORO TOWNSHIP, NJ 08248
(609) 683-1800
13 ROXBURY DRIVE
AT WATER STREET
TOWNE SQUARE, NJ 07033
(973) 254-1000

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

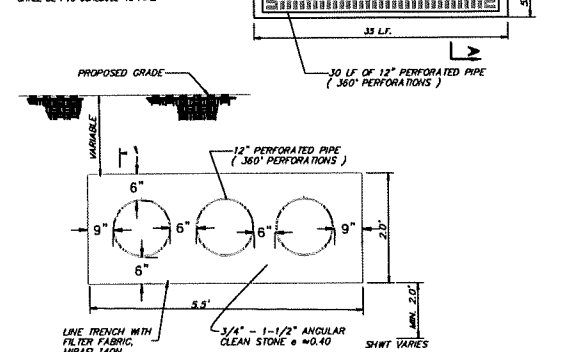
DATE: 5/30/23
SCALE: AS SHOWN
DRAWN: JZ
CHECKED: RS
SHEET: 8 OF 13
PROJECT:

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

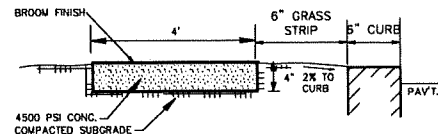


- NOTES:
1. THE LEADER PIPE SHALL EXTEND INTO THE TRENCH A MIN. OF (2) TWO FEET.
 2. THE TRENCH SHALL BE A MIN. OF 18" FROM THE BUILDING.
 3. ALL ROOF LEADERS RUNNING UNDER THE DRIVEWAY SHALL BE PVC SCHEDULE 40 PIPE.



CONCRETE APRON DETAIL

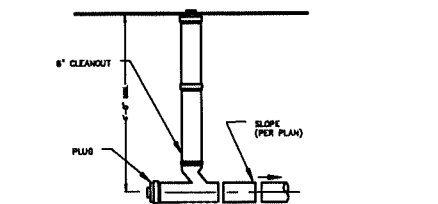
NOT TO SCALE



CONCRETE SIDEWALK DETAIL

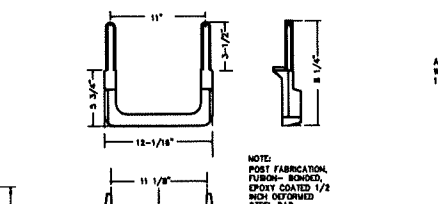
NOT TO SCALE

- NOTES:
1. CONCRETE TO BE N.J.S.D. CLASS "B"
 2. PROVIDED PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20'-0" (MAX.) INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS



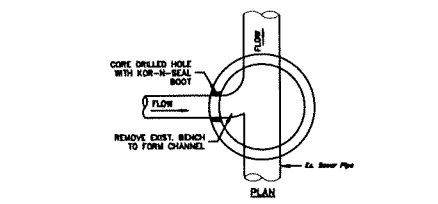
CLEANOUT DETAIL

NOT TO SCALE



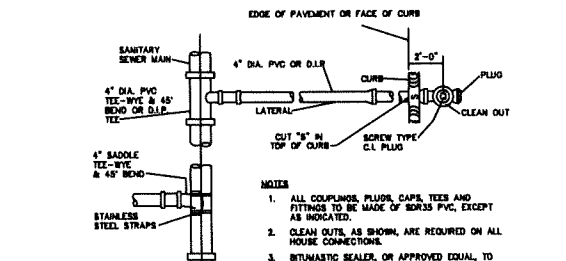
SANITARY SEWER POLYPROPYLENE MANHOLE STEP

N.T.S.



STONE TRENCH DETAIL

NO SCALE



PLAN

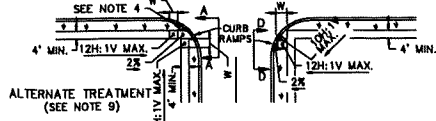
TYPICAL SANITARY SEWER 4 INCH HOUSE CONNECTION INSTALLATION

SIL

CONCRETE CURB

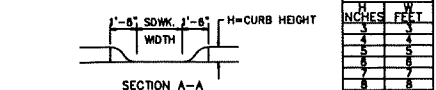
NOT TO SCALE

- NOTES:
1. CONCRETE TO BE N.J.S.D. CLASS "B"
 2. PROVIDED PREFORMED BITUMINOUS FIBER EXPANSION JOINTS, 1/2" THICK AT 20'-0" (MAX.) INTERVALS. PROVIDE DUMMY JOINTS (FORMED) MIDWAY BETWEEN EXPANSION JOINTS



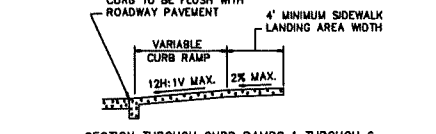
CURB RAMP TYPE 6

NOT TO SCALE

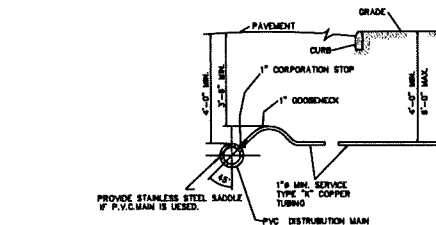


SECTION A-A

- NOTES:
1. CURB RAMP OPENING TO BE FLUSH WITH ROADWAY PAVEMENT (CURB RAMP TYPES 5 & 6).



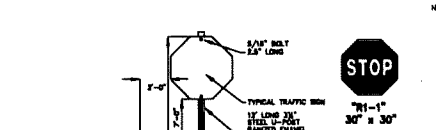
SECTION THROUGH CURB RAMP 1 THROUGH 6



1" HOUSE SERVICE CONNECTION

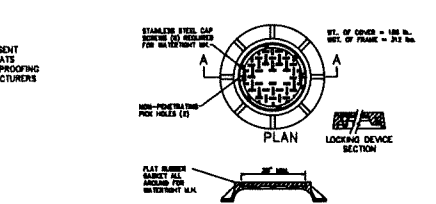
WATER/IRIGATION MAIN IN STREET OR BENEATH OPPOSITE SIDEWALK

"BOLT" TO BE EMBED IN CURB FACE IN FRONT OF CURB BOX LOCATION



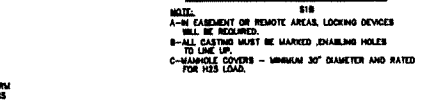
TYPICAL TRAFFIC SIGN POST DETAIL

NOT TO SCALE



WATERTIGHT SANITARY MANHOLE FRAME AND COVER

N.T.S.

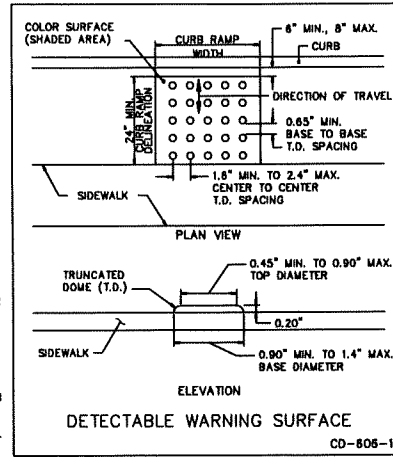


PRE CAST SANITARY SEWER CONCRETE MANHOLE

N.T.S.

ALL M.H.S. TO BE INTERIOR EPOXY COATED.

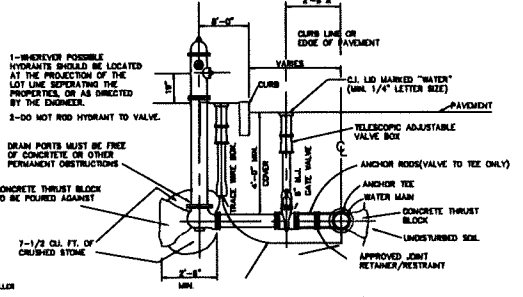
- GENERAL NOTES:
1. LANDING AREA, APPROACH SIDEWALK TRANSITIONS, AND CURB RAMP SHALL BE KEPT CLEAR OF OBSTRUCTIONS.
 2. DIMENSIONS SHOWN IN TABLES ARE FOR RELATIVELY FLAT SIDEWALK AREAS. CARE SHOULD BE TAKEN WHEN DETERMINING CURB RAMP SIZE BASED ON CURB HEIGHT (H) WHERE ELEVATION OF CURB AND SIDEWALK VARY DRAMATICALLY IN AREA OF PROPOSED CURB RAMP.
 3. CURB (DROPPED CURB) GUTTERLINE TO BE FLUSH WITH ROADWAY PAVEMENT A MINIMUM OF 4 FEET AT ALL CURB RAMP.
 4. FOR CURB RAMP TYPES 5 AND 6, IF A GRASS BUFFER DOES NOT EXIST, SLOPE CURB TO EQUAL SLOPE OF ADJACENT CURB RAMP.
 5. SIDEWALK AND CURB RAMP WITHIN AREA ENCLOSED BY HEAVY LINES TO BE PAID FOR AS CONCRETE SIDEWALK OF THE APPROPRIATE ADJACENT THICKNESS.
 6. CURB AND HEADER WITHIN AREA ENCLOSED BY HEAVY LINES TO BE PAID FOR AS VERTICAL CURB OR SLOPING CURB OF THE APPROPRIATE ADJACENT SIZE AND KIND.
 7. WHERE THE DISTANCE FROM THE GUTTER LINE TO THE OUTSIDE EDGE OF SIDEWALK IS 8 FEET OR LESS, CURB RAMP TYPE 7 SHOULD BE USED, INSTEAD OF CURB RAMP TYPE 1 THROUGH 4.
 8. CROSSWALKS AND STOP LINES MAY BE MARKED OR UNMARKED, SEE PLANS.
 9. PREFERRED AND ALTERNATE TREATMENTS SHOULD NOT BE INTERFERED WITHIN THE SAME INTERSECTION.
 10. DIMENSIONS SHOWN IN TABLES ARE FOR 3 INCH TO 9 INCH CURB HEIGHTS. WHERE THE CURB HEIGHTS ARE OTHER THAN WHAT IS PROVIDED IN THE TABLES, THE DIMENSIONS OF THE RAMP WILL HAVE TO BE CALCULATED BASED ON CROSS SLOPES SHOWN.



DETECTABLE WARNING SURFACE

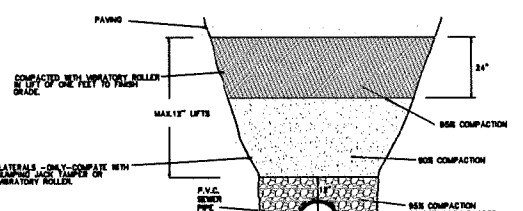
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WATER MAIN SIZE	HYDRANT COLOR	STANDARD WELLS NUMBER (INDUSTRIAL DIAMETER)
8"	ORANGE	S.S. 4081
10"	ORANGE	S.S. 4082
12"	ORANGE	S.S. 4083
14"	ORANGE	S.S. 4084
16"	ORANGE	S.S. 4085
18"	ORANGE	S.S. 4086
20"	ORANGE	S.S. 4087
22"	ORANGE	S.S. 4088
24"	ORANGE	S.S. 4089
26"	ORANGE	S.S. 4090
28"	ORANGE	S.S. 4091
30"	ORANGE	S.S. 4092
32"	ORANGE	S.S. 4093
34"	ORANGE	S.S. 4094
36"	ORANGE	S.S. 4095
38"	ORANGE	S.S. 4096
40"	ORANGE	S.S. 4097
42"	ORANGE	S.S. 4098
44"	ORANGE	S.S. 4099
46"	ORANGE	S.S. 4100
48"	ORANGE	S.S. 4101
50"	ORANGE	S.S. 4102
52"	ORANGE	S.S. 4103
54"	ORANGE	S.S. 4104
56"	ORANGE	S.S. 4105
58"	ORANGE	S.S. 4106
60"	ORANGE	S.S. 4107
62"	ORANGE	S.S. 4108
64"	ORANGE	S.S. 4109
66"	ORANGE	S.S. 4110
68"	ORANGE	S.S. 4111
70"	ORANGE	S.S. 4112
72"	ORANGE	S.S. 4113
74"	ORANGE	S.S. 4114
76"	ORANGE	S.S. 4115
78"	ORANGE	S.S. 4116
80"	ORANGE	S.S. 4117
82"	ORANGE	S.S. 4118
84"	ORANGE	S.S. 4119
86"	ORANGE	S.S. 4120
88"	ORANGE	S.S. 4121
90"	ORANGE	S.S. 4122
92"	ORANGE	S.S. 4123
94"	ORANGE	S.S. 4124
96"	ORANGE	S.S. 4125
98"	ORANGE	S.S. 4126
100"	ORANGE	S.S. 4127



FIRE HYDRANT ASSEMBLY

N.T.S.



SANITARY SEWER REQUIRED BACKFILL/COMPACTION

N.T.S.

TABLE OF TRENCH WIDTHS	
PIPE DIA.	SPAC. WIDTH
4"	2'-0"
6"	2'-0"
8"	2'-0"
10"	2'-0"
12"	2'-0"
14"	2'-0"
16"	2'-0"
18"	2'-0"
20"	2'-0"
22"	2'-0"
24"	2'-0"
26"	2'-0"
28"	2'-0"
30"	2'-0"
32"	2'-0"
34"	2'-0"
36"	2'-0"
38"	2'-0"
40"	2'-0"
42"	2'-0"
44"	2'-0"
46"	2'-0"
48"	2'-0"
50"	2'-0"
52"	2'-0"
54"	2'-0"
56"	2'-0"
58"	2'-0"
60"	2'-0"
62"	2'-0"
64"	2'-0"
66"	2'-0"
68"	2'-0"
70"	2'-0"
72"	2'-0"
74"	2'-0"
76"	2'-0"
78"	2'-0"
80"	2'-0"
82"	2'-0"
84"	2'-0"
86"	2'-0"
88"	2'-0"
90"	2'-0"
92"	2'-0"
94"	2'-0"
96"	2'-0"
98"	2'-0"
100"	2'-0"

NOTES:

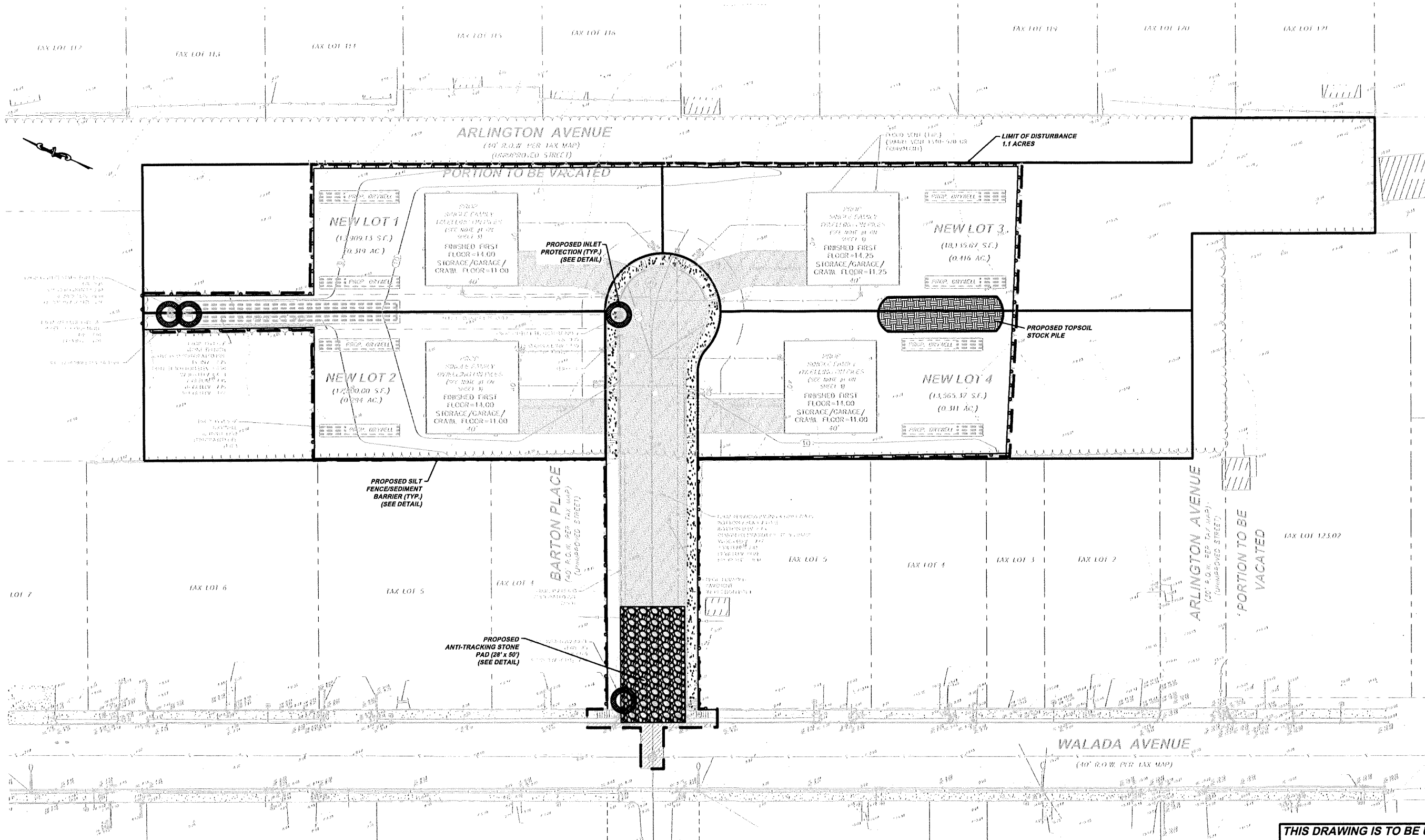
1. ALL TRENCHES AND EXCAVATIONS TO BE GIVEN THE STEEPEST SLOPE PRACTICAL.
2. IF THE BOTTOM OF THE TRENCH AT OR BELOW THE OUTSIDE TOP OF THE PIPE EXCEEDS THE WIDTH IN COLUMN 2, THE SPACE BETWEEN THE PIPE AND THE SIDE OF THE TRENCH OR EXCAVATION SHALL BE BACKFILLED WITH CLEAN WASH GRADED SAND OR SELECT MATERIAL. IT SHALL BE COMPACTED TO THE 1/2 POINT OF THE PIPE. IF THE TRENCH IS DEEPER THAN 18" IN DEPTH, THE BOTTOM OF THE TRENCH SHALL BE BACKFILLED WITH CLEAN WASH GRADED SAND OR SELECT MATERIAL. IT SHALL BE COMPACTED TO THE 1/2 POINT OF THE PIPE. IF THE TRENCH IS DEEPER THAN 18" IN DEPTH, THE BOTTOM OF THE TRENCH SHALL BE BACKFILLED WITH CLEAN WASH GRADED SAND OR SELECT MATERIAL. IT SHALL BE COMPACTED TO THE 1/2 POINT OF THE PIPE.
3. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
4. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
5. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
6. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER. COMPACTED BACK FILL SHALL BE A MINIMUM OF 18" UNLESS OTHERWISE SPECIFIED BY THE ENGINEER.
7. LIMITS OF TRENCH TO BE CUT TO A NEAT EDGE AND SEALED WITH CALKED ASPHALT.
8. ON AREAS SEALED WITH CALKED ASPHALT, DRY SAND SHALL BE SPINNED TO PREVENT PICK UP BY TRAFFIC.

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

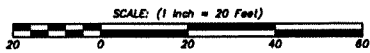
DATE: 5/30/23
SCALE: NO SCALE
DRAWN: JZ
CHECKED: RS
SHEET: 9 OF 13
PROJECT: PRELIMINARY & FINAL MAJOR SUBDIVISION
BLOCK 158, TAX LOT 2
BLOCK 159, TAX LOT 3
BLOCK 122, TAX LOT 122
MIDDLETOWN TOWNSHIP
MONMOUTH COUNTY, NEW JERSEY

SITE 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
3	REV. STORMWATER DESIGN PER ADEP EMAIL DATED 6/6/24	6/27/24	RS
2	REV. STORMWATER DESIGN PER ADEP MEETING DATED 12/3/24	1/10/25	RS
1	REV. STORMWATER DESIGN PER ADEP LETTER DATED 7/26/23	10/5/23	RS

CREST

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Civil & Environmental Engineers
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PHONE: 609-426-1800

13 BROADWAY
AT WATER STREET
TRENTON, NJ 08606
PHONE: 609-622-0000

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

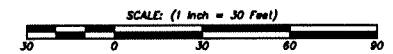
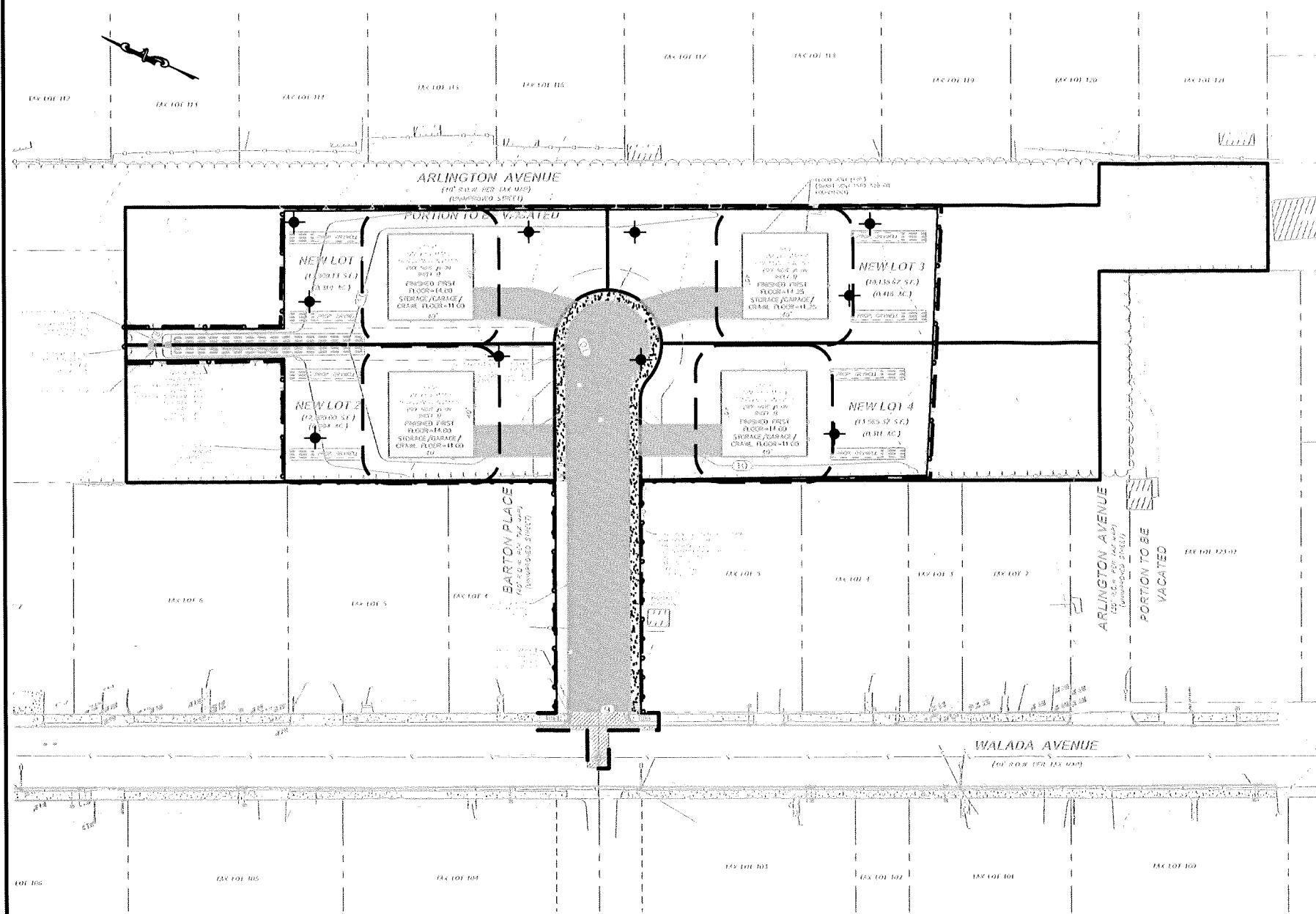
DATE	5/30/23
SCALE	1"=20'
DRAWN	JZ
CHECKED	RS
SHEET	10 OF 13
PROJECT	

PRELIMINARY & FINAL MAJOR SUBDIVISION

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

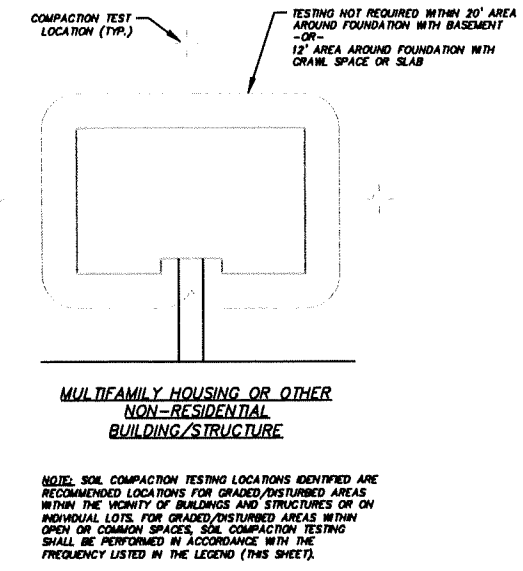
MIDDLETOWN TOWNSHIP
MONMOUTH COUNTY, NEW JERSEY

SOIL EROSION &
SEDIMENT
CONTROL PLAN



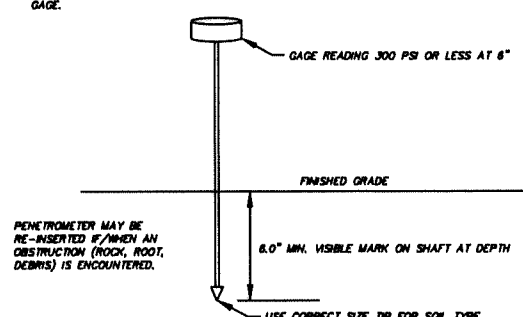
- LEGEND**
- SOIL COMPACTION TESTING AREAS
 - RECOMMENDED SOIL COMPACTION TESTING LOCATION (APPROX. 2 PER ACRE)

- 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 GRADUALLY DECLASSIFIED 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 IMPLIFIED 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 (COMPACTION/TILLAGE TO MINIMUM DEPTH OF 6" OR DEEPER) 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 (MINIMUM DEPTH OF 6" MINIMUM DEPTH) PRIOR TO THE PLACEMENT OF TOPSOIL. IF/WHEN SUBSOIL TILLAGE IS USED, THE CONTRACTOR SHALL SUBMIT AN 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

NOTE:
SOIL SHOULD BE MOIST BUT NOT SATURATED. DO NOT TEST WHEN SOIL IS EXCESSIVELY DRY OR SUBJECT TO FREEZING TEMPERATURES. SLOW, STEADY DOWNWARD PRESSURE USED TO ADVANCE THE PROB. PROB MUST PENETRATE AT LEAST 6" WITH LESS THAN 300 PSI READING ON THE GAGE.



HANDHELD SOIL PENETROMETER TEST
NO SCALE

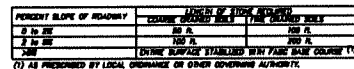
THIS DRAWING IS TO BE USED FOR SOIL EROSION AND SEDIMENT CONTROL COMPACTION PURPOSES ONLY.

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

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TOWNSHIP, N.J. 08063
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ROBERT D. SIVE
PROFESSIONAL ENGINEER N.J. LIC. NO. 43816

DATE: 8/30/23
SCALE: 1"=30'
DRAWN: JZ
CHECKED: RS
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
FILE: 11510027
SOIL EROSION & SEDIMENT CONTROL COMPACTION PLAN
SHEET NO. 11 OF 13
DATE: 8/30/23



1. INDIVIDUAL LOT ENTRANCE AND EXITS: - AFTER INTERIOR ROADWAYS ARE PAVED, INDIVIDUAL LOT ENTRANCE/EXITS POINTS MAY REQUIRE A STABILIZED CONCRETED DRIVEWAY CONSISTING OF NOT 3 FEET (1' TO 2') TO PREVENT OR MINIMIZE TRACKING OF SEDIMENT, MUD OR OF THE SOILS ABOVE, WHICH SHALL BE MAINTAINED TO LOT EDGE. DRIVEWAYS SHALL BE MAINTAINED TO LOT EDGE.

2. THE DRIVEWAY - IF SPACE IS LIMITED, WHILE SUCH MAY BE MARKED WITH CLEAR WHITE BEFORE BEING PAVED AREA, A DRIVE STRIP MUST BE LOCATED SUCH THAT DRIVE STRIP WILL NOT FLOW INTO PAVED ROADWAYS OR INTO UNPROTECTED STORM DRAINAGE SYSTEMS.

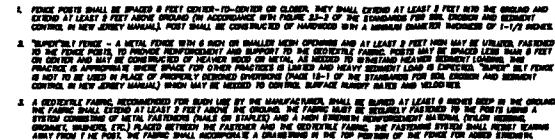
3. WHEN THE CONSTRUCTION ACCIDENT OCCURS TO A MAJOR ROADWAY, A PAVED TRANSITION AREA MAY BE INSTALLED BETWEEN THE DRIVEWAY AND THE MAJOR ROADWAY TO PREVENT LOGS, STUMPS FROM BEING DRIVEN ONTO THE ROADWAY BY HEAVY EQUIPMENT EXISTING ON LEAVING THE SITE.

1. THE EXCHANGE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT DRAGGING OR FLOODING OF TRUCKS OR OTHER EQUIPMENT. IT MAY INCLUDE PERIODIC FLOW CHECKING WITH ADDITIONAL STOPS OR ADDITIONAL LENGTHS AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO STOP DRAGGAGE. ALL SEDIMENT, SPILLS, DROPPED, BURNED OR DRAGGED OR ROADWAYS (PUBLIC OR PRIVATE) OR OTHER IMPROVED SURFACES MUST BE REMOVED IMMEDIATELY.
2. WHERE ACCUMULATION OF DIRT/SEDIMENT IS SIGNIFICANTLY CLEANED OR REMOVED BY CONVENTIONAL MEANS, A POWER BLOWER, A POWER BRUSH, OR A BACKHOE MAY BE REQUIRED TO CLEAN PAVED OR IMPROVED SURFACES. ALL OTHER ACCESS POINTS WHICH ARE NOT STABILIZED SHALL BE BLOCKED OFF.

ANTI-TRACKING STONE PAD DETAIL
NO SCALE

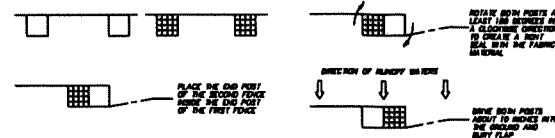


1. THE TREE PROTECTION FENCING SHALL BE INSTALLED ALONG THE TREES AT A DISTANCE DETERMINED BY THE CRITICAL ROOT RADIIUS (CRR). THE CRR IS THE DISTANCE FROM THE TRUNK OF THE TREE TO THE POINT WHERE THE CRR BEGINS. THE CRR SHALL BE ONE AND ONE-HALF (1.5) TIMES THE DBH OF THE TREE OR THE CRITICAL ROOT RADIIUS (CRR) OF THE TREE. THE CRR SHALL BE ONE AND ONE-HALF (1.5) TIMES THE DBH OF THE TREE (FOR EXAMPLE, A TREE WITH A DIAMETER OF FOUR (4) INCHES SHOULD HAVE A CRITICAL ROOT RADIIUS OF SIX (6) FEET).
2. WARNING SIGNAGE, TO BE OBTAINED FROM THE TOWN ENGINEERING DEPARTMENT, SHALL BE ATTACHED TO THE FENCING 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 DESTROYED OR DAMAGED 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.

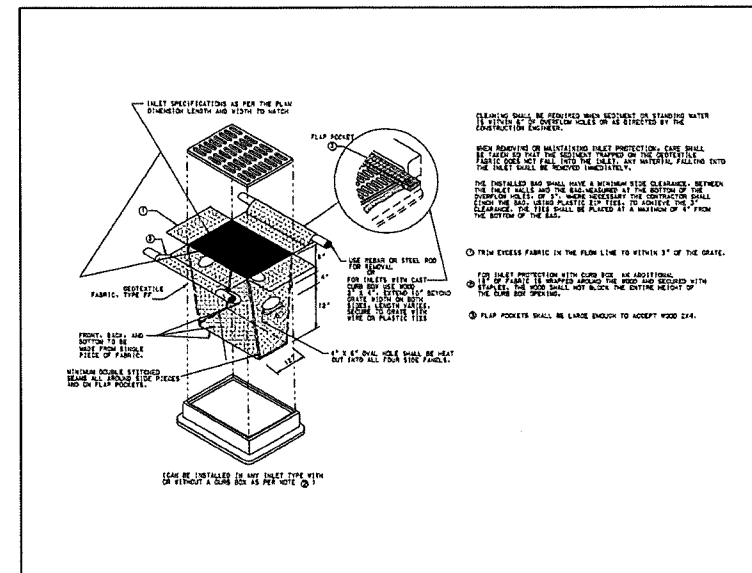


1. SEDIMENT SHALL BE REMOVED FROM THE UPSTREAM FACE OF THE BARRIER WHEN IT HAS REACHED A DEPTH OF 1/8 THE BARRIER HEIGHT.
2. REPAIR OR REPLACE BARRIER (FABRIC, POSTS, SALES, ETC.) WHEN DAMAGED.
3. BARRIERS SHALL BE INSPECTED ONLY FOR SIGNS OF DETEIORATION AND SEDIMENT REMOVAL.

SILT FENCE / SEDIMENT BARRIER DETAIL

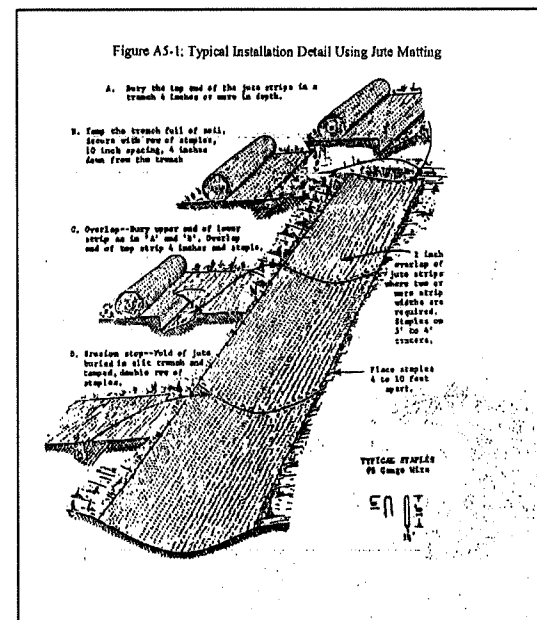


ATTACHING TWO SILT FENCES DETAIL



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



JUTE MATTING DETAIL
NO SCALE

[illegible]

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

DATE	5/30/23
SCALE	NO SCALE
DRAWN	JZ
CHECKED	RS
SHEET	12 OF 13
POCKET	

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
SHEET 10 OF 12

