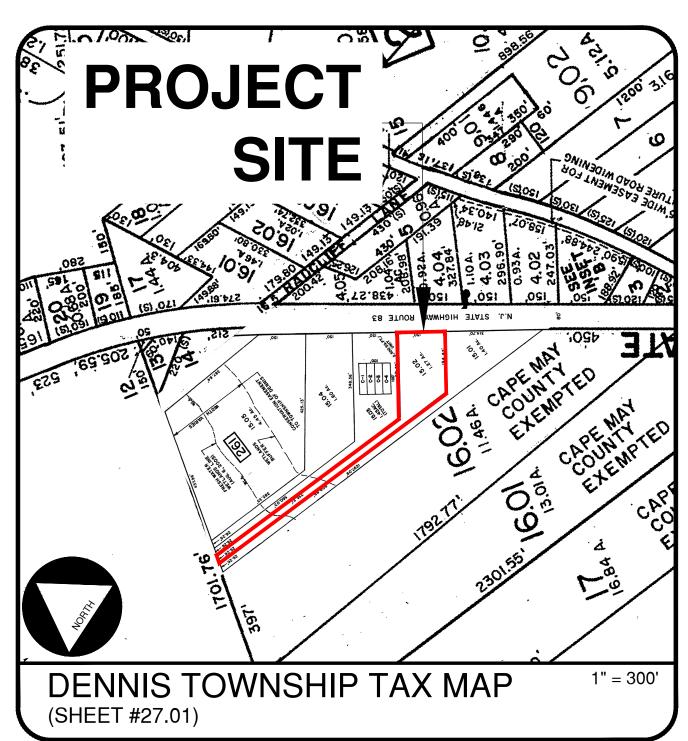


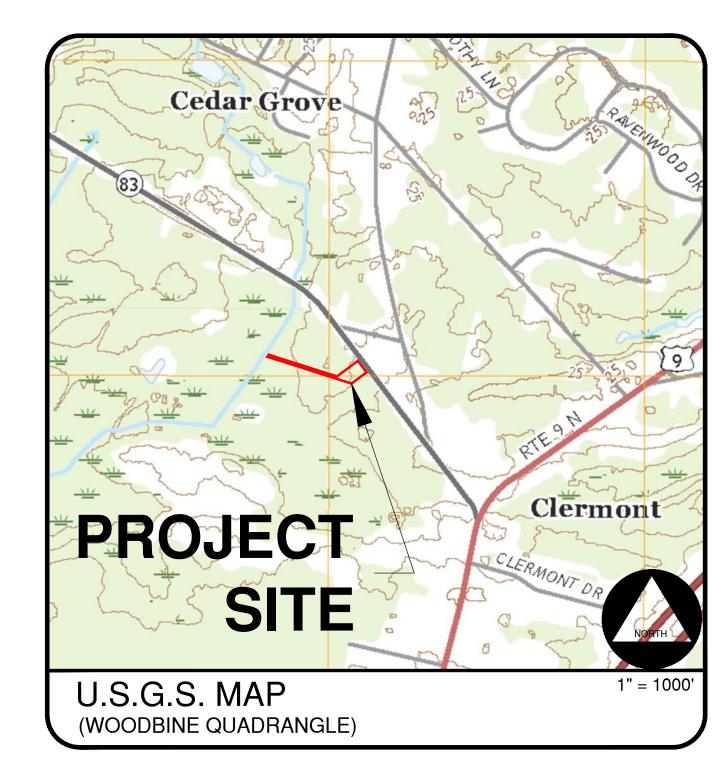
PROPERTY OWNERS WITHIN 200' OF

BLOCK 261, LOT 15.02

TOWNSHIP OF DENNIS, CAPE MAY COUNTY, NJ

PROPERTY OWNERS LIST WITHIN 200'





Outbound and topographic survey information taken from plan entitled

"Situate in Block 261, Lot 15.02, Township of Dennis, Cape May

dated 12/09/22.

or directions.

SURVEY INFORMATION

indicate "Issued for Construction."

County, NJ", prepared by George Swensen N.J.P.L.S. #GS43415,

This set of plans has been prepared for purposes of municipal and

agency review and approval. This set of plans shall not be utilized

satisfied on the drawings and each drawing has been revised to

Contractor shall check and verify all existing utilities, grades, site

construction. Any discrepancies or unusual conditions are to be

Specifications and supplementary specifications for this project.

These drawings do not include the necessary components for construction safety; however, all construction must be done in

all rules and regulations appurtenant to this project.

CONTRACTOR NOTES

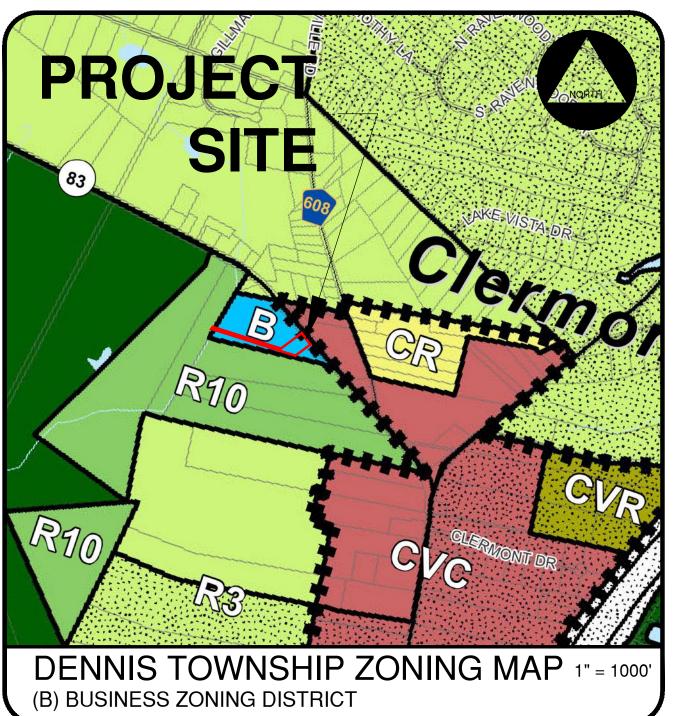
reported to design engineer/project staff immediately for adjustments

All construction to be performed in accordance with NJDOT Standard

compliance with the Occupational Safety and Health Act of 1970 and

dimensions and existing conditions before proceeding with

as construction documents until all conditions of approval have been





ZONING INFORMATION (B) BUSINESS DISTRICT EDA #9826 55,756.8 Lot Depth 248.6' Front Yard Setback Side Yard Setback Rear Yard Setback 41.81' YES **Building Coverage** 10.8% Impervious Coverage 26.2% **Building Height (Feet)** 6,000 SF Storage Workshop 8.57 spaces (1 space / 700 SF)

Sign Requirement No signs are proposed as part of this application.

9 spaces

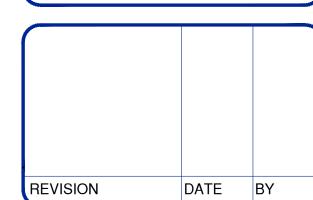
Section 185-18(D): Bulk Standards Rear yard; To permit a setback of 41.81', where a 50' setback is

Clearing Limits as it pertains to Section 185-41J(2)

Requiring curbing in all parking areas (Section 185-38A(2)) Environmental Assessment Report (Section 185-41K(2)(c)) Traffic Impact Study (Section 165-54.B.2(h))

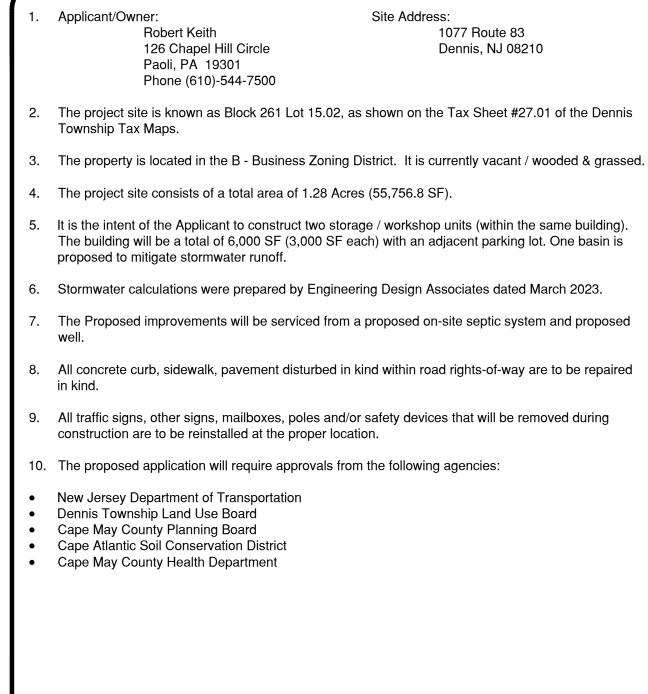
VINCENT C. ORLANDO PROFESSIONAL ENGINEER N.J.P.E. LIC. #32498

RAISED SEAL IMPRESSION BEARING THE NAME AND REGISTRATION NUMBER OF THE ABOVE SIGNED PROFESSIONAL, IT MAY NOT BE AN AUTHORIZED COPY OF THE ORIGINAL DOCUMENT AND MAY HAVE BEEN ALTERED. REPRODUCTION OR FURTHER DISSEMINATION OF THE CONTENTS IN WHOLE OR IN PART REQUIRES PERMISSION IN WRITING FROM ENGINEERING DESIGN ASSOCIATES, P.A.



ZONING INFORMATION

CAPE MAY COUNTY PLANNING BOARD DN-309, CENTRAL MAIL ROOM CAPE MAY COURT HOUSE, NJ 08210 SOUTH SERVILLE, NJ 08246.0100 1084 RT 83 VERIZON COMMUNICATIONS % ENGINEERING DEPARTMENT 10 TANSBORO RD, FL 2 BERLIN, NJ 08009 SOUTH JERSEY GAS COMPAN' % JOSEPH SCHNEIDER GENERAL MANAGER 1 SO JERSEY PLAZA FOLSOM, NJ 08037 48034.8205 5100 HARDING HIGHWAY, SUITE 399 08201.2429 MAYS LANDING, NJ 08330-9902 COMCAST CABLE 19008.4309 901 W LEEDS AVENUE ABSECON, NJ 08201 PUBLIC SERVICE ELECTRIC & GAS CO. MANAGER-CORPORATE PROPERTIES K & A PROPERTY MANAGEMENT LLC 16 KELLY COURT CAPE MAY COURT HOUSE, NJ 08210.1132 1083 ROUTE 83 #1 15.03 C-1 80 PARK PLAZA, T6B NEWARK, NJ 07102 CAPE ATLANTIC SOIL 15.03 C-2 CONSERVATION DISTRICT OCEAN VIEW, NJ 1083 RT 83 #2 ATTN: MICHAEL KENT 6260 OLD HARDING HIGHWAY 15.03 C-3 DONLEY, JOHN K & ROBERTSON, SANDRA 17 SWAINTON GOSHEN RD MAYS LANDING, NJ 08330 CAPE MAY COURT HOUSE, NJ 08210.1456 1083 RT 83 #3 CAPE ATLANTIC RE INV @ BINDER J 5 HARBOR COVE CAPE MAY, NJ 08204.40 1083 RT 83 #4 15.03 C-4 CN-600 1035 PARKWAY AVE TRENTON, NJ 08625-0600 08204.4067 08202.1674 RUSCO, DANNAUAL A & JANE 1095 RT 83 CAPE MAY COURT HOUSE, NJ 08210.1256 1095 RT 83 CAPE MAY COUNTY 4 MCORE RD CAPE MAY COURT HOUSE, NJ 08210.1654 1057 RT 83 16.02



GENERAL NOTES

SITE PLAN FOR ROBERT KEITH

BLOCK 261, LOT 15.02 DENNIS TOWNSHIP CAPE MAY COUNTY, NEW JERSEY

SCHEDULE OF SHEETS	SHEET NUMBER	ORIGINAL DATE	LAST REVISION DATE
COVER SHEET	1 OF 8	4/4/2023	
EXISTING CONDITIONS PLAN	2 OF 8	4/4/2023	
SITE PLAN	3 OF 8	4/4/2023	
GRADING AND SOIL EROSION PLAN	4 OF 8	4/4/2023	
LANDSCAPING AND LIGHTING PLAN	5 OF 8	4/4/2023	
NJDOT TRAFFIC CONTROL PLAN	6 OF 8	4/4/2023	
ENGINEERING DETAILS	7 OF 8	4/4/2023	
SOIL EROSION AND SEDIMENT CONTROL NOTES	8 OF 8	4/4/2023	

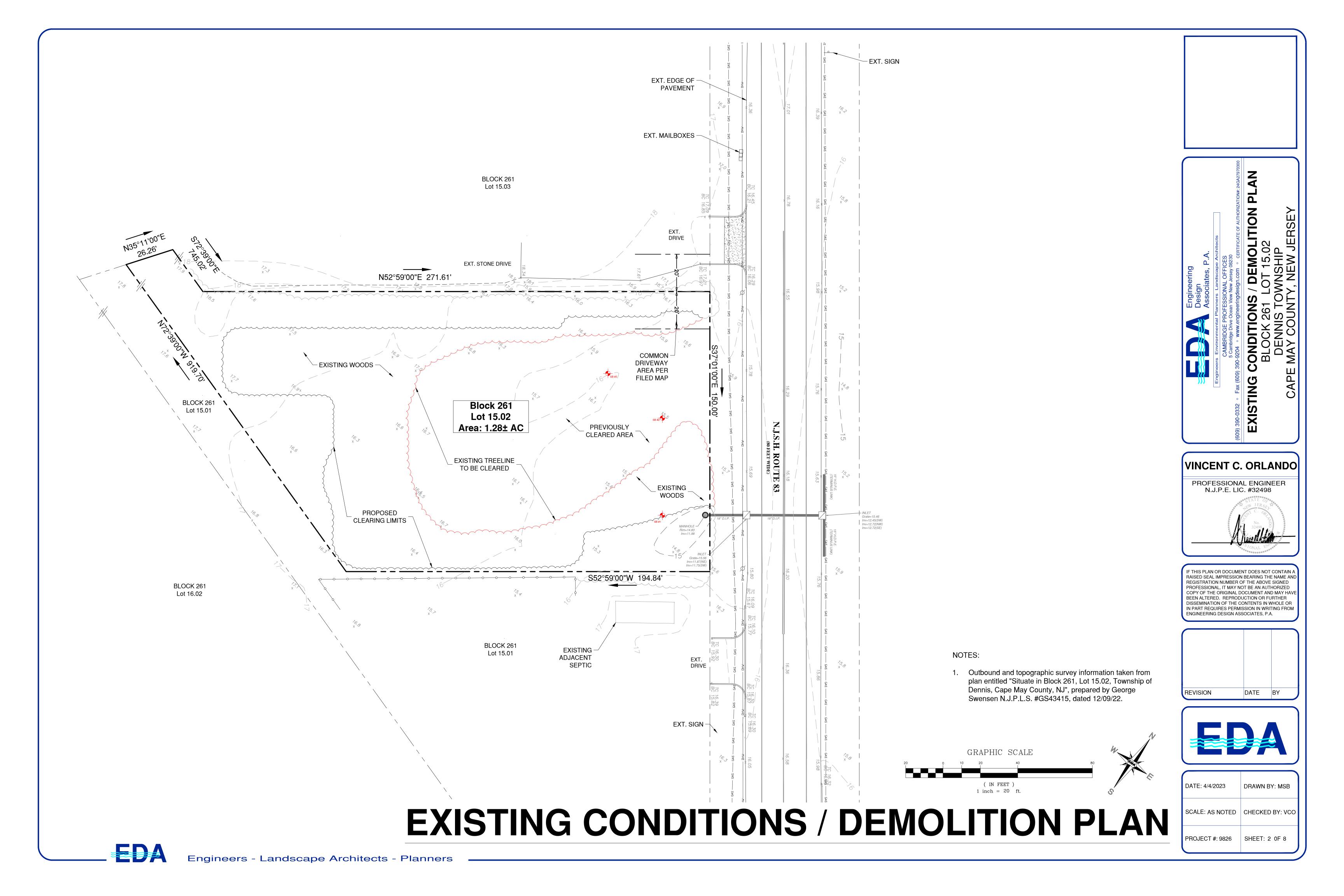
SCHEDULE OF SHEETS	SHEET NUMBER	ORIGINAL DATE	REVISION DATE
ET	1 OF 8	4/4/2023	
NDITIONS PLAN	2 OF 8	4/4/2023	
	3 OF 8	4/4/2023	
ID SOIL EROSION PLAN	4 OF 8	4/4/2023	
IG AND LIGHTING PLAN	5 OF 8	4/4/2023	
FIC CONTROL PLAN	6 OF 8	4/4/2023	
G DETAILS	7 OF 8	1/1/2023	

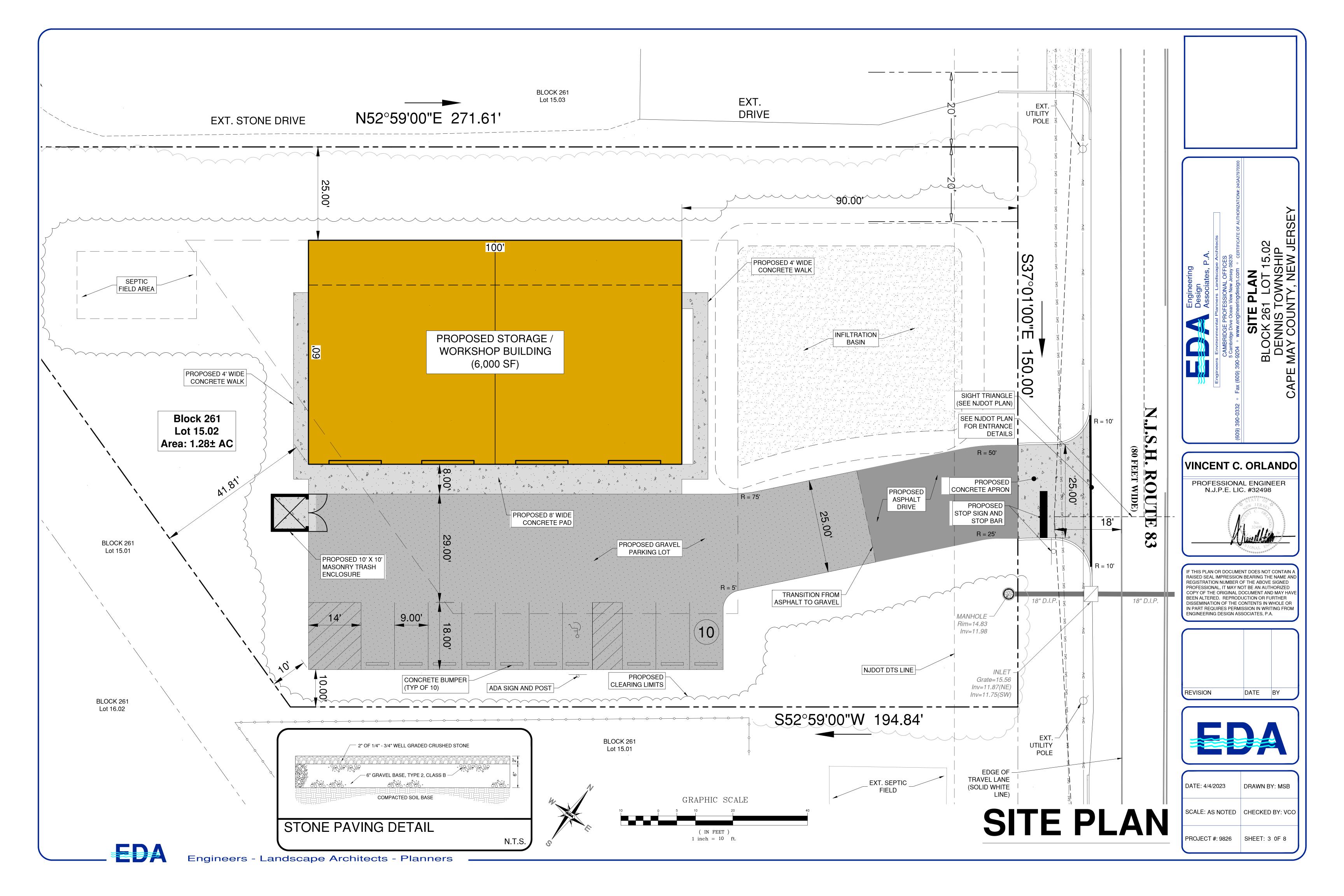
TOWNSHIP OF DENNIS APPROVAL BLOCK

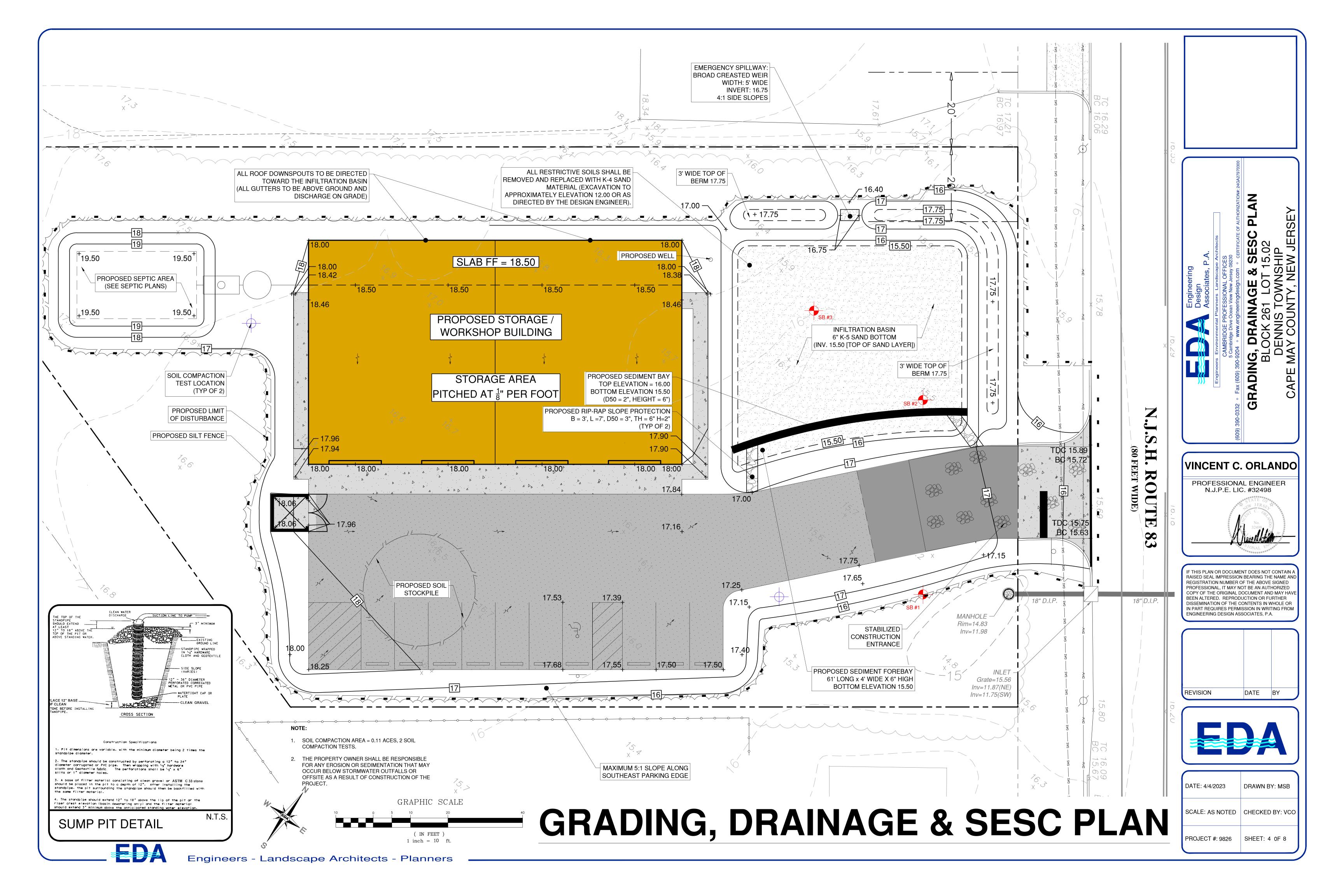
Chairman	Date
Secretary	Date
Engineer	Date

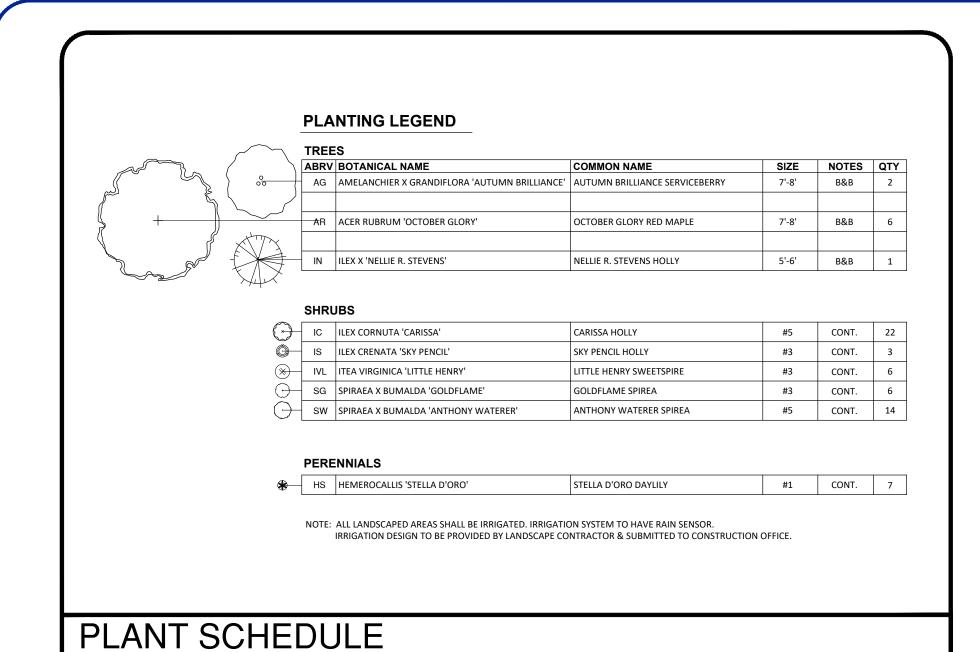


DATE: 4/4/2023	DRAWN BY: MSB
SCALE: AS NOTED	CHECKED BY: VCO
PROJECT #: 9826	SHEET: 1 0F 8







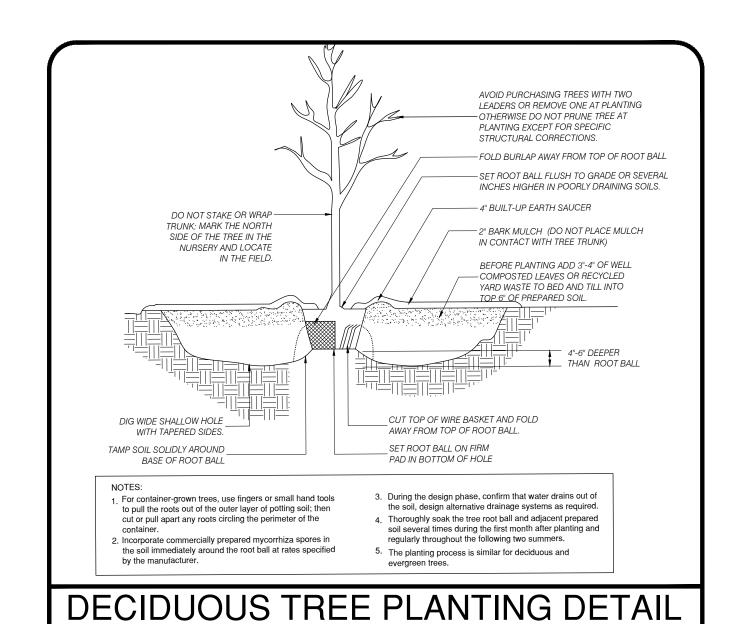


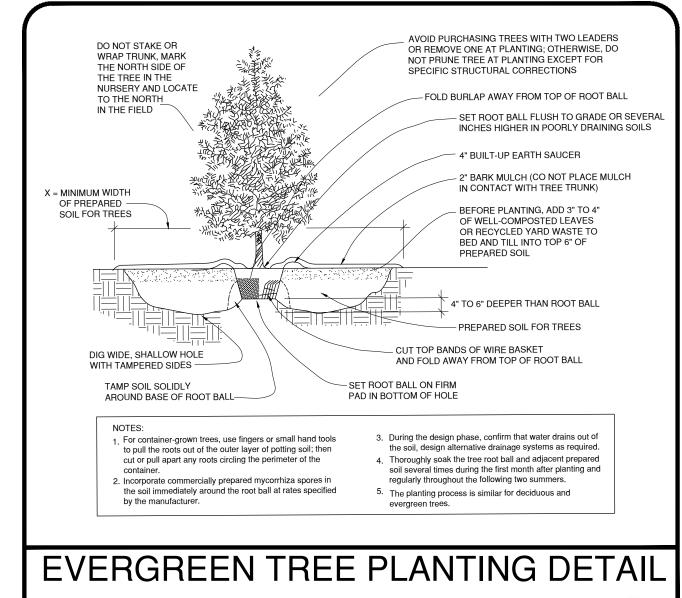
DRAWINGS TO BE SCALED FOR PURPOSES OF LOCATING SOIL BERMS, PLANT MATERIAL, PLANTING BEDS, GROUND COVER AREAS AND OTHER SITE AMENITIES SHOWN. DRAWINGS ARE DIAGRAMATIC; PLANT MATERIAL SUBJECT TO FIELD ADJUSTMENT. 2. ALL PLANT MATERIAL TO BE SET IN PREPARED MULCH BEDS. FINAL BED LINES TO BE APPROVED IN THE FIELD BY THE LANDSCAPE ARCHITECT OR REPRESENTATIVE. 3. ALL PLANT MATERIAL TO BE IRRIGATED. 4. LANDSCAPE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL PLANT MATERIAL QUANTITIES. ANY DISCREPANCY SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE AREAS TO BE SEEDED SHALL CONSIST OF THE FOLLOWING SEED MIXTURES TO INSURE A HIGH REBEL II TALL FESCUE - 8 LBS PER 1000 SF ECLIPSE KENTUCKY BLUE GRASS - 4 LBS PER 1000 SF FERTILIZING AND LIMING SHALL BE COMPLETED PRIOR TO SEEDING LAWN AREAS PLANTING BED - TO BE CONSTRUCTED AS SHOWN ON PLAN. USE THE FOLLOWING A. MULCH - BEDS TO BE FILLED WITH A 4" LAYER OF LICORICE ROOT MULCH (RIGHT DRESS INC.) B. WEED BARRIER - MULCH TO BE PLACED OVER TERRA TOP LS WEED CONTROL FABRIC OR 4 MIL BLACK POLYETHYLENE

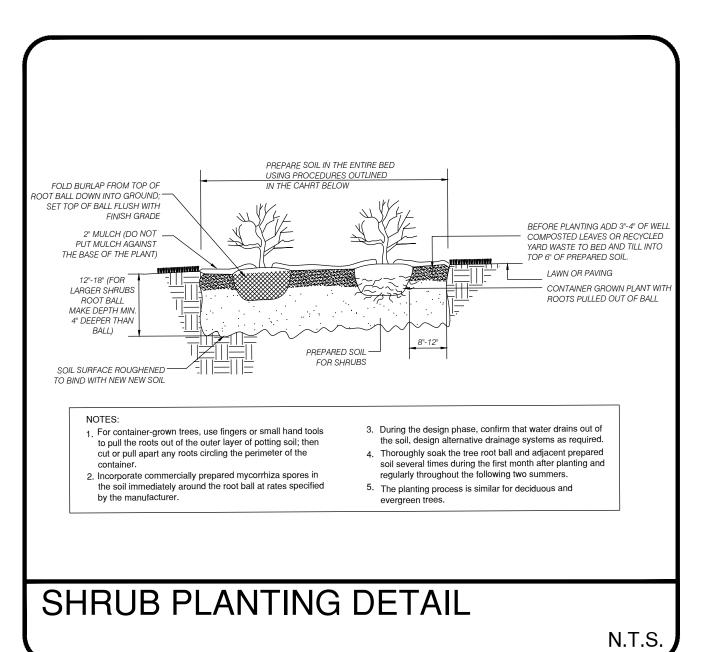
C. EDGING - PLANTING BED TO BE EDGED WITH BLACK DIAMOND POLYETHYLENE BED DIVIDER

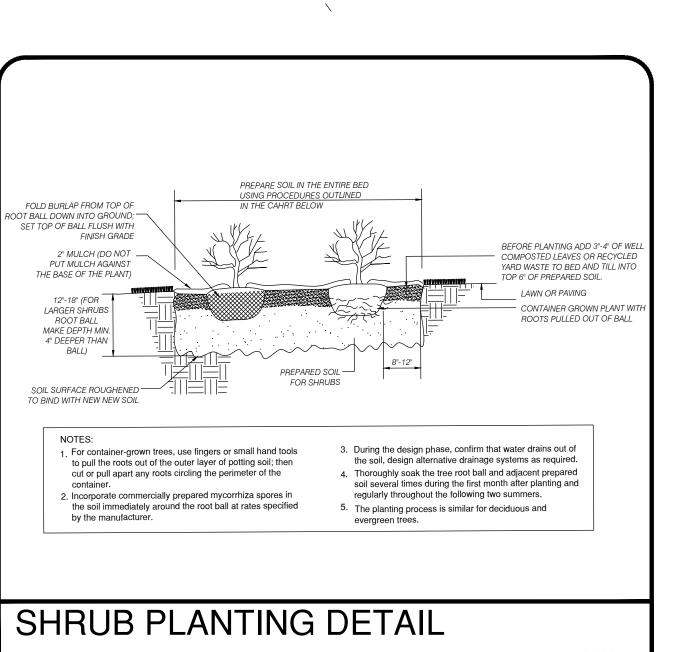
CONTRACTOR NOTES

(VALLEY VIEW SPECIALTIES CO.)









5. ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH BUARANTEE OF AT LEAST TWO (2) YEARS FOR TEES AND A MINIMUM OF TWO GROWING SEASONS FOR SCHRUBS. REPLACMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACMENTS SHALL HAVE A GUARANTEE EQUAL TO THATSTATED ABOVE. PROTECT STOCK NOT TO BE PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE (3) DAY PERIOD AFTER DELIVERY. . QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z80 (REV 1980) "AMERICAN STANDARD FOR NURSEF I. PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME AS TO DAMAGE THE BARK AND BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY. 10. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTABLE LOCAL PRACTICE, 11. NO PLANT, EXCEPT GROUND COVERS, SHALL BE PLANTED LESS THEN TWO (2) FEET FROM EXISTING STRUCTURES AND SIDEWALKS 2. SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT, AFTER SETTLEMENT A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT (2" CALIPER AND OVER) BY THE REMOVAL OF SUPERFUOUS BRANCHES, THOSE WHICH CROSS, THOSE WHICH RUN PARALLEL, ETC. MAIN LEADER OF TREES MUST NOT BE CUT BACK. LONG SIDE BRANCHES, HOWEVER, MUST BE SHORTENED. 4. EACH TREE AND SHRUB SHALL BE PRUNED IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICE TO PRESERVE NATURAL CHARACTER OF PLANT. PRUNING SHALL BE DONE WITH CLEAN, SHARP TOOLS, CUT OVER 3/4" IN DIAMETER SHALL BE PAINTED WITH SUITABLE TREE PAINT 5. TREES SHALL BE SUPPOTED IMMEDIATELY AFT ER PLANTING. ALL TREES SIX (6) INCHES AND OVER IN CALIPER SHALL BE GUYED. SMALLER TREES SHALL BE STAKED. GUYING WIRES AND STAKES SHALL BE INSTALLED AS INDICATED. 16. THE TRUNKS OF ALL TREES SHALL BE WRAPPED AS SOON AS POSSIBLE AFTER PLANTING ACCORDING TO STANDARD PROCEDURES AND AS INDICATED

SYSTEMS AND BE FREE FROM DETECTS AND INJURIES.

PLANTING NOTES

. PLANT MATERIALS SHALL BE FURNISHED AND INSTALLED AS INDICATED INCLUDING ALL LABOR, MATERIALS, PLANTS, EQUIPMENT, INCIDENTALS AND CLEAN UP

I. PLANTS SHALL NE TYPICAL OF THEIR SPECIES AND VARIETY: HAVE NORMAL GROWTH HABITS, WELL DEVELOPED BRANCHES, DENSELY FOLIATED; VIGROUS ROOT

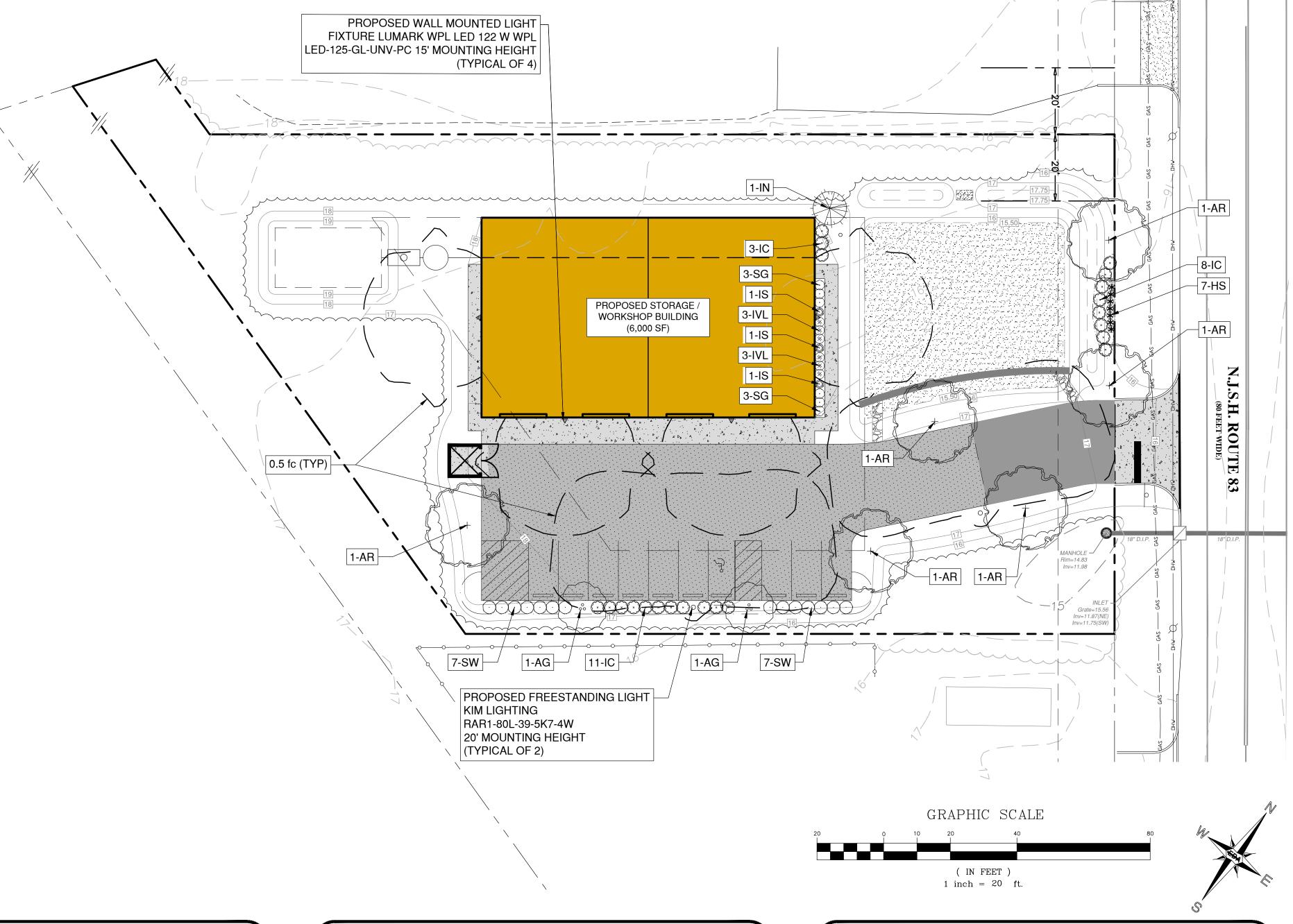
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING CORRECT GRADES ANMD ALIGNMENT

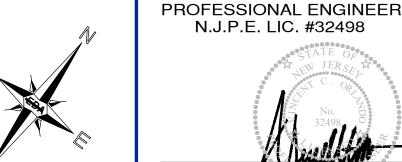
4. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL

PLANTING NOTES

N.T.S.







F THIS PLAN OR DOCUMENT DOES NOT CONTAIN A RAISED SEAL IMPRESSION BEARING THE NAME AND REGISTRATION NUMBER OF THE ABOVE SIGNED

PROFESSIONAL, IT MAY NOT BE AN AUTHORIZED

BEEN ALTERED REPRODUCTION OR FURTHER

ENGINEERING DESIGN ASSOCIATES, P.A.

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VINCENT C. ORLANDO

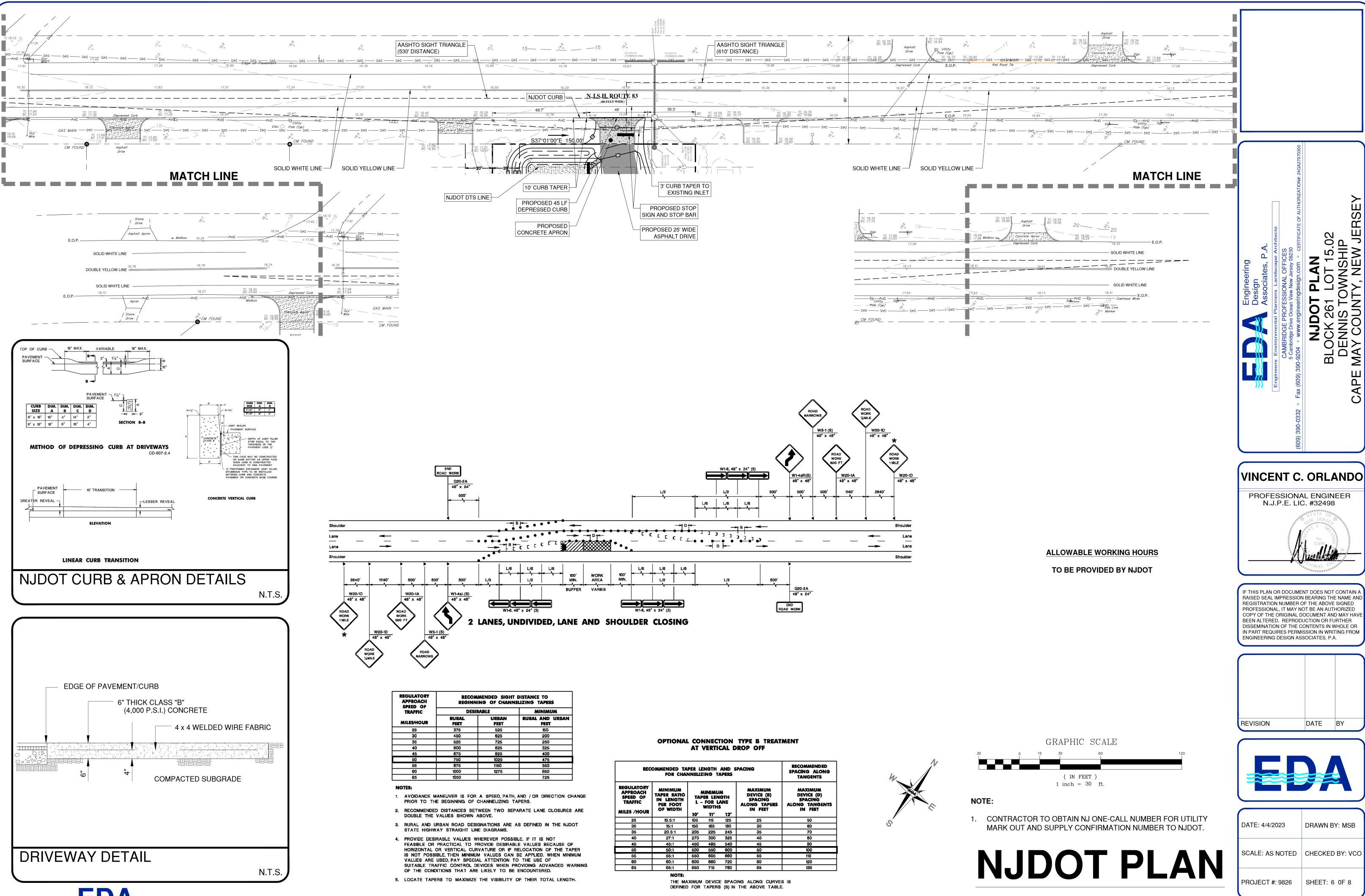
AND

DATE BY REVISION



DATE: 4/4/2023 DRAWN BY: MSB SCALE: AS NOTED | CHECKED BY: VCO PROJECT #: 9826 SHEET: 5 0F 8

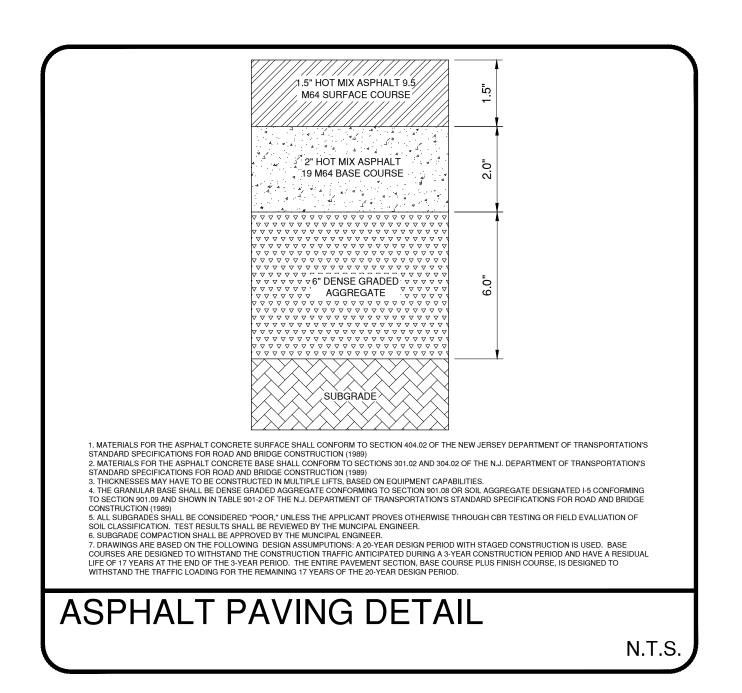


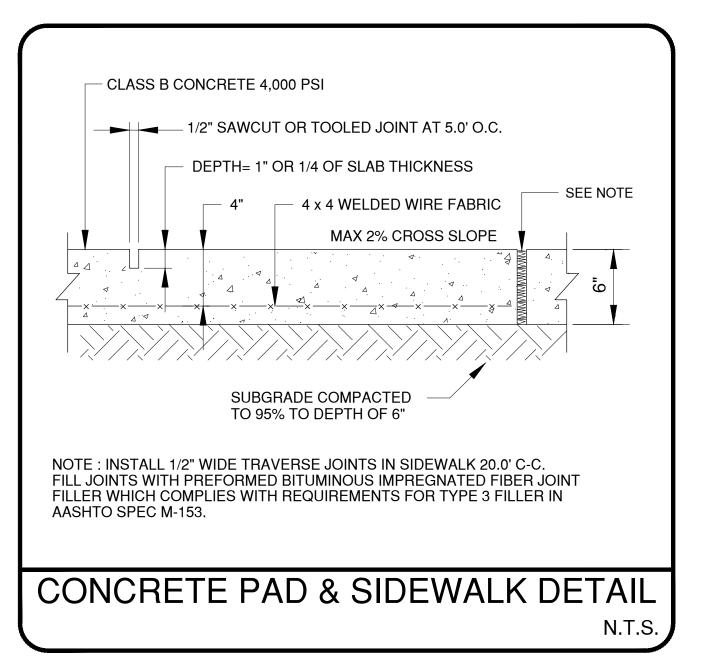


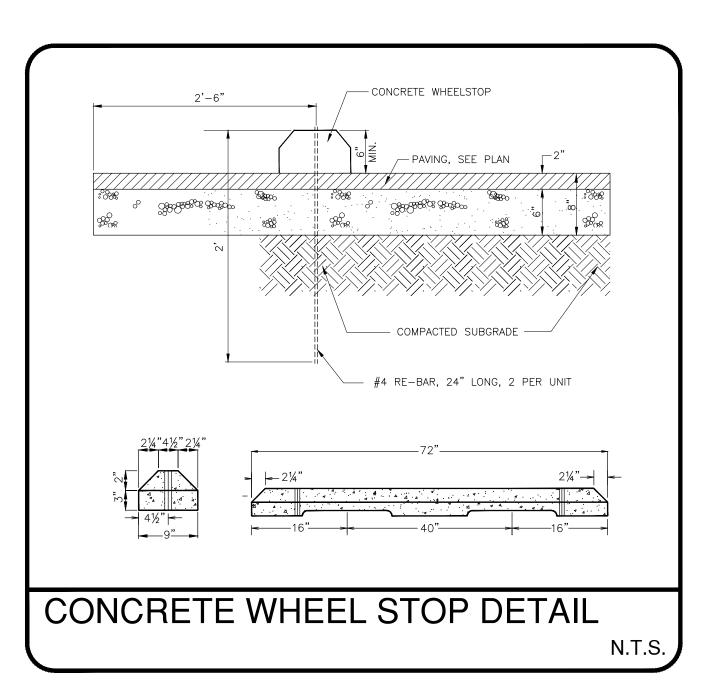
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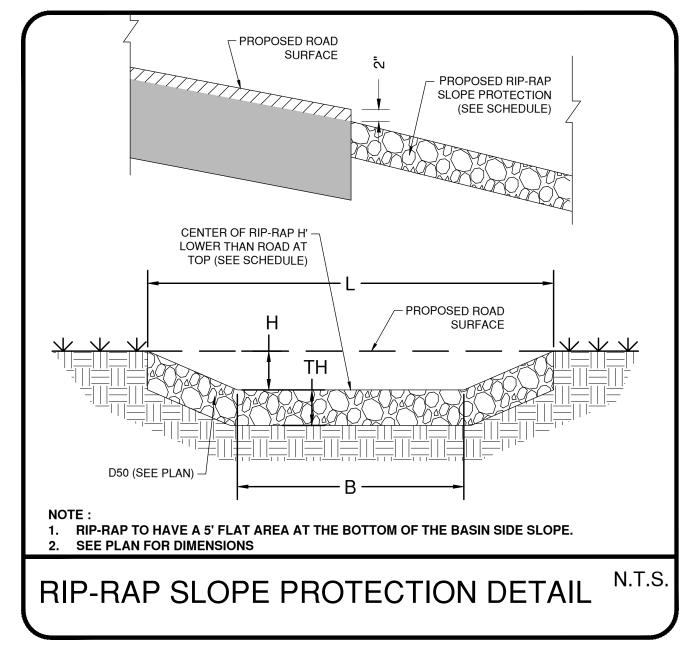
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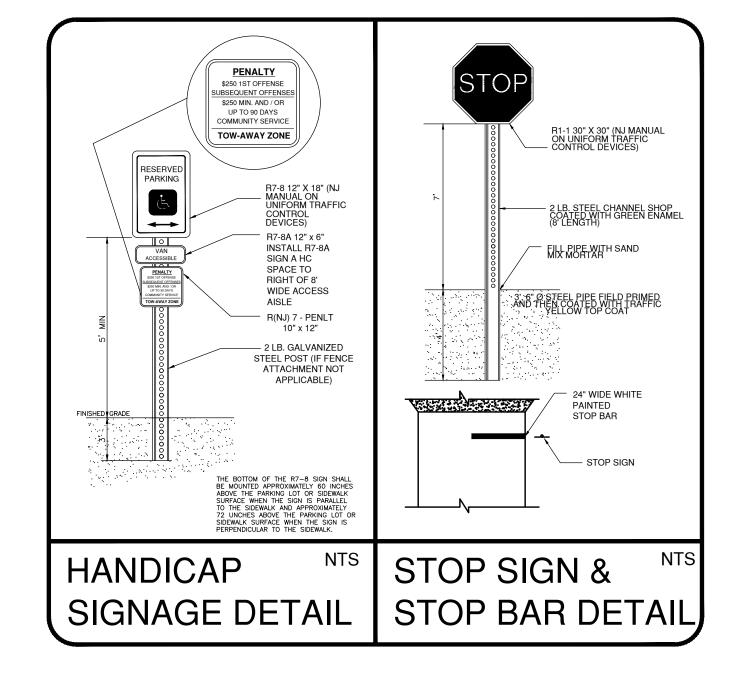
Engineers - Landscape Architects - Planners

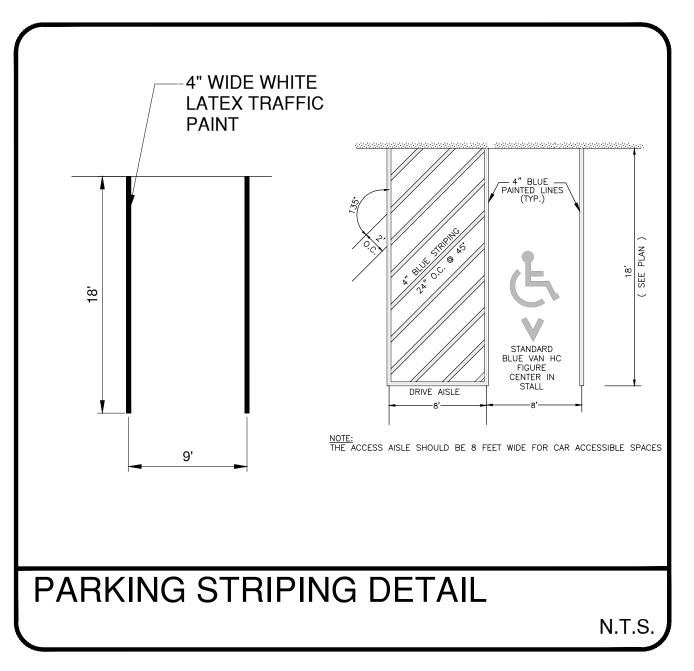


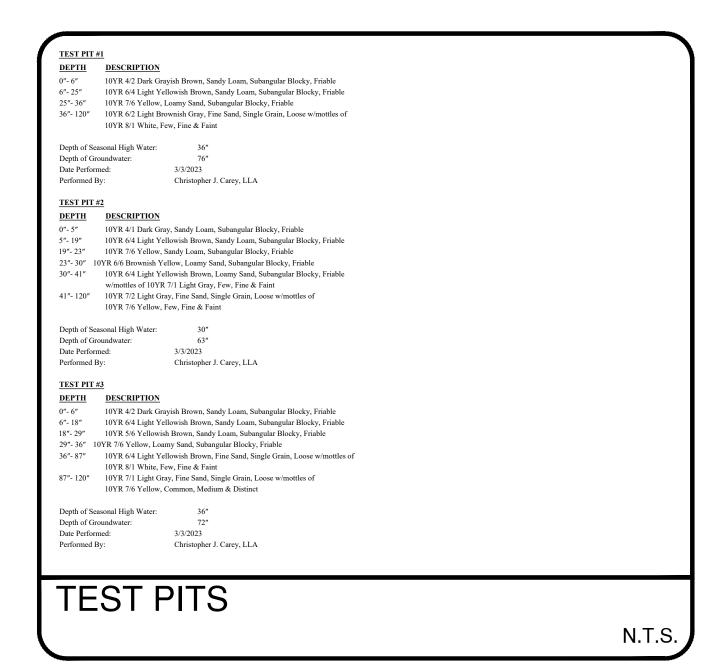


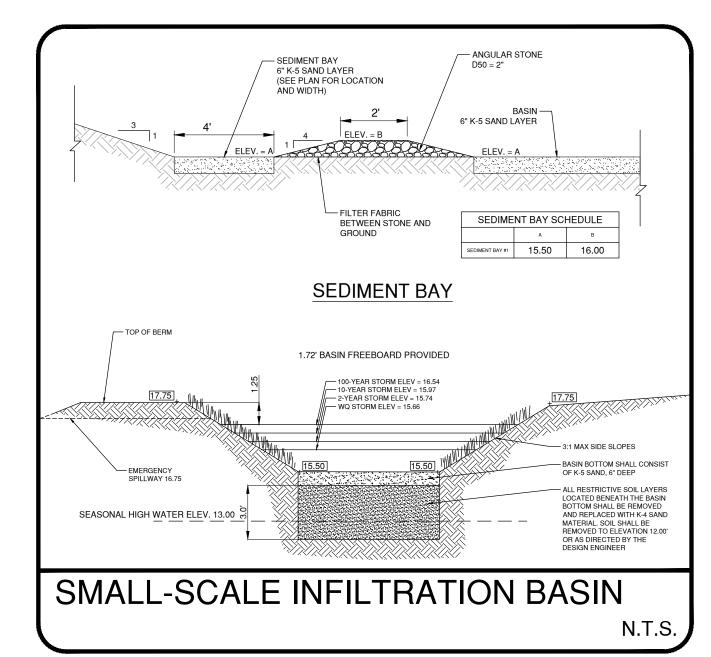


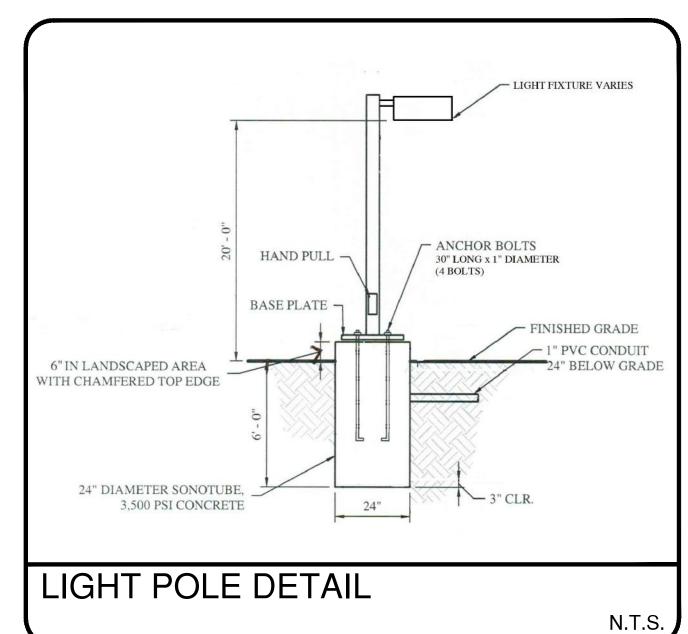


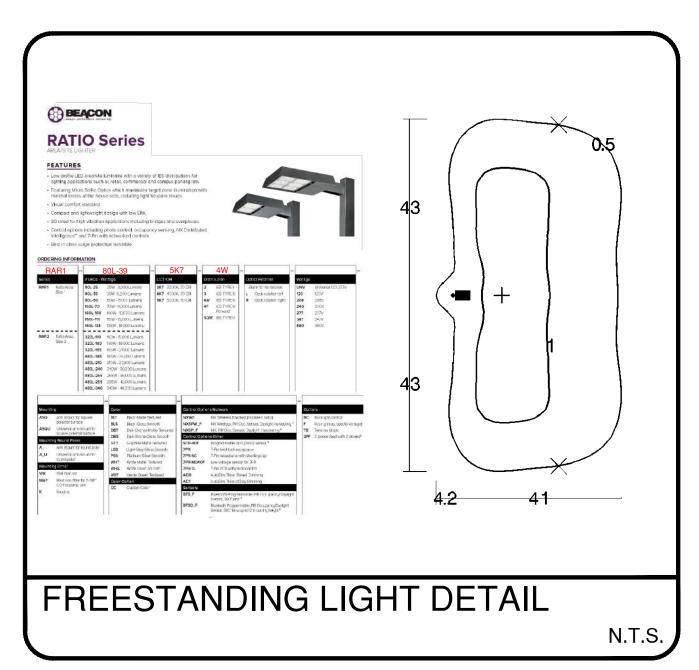


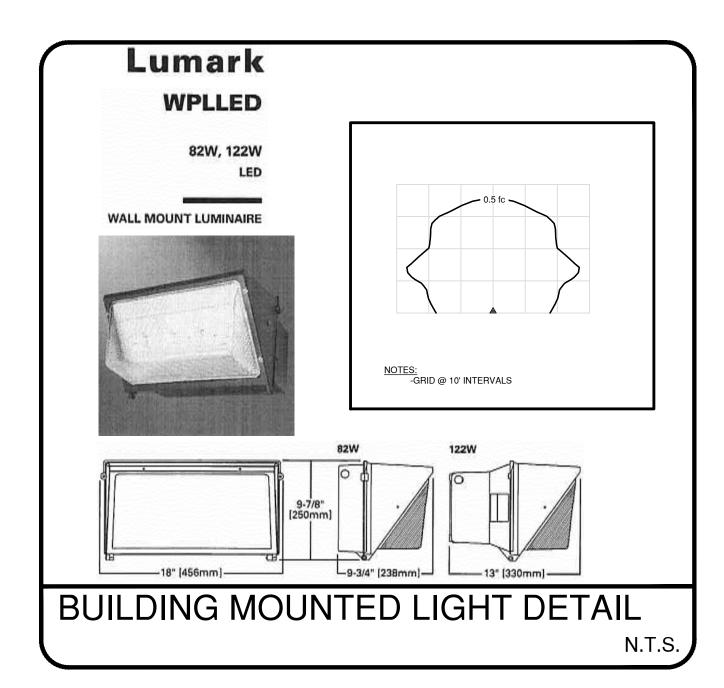


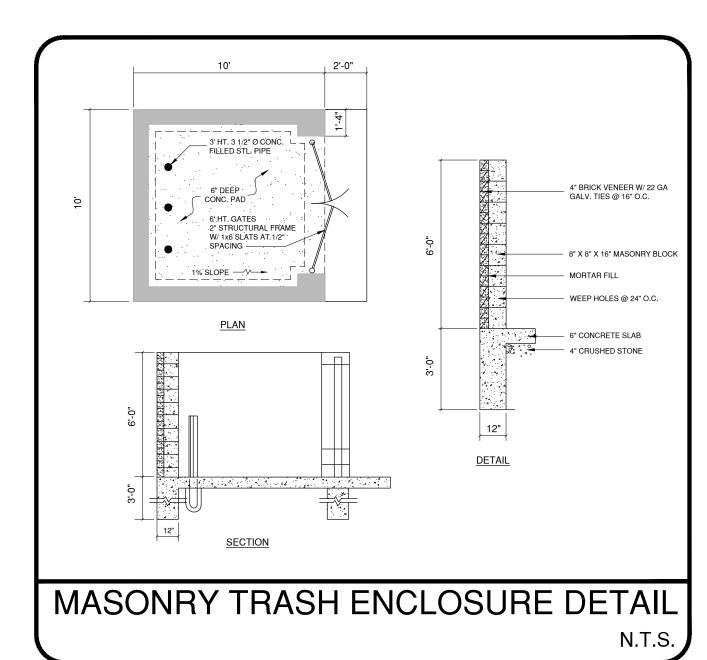


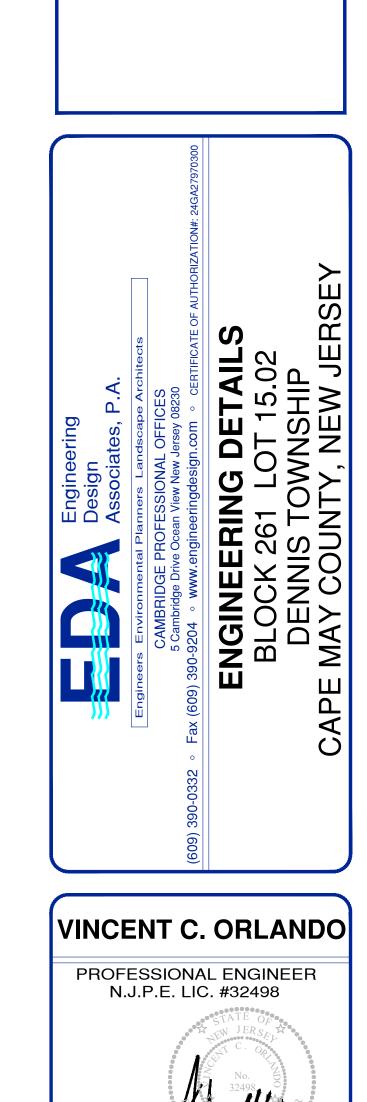


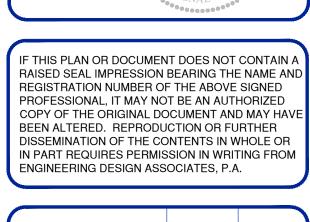


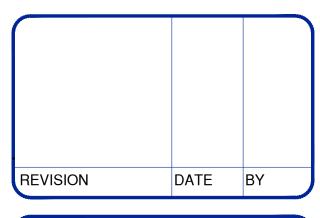














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PRO	DJECT #: 9826	SHEET: 7 OF 8

SOIL EROSION AND SEDIMENT CONTROL PLAN

- All applicable erosion and sediment control practices shall be in place prior to any grading or installation of proposed structures or utilities soil Erosion and Sediment Control practices on this plan shall be constructed in accordance with the standards for Soil Erosion and Sediment Control in New Jersey. Applicable erosion and sediment control practices shall be left in place until construction is completed and/or the area is stabilized.
- The contractor shall perform all work, furnich all materials and install all measures required to reasonably control soil erosion resulting from construction operations and prevent excessive flow of sediment from the construction site. Any disturbed area that is to be left exposed for more than thirty (30) days and not subject to construction traffic shall immediately receive a temporary seeding and fertilization in
- accordance with the New Jersey Standards and their rates should be included in the narrative. If the season prohibits temporary seeding, the disturbed areas will be mulched with salt hay or equivalent and anchored in accordance with the New Jersey Standards (ie. peg and twine, mulch netting or liquid mulch binder).
- It shall be the responsibility of the developer to provide confirmation of lime, fertilizer and seed and seed application and rates of application at the request of the Cape Atlantic All critical areas subject to erosion will receive a temporary seeding in combination with straw mulch at a rate of 2 tons per acre, according to the New Jersey Standards immediately following rough grading.
- The site shall at all times be graded and maintained such that all storm water runoff is diverted to soil erosion and sediment control facilities.
- All sedimentation structures will be inspected and maintained on a regular basis and after every storm event A crushed stone, tire cleaning pad will be installed wherever a construction access exists. The stabilized pad will be installed according to the standards for stabilized construction
- All driveways must be stabilized with 2 1/2" crushed stone or subbase prior to individual lot construction.
- . All paved areas must be kept clean at all times. All catch basin inlets will be protected according to the certified plan.
- All storm drainage outlets will be stabilized, as required, before the discharge points become operational. All dewatering operations must discharge directly into a sediment filter area. The sediment filter should be composed of a suitable sediment filter fabric. (see detail). The basin r be dewatered to normal pool within 10 days of the design storm. . NJSA 4:24-39, Est Seq. requires that no certificate of occupancy be issued before all provisions of the certified soil erosion and sediment control plan have been complied with for permanent measures. All site work for the project must be completed prior to the district issuing a report of compliance as a prerequisite to the issuance of a certificate of occupa
- Mulching is required on all seeded areas to insure against erosion before grass is established to promote earlier vegetation cover. Offsite sediment disturbance may require additional control measures to be determined by the erosion control inspector
- . A copy of the certified Soil Erosion and Sediment Control Plan must be maintained on the project site during construction
- The Cape Atlantic Conservation District shall be notified 48 hours prior to any land disturbance.
- . Any conveyance of this project prior to its completion will transfer full responsibility for compliance with the certified plan to any subsequent owners.

 Immediately after the completion of stripping and stockpiling of topsoil, the stockpile must be stabilized according to the standard for temporary vegetative cover. Stabilize topsoi with straw mulch for protection if the season does not permit the application and establishment of temporary seeding. All soil stockpiles are not to be located within fifty (50) feet of floodplain, slope, roadway or drainage facility and the base must be protected with a sediment barrier.
- 3. Any changes to the site plan will require the submission of a revised Soil Erosion and Sediment Control Plan to the Cape Atlantic Conservation District. The revised plan must be in accordance with the current New Jersey Standards for Soil Erosion and Sediment Control. Methods for the management of high acid producing soils shall be in accordance with the standards. High acid producing soils are those found to contain iron sulfides or have a pl
- of 4 or less. Temporary and permanent seeding measures must be applies according to the New Jersey Standards, and mulched with salt hay or equivalent and anchored in accordance with
- the New Jersey Standards (ie. peg and twine, mulch netting or liquid mulch binder). Minimum side slopes of all exposed surfaces shall not be constructed steeper than 3:1 unless otherwise approved by the distric Dust is to be controlled by an approved method according to the New Jersey Standards and may include watering with a solution of calcium chloride and water.
- Adjoining properties shall be protected from excavation and land filling operations on the proposed site. 9. Use staged construction methods to minimize exposed surfaces, where applicable.
- 0. All vegetative material shall be selected in accordance with American Standards for Nursery Stock of the American Association of the Nuseryman and in accordance with the New Jersev Standards.
- Natural vegetation and species shall be retained where specified on the Landscaping Plan. 2. The soil erosion inspector may require additional soil erosion measures to be installed, as directed by the district inspector.

STORMWATER MANAGEMENT MAINTENANCE PROGRAM

BASIN MAINTENANCE In order to ensure that all retention and detention basins function properly, a maintenance program must be followed. The following are the minimum requirements for the maintenance all basins.

- Annual visual inspection of outlet structures and basins. . Inspection of outlet structures to include checking for obstructions of outfall pipes and the accumulation of silts and sediments.
- b. Inspection of basins to include the removal of debris and accumulated particles such as silts and sediments.
- a. Mowing of grass is required regularly to ensure the aesthetic quality of the site. All clippings shall be raked and bagged to avoid thatch buildup
- b. A dense turf, with extensive root growth, is encouraged to reduce erosion and enhance infiltration throughout the bottom and the side of the basin. Well-established turf of the flor and sides will grow through sediment deposits, thus forming a porous turf and preventing the formation of an impermeable layer. . Grasses of the fescue family are recommended for seeding, primarily due to their adaptability to dry sandy soils, drought resistance, hardiness, and ability to withstand brief
- inundations. Fescues will also permit longer intervals between mowings. d. Seed type: A mixture of the following special water-tolerant seed will ensure a high quality grass for retention basins

SEEDING RATE Mixture 8 2.1Lb./1,000 SF Perennial Rye Grass 0.25l b./1.000 SF Kentucky Bluegrass 0.25Lb./1,000 S

- e. Fertilizing and liming: Bi-annually Fertilize with 10-20-10 at a rate of 11lbs./1,000 SF
- Long term Maintenance a. In order to ensure proper function of all basins, every seven years each basin bottom shall be scarified to a depth of 4" to remove sediments and silts. Then 4" of topsoil must be added and resided.

0.10Lb./1,000 SF

STORM WATER STRUCTURE MAINTENANCE

ntenance is the work required to keep structures in practice, or restore them to their original physical and functional condition. Maintenance as it applies to this situation shall be divided into two stages; that which is necessary to allow for continuing performance of storm water controls during the construction period and long term maintenance following nstruction. Both stages are necessary for the life of the storm water structures and systems.

- a. TRENCHES/SWALES Fenches/Swales to be inspected for rubbish or channel obstructions, bank failure, accumulation of silts and sediments, undesirable vegetation growth, rodents, and overall syste
- b. OUTLET STRUCTURE/CONDUI Inspection of outlet structures and conduit to include checking for obstruction of pipe, accumulation of silts and sediments, cracking, corrosion, deterioration from freezing, salt or chemicals, excessive wear or damage from settling.
- . SPILLWAYS/INLETS/MANHOLES Inspection to include checking for cracking, rodents, obtructions(silt-sediment, trash or other.) Check any gates, racks, or grates, for damage from corrosion, ice debris, Check for unauthorized modifications, tampering or vandalism LONG TERM MAINTENANCE
- As noted, any basin, pipe, pit, trench or inlet not functioning as designed will be thoroughly as prescribed. Any system that continues to remain inoperable after thorough cleaning must be removed and replaced.

All on-site retention facilities shall be the sole responsibility of the developer/owner, his assigns and/or heir. The responsibility shall include but not be limited to installation, inspection, a

DETENTION FACILITY MAINTENANCE nual Maintenance of the Basins will be for lawn cutting. The exact type and size of this equipment is to be determined by the maintenance service under contract for the project

Mulching is required on all seeding. It is defined as stabilizing exposed soils with non-vegetative materials. The purpose is to protect exposed soil surfaces from erosion damage and to reduce offsite environmental damage. Mulching provides temporary mechanical protection against wind or rainfall induced soil erosion until permanent vegetative cover may be established. This practice is applicable to areas subject to erosion, where the season and other conditions may not be suitable for growing. An erosion-resistant cover or where stabilization is needed for a short period until more suitable protection can be applied.

- a. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application, and mulch anchoring. All grading should be done in accordance with Standards for Land Grading, pg 19-1. b. Install needed erosion control practices or facilities such as diversions, grade stabilization structures, channel stabilization measures, sediment basins, and waterways. See
- Standards 11 through 42.

PROTECTIVE MATERIALS

- a. Mulch materials should be unrotted small grain straw, hay free of seeds, or salt hay to be applied at the rate of 2.0 to 2.5 tons per acre (90 to 115 pounds per 1,000
- Synthetic or organic soil stabilizers may be used under suitable conditions and in quantitities as recommended by the manufacturer Wood-fiber or paper-fiber mulch at a rate of 1,500 pounds per acre may be applied by a hydroseeder. Mulch netting such as paper jute, excelsior, cotton, or plastic, may be used.
- Woodchips applied uniformly to a minimum depth of 2 inches may be used. Woodchips will not be used on areas where flowing water could wash them into an inlet and Gravel, crushed stone, or slag at the rate of 9 cubic yards per 1,000 SF applied uniformly to a minimum depth of 3 inches may be used. Size 2 or 3 (ASTM C-33) is
- b. Mulch anchoring should be accomplished immediately after placement to minimize loss by wind or water. This may be done by one of the following methods
- depending upon the size of the area, steepness of slopes, and costs depending upon the size of the area, steepness of slopes, and costs.
- Peg and Twine Drive 8 to 10 inch wooden pegs to within 2 to 3 inches of the soil surface every 4 feet in all directions. Stakes may be driven before or after applying mulch. Secure mulch to soil surface by stretching twine between pegs in a criss-cross and a square pattern. Secure twine with two or more round turns.
- Mulch Nettings Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed. Crimper (mulch anchoring tool) - A tractor-drawn implement, somewhat like a disc-harrow, especially designed to push or customer of the broadcast long fiber mulch
- to 4 inches into the soil as to anchor it and leave part standing upright. This technique is limited to areas traversible by a tractor, which must operate on the contour o slopes. Straw mulch rate must be 3 tons per acre. No tackifying or adhesive agent is required.

STANDARDS FOR TOPSOILING

METHODS AND MATERIALS

- A. Topsoil should be friable, loamy, free of debris, objectionable weeds and stones, and contain no toxic substance or adverse chemical or physical condition that may be harmful to plant growth. Soluble salts should not be excessive (conductivity less than 0.5 millimhos per centimeter. More than 0.5 millimhos may desiccate seedlings and adversely impact growth). Imported topsoil shall have a minimum organic matter content of 2.75 percent. Organic matter content
- B. Topsoil substitute is a soil material which may have been amended with sand, silt, clay, organic matter, fertilizer or lime and has the appearance of topsoil. Topsoil substitutes may be utilized on sites with insufficient topsoil for establishing permanent vegetation. All topsoil substitute materials shall meet the requirements of topsoil noted above. Soil tests shall be performed to determine the components of sand, silt, clay, organic matter, soluble salts and pH level. 2 Stripping and Stockpiling
- A. Field exploration should be made to determine whether quantity and or quality of surface soil justifies stripping.
 - B. Stripping shall be confined to the immediate construction area. C. Where feasible, lime may be applied before stripping at a rate determined by soil tests to bring the soil pH to approximately 6.5.
- D. A 4-6 inch stripping depth is common, but may vary depending on the particular soil. Stockpiles of topsoil should be situated so as not to obstruct natural drainage or cause off-site environmental damage F. Stockpiles should be vegetated in accordance with standards previously described herein; see standards for Permanent (pg. 4-1) or Temporary (pg.7-1
- Vegetative Cover for Soil Stabilization. Weeds should not be allowed to grow on stockpiles. A. Grade at the onset of the optimal seeding period so as to minimize the duration and area of exposure of disturbed soil to erosion. Immediately proceed to
- establish vegetative cover in accordance with the specified seed mixture. Time is of the essence B. Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and
- maintenance. See the Standard for Land Grading, pg. 19-1. C. As guidance for ideal conditions, subsoil should be tested for lime requirement. Limestone, if needed, should be applied to bring soil to a pH of approximately
- 6.5 and incorporated into the soil as nearly as practical to a depth of 4 inches. D. Prior to topsoiling, the subsoil shall be in compliance with the Standard for Land Grading, pg. 19-1.
- E. Employ needed erosion control practices such as diversions, grade stabilization structures, channel stabilization measures, sedimentation basins, and waterways. See Standards 11 through 42.
- 4. Applying Topsoil A. Topsoil should be handled only when it is dry enough to work without damaging soil structure; i.e., less than field capacity (see glossary).
- B. A uniform application to an average depth of 5.0 inches, firmed in place is required. Alternative depths may be considered where special regulatory and/or
- industry design standards are appropriate such as on golf courses, sports fields, landfill capping, etc.. Soils with a pH of 4.0 or less or containing iron sulfide shall be covered with a minimum depth of 12 inches of soil having a pH of 5.0 or more, in accordance with the Standard for Management of High Acid Producing Soil (pg. 1-1).
- C. Pursuant to the requirements in Section 7 of the Standard for Permanent Vegetative Stabilization, the contractor is responsible to ensure that permanent vegetative cover becomes established on at least 80% of the soils to be stabilized with vegetation. Failure to achieve the minimum coverage may require additional work to be performed by the contractor to include some or all of the following: supplemental seeding, re-application of lime and fertilizers, and/or the addition of organic matter (i.e. compost) as a top dressing. Such additional measures shall be based on soil tests such as those offered by Rutgers Cooperative Extension Service or other approved laboratory facilities qualified to test soil samples for agronomic properties.

SOIL CONSERVATION NOTES

DUST CONTROL STANDARDS e following methods should be considered for dust control at the request of the Township Construction Code Official, or upon inspection by an S.C.D. official.

Spray - On Adhesive - On mineral soils (not effective on muck soils.) Keep traffic off these areas

Mulch - Stabilization with approved mulches and vegetation cover being temporary of permanent.

Apply Gallons/Acre Anionic asphalt emulsion Latex emulsion Fine spray

- Tillage To roughen surface and bring clods to the surface. This is a temporary emergency measure which should be used before soil blowing starts. Begin plowing on windward side of site. Chisel-type plows spaced about 12 inches apart, and spring-toothed harrows are examples of equipment which may produce the
- Sprinkling Site is sprinkled until the surface is wet. Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hay and similar material can be used to crate walls, bales of hay and similar material can be used to control air currents and soil blowing
- Calcium Chloride Shall be in the form of loose dry granules at a rate that will keep surface moist but not cause or flakes fine enough to feed through commonly used spreaders pollution or plant damage. If used on steeper slopes, Then pollution or plant damage. If used on steeper slopes, Then use other practices to prevent washing into streams or accumulation around plants. Stone - Cover surface with crushed stone or coarse gravel.

SEEDING SPECIFICATIONS

Fertilizer Limestone Perennial Rye Grass	(10-20-10 or equivalent) (50% Calcium plus MgO) (Lolium multiflorum)	11 Lbs./1,000 90 Lbs./1,000 1 Lb./1,000 S
Permanent Seeding Fertilizer Limestone	(10-20-10 or equivalent) (50% Calcium plus MgO)	11 Lbs./1,000 90 Lbs./1,000
Mixture B-15	Kentucky Bluegrass (Three Cultivar Blend) Hard Fescue Perennial Rye Grass	0.9 Lbs./1,000 4.0 Lbs./1,000 0.7 Lbs./1,000

Work lime and fertilizer into soil as nearly as practical to depth of four inches (4"0). Remove from the surface all stones two inches (2") or larger. Roll soil to firm the seed bed where feasible. Use specifications as shown above. lote: Optimum seeding dates February 1 to April 30 and August 15 to October 30.

STANDARD FOR LAND GRADING

PLANNING CRITERIA

he grading plan and installation shall be based upon adequate topographic surveys and investigations. The plan is to show the location, slope, cut, fill and finish evation of the surfaces to be graded. The plan should also include auxiliary practices for safe disposal of runoff water, slope stabilization, erosion control and drainage. cilities such as waterways, ditches, diversions, grade stabilization structures, retaining walls and subsurface drains should be included where necessary. osion control measures shall be designed and installed in accordance with the applicable standard contained herein. e development and establishment of the plan shall include the following:

- The cut face of earth excavations and fills shall be no steeper than the safe angle of repose for the materials encountered and flat enough for proper maintenance The permanently exposed faces of earth cuts and fills shall be vegetated or otherwise protected from erosion. ions shall be made to safely conduct surface water to storm drains or suitable water courses and to prevent surface runoff from damaging cut faces and fill
- Subsurface drainage is to be provided in areas having a high water table, to intercept seepage that would adversely affect slope stability, building foundations or create undesirable wetness. See Standard for Subsurface Drainage, pg. 32-1.
- Adjoining property shall be protected from excavation and filling operations. Fill shall not be placed adjacent to the bank of a stream or channel, unless provisions are made to protect the hydraulic, biological, aesthetic and other

Soil Management and Preparation

Subgrade soils prior to the application of topsoil shall be free of excessive compaction to a depth of 6.0 inches to enhance the establishment of permanent his section of this Standard addresses the potential for excessive soil compaction in light of the intended land use, testing for excessive soil compaction

- ue to use or setting, certain disturbed areas will not require compaction remediation including, but not limited to the following Within 20 feet of building foundations with basements, 12 feet from slab or crawl space construction. Where soils or gravel surfaces will be required to support post-construction vehicular traffic loads such as roads, parking lots and driveways (including gravel surfaces), bicycle paths or pedestrian walkways (sidewalks etc)
- Areas requiring industry or government specified soil designs, including golf courses, landfills, wetland restoration, septic disposal fields, wet/lined ponds,
- Areas governed or regulated by other local, state or federal regulations which dictate soil conditions

nere permanent vegetation is to be established and mitigation of excessive soil compaction when appropriate.

- Brownfields (capped uses), urban redevelopment areas, , in-fill areas, , recycling yards, junk yards, quarries and Slopes determined to be inappropriate for safe operation of equipment
- Portions of a site where no heavy equipment travel or other disturbance has taken place Areas receiving temporary vegetative stabilization in accordance with the Standard
- Where the area available for remediation practices is 500 square feet or less in size. Locations containing shallow (close to the surface) bedrock conditions.

Areas of the site which are subject to compaction testing and/or mitigation shall be graphically denoted on the certified soil erosion control plan. Soil compaction remediation or testing to prove remediation is not necessary will be required in areas where permanent vegetation is to be established that are not otherwise exempted above. Testing method shall be selected, and soil compaction testing shall be performed by the contractor or other project owner's representative (e.g. engineer). A minimum of two (2) tests shall be performed for projects with an overall limit of disturbance of up to one (1) acre and at a rate of two (2) tests per acre of the overall limit of disturbance for larger areas which shall be evenly distributed over the area of disturbance subject to esting. Tests shall be performed in areas representative of the construction activity prevailing in the area. In the event this testing indicates compaction in excess of the maximum thresholds indicated for the testing method, the contractor/owner shall have the option to perform compaction mitigation over the entire disturbed area (excluding exempt areas) or to perform additional testing to establish the limits of excessive compaction whereupon only the excessively ompacted areas would require compaction mitigation. Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is proposed as part of the

Soil Test Method Options

Probing Wire Test Method is test shall be conducted with a firm wire (15-1/2 gauge steel wire - e.g. survey marker flag, straight wire stock, etc.), 18 to 21 inches in length, with 6 ches from one end visibly marked on the wire. Conduct wire flag test by holding the wire flag near the flag end and push it vertically into the soil at everal different locations in the field to the lesser of a 6 inch depth or the depth at which it bends due to resistance in the soil. Record the depth at which it pends due to resistance in the soil. The wire should penetrate without bending or deforming at least 6" into the ground by hand, without the use of tools. If enetration fails and an obstruction is suspected (rocks, root, debris, etc.) the test can be repeated in the same general area. If the test is successful the soil is not excessively compacted. If the wire is difficult to insert (wire bends or deforms prior to reaching 6 inches in depth) the soil may be excessively mpacted and compaction mitigation or further testing via method 3 or 4 below is required, the choice of which is at the contractor/owner's discretion.

nis test shall be conducted based on the Standard Operation Procedure (SOP) #RCE2010-001, prepared by the Rutgers Cooperative Extension, lemented June 1, 2010, last revised February 28, 2011. A result of less than or equal to 300 psi shall be considered passing. If the result is greater than 300 psi the soil may be excessively compacted and compaction mitigation or further testing via method 3 or 4 below is required, the choice of which is

at the contractor/owner's discretion.

his test shall be certified by a New Jersey Licensed Professional Engineer utilizing only undisturbed samples (reconstitution of the sample not permitted) ollected utilizing the procedure for Soil Bulk Density Tests as described in the USDA NRCS Soil Quality Test Kit Guide, Section 1-4, July 2001. When the exture of the soil to be tested is a sand or loamy sand and lack of soil cohesion or the presence of large amounts of coarse fragments, roots or worm nannels prevent the taking of undisturbed samples, this test shall not be used.

/here the results of replicate tests differ by more than ten percent (10%), the samples shall be examined for the following defects: Cracks, worm channels, large root channels or poor soil tube contact within the samples: Large pieces of gravel, roots or other foreign objects Smearing or compaction of the upper or lower surface of the samples If any of the defects described in 3 (i-iii) above are found, the defective core(s) shall be discarded

and the test repeated using a new replicate sample for each defective replicate sample. The bulk density (defined as the weight of dry soil per volume) sults shall be compared with the Maximum Dry Bulk Densities in Table 19-1. A result of less than or equal to the applicable maximum bulk density shall e considered passing. If the result is greater than the maximum bulk density the soil shall be considered excessively compacted and compaction

Nuclear Density Test Method is test shall be certified by a New Jersey Licensed Professional Engineer and conducted by a nuclear gauge certified inspector pursuant to ASTM

6938 . The bulk density measurement results shall be compared with the Maximum Dry Bulk Densities in Table 19-1. A result of less than or equal to the applicable maximum bulk density shall be considered passing. If the result is greater than the maximum bulk density the soil shall be considered cessively compacted and compaction mitigation is required

Silty Clay Loam

Silty Clay

aximum Dry Bulk Densities (grams/cubic centimeter) by soil type Soil Type/Texture Coarse, Medium and Fine Sands and Loamy Sands Very Fine Sand and Loamy Very Fine Sand Sandy Loam Sandy Clay Silt. Silt Loam

urce: USDA Natural Resource Conservation Service, Soil Quality Information Sheet, Soil Quality Resource Concerns: Compaction, April 1996 Additional testing methods which comform to ASTM standards and specificaitons, and which produce a dry weight, soil bulk density measurement may be allowed subject to District approval

f subgrade soils are determined to be excessively compacted by testing, as identified above, procedures shall be used to mitigate excessive soil impaction prior to placement of topsoil and establishment of permanent vegetative cover. Restoration of compacted soils shall be through deep carification/tillage (6" minimum depth) where there is no danger to underground utilities (cables, irrigation systems, etc.) or in the alternative, another

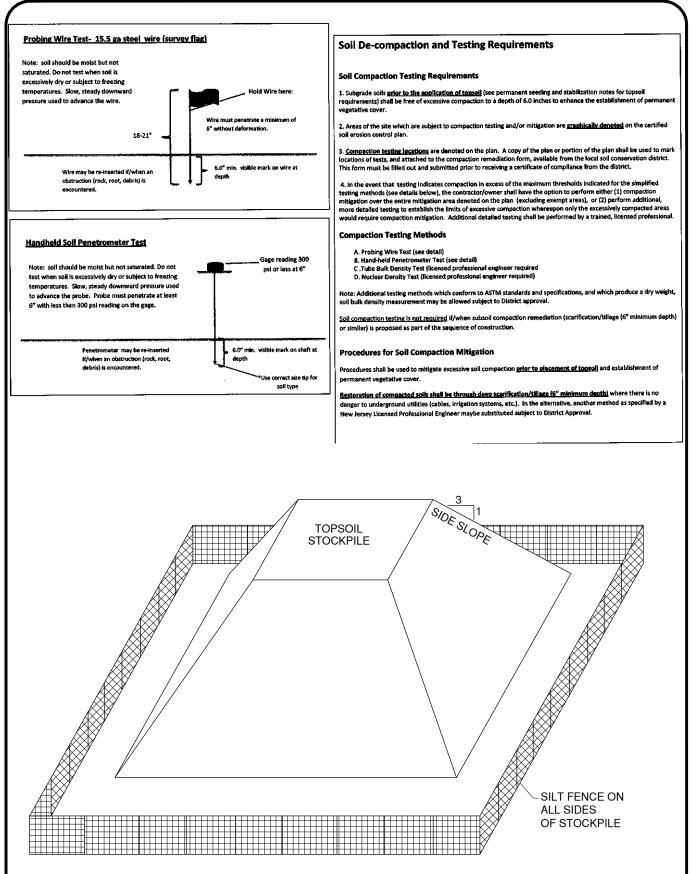
Timber, logs, brush, rubbish, rocks, stumps and vegetative matter which will interfere with the grading operation or affect the planned stability or fill areas shall be removed and disposed of according to the plan.

Topsoil is to be stripped and stockpiled in amounts necessary to complete finish grading of all exposed areas requiring topsoil. See Standard for Fill material is to be free of brush, rubbish, timber, logs, vegetative matter and stumps in amounts that will be detrimental to constructing stable fills. All structural fills shall be compacted as determined by structural engineering requirements for their intended purpose and as required to reduce

All disturbed areas shall be left with a neat and finished appearance and shall be protected from erosion. See Standards for Permanent Vegetative

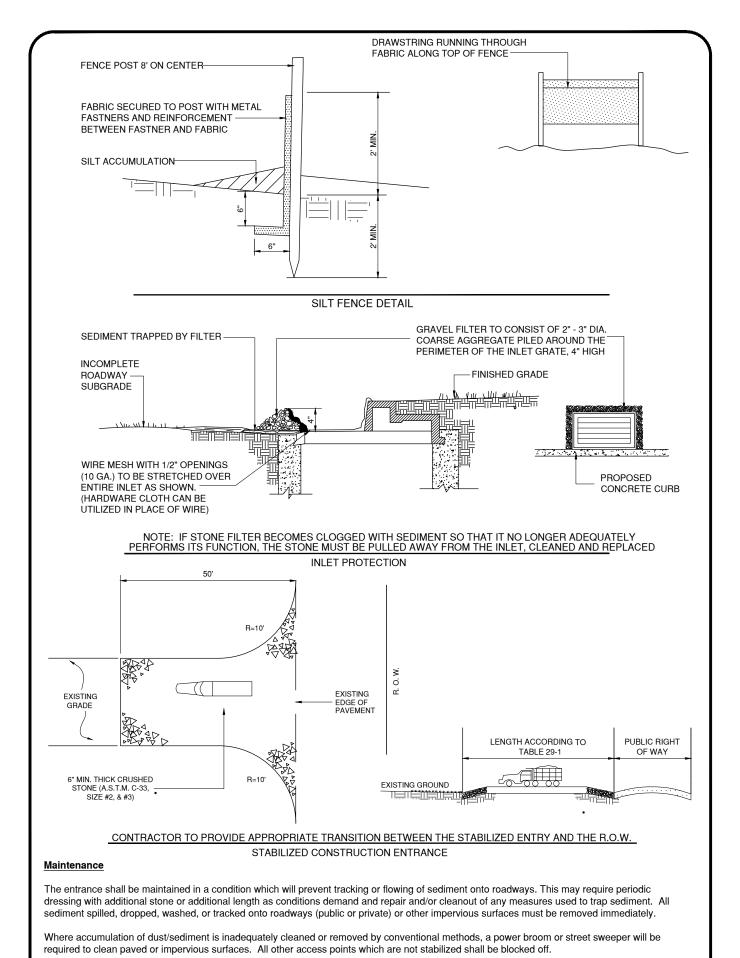
Trees to be retained shall be protected if necessary in accordance with the Standard for Tree Protection During Construction

SOIL CONSERVATION NOTES

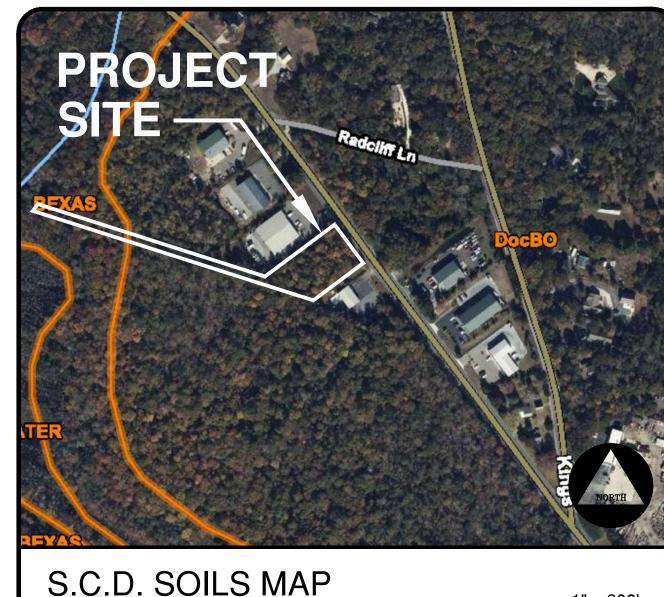


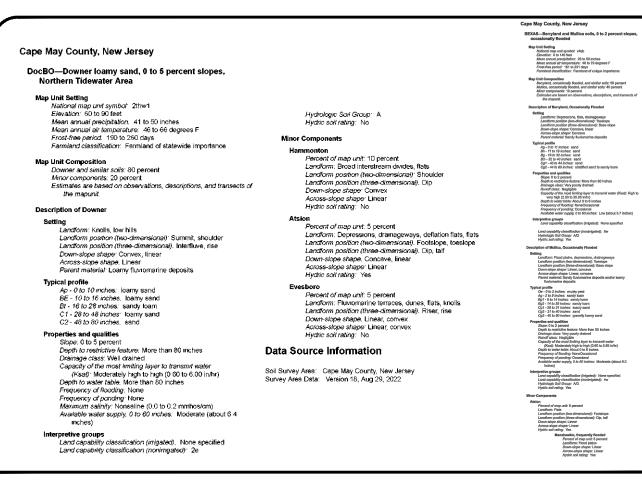
TOPSOIL STOCKPILE DETAIL

SOIL CONSERVATION NOTES

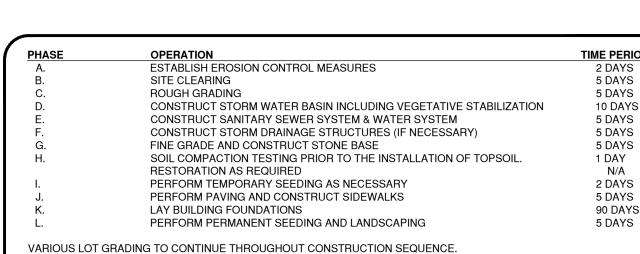


SOIL CONSERVATION DETAILS





SOILS DESCRIPTION



CONSTRUCTION SEQUENCE

LAND COVER

CONSTRUCTION WILL BEGIN SPRING 2023.

1.28 Acres Total Area of Site: Grassland & Woodland Total Area of Disturbance: . 0.648 Acres Adjacent Site Conditions: . Well Driller / Commercial Offices / Vacant

126 Chapel Hill Circle

Paoli, PA 19301 Phone (610)-544-7500

DURATION OF EACH SEQUENCE WILL VARY DUE TO SECTIONALIZATION AND MARKET CONDITIONS.

RESPONSIBILITY

All soil erosion and sediment control measures and facilities shall be the sole responsibility of the developer/owner. The responsibility shall include, but not be limited to installation, inspection, and maintenance of conditions during and following construction. Applicant/Owner: 1077 Route 83 Robert Keith

Dennis, NJ 08210

GENERAL INFORMATION

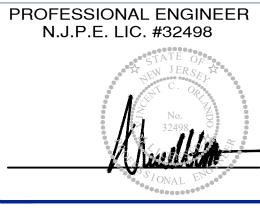


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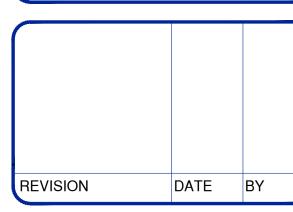
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VINCENT C. ORLANDO

N.J.P.E. LIC. #32498



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DATE: 4/4/2023 DRAWN BY: MSB SCALE: AS NOTED | CHECKED BY: VCO PROJECT #: 9826 SHEET: 8 0F 8

