



VINCENT C. ORLANDO

PROFESSIONAL ENGINEER

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

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ENGINEERING DESIGN ASSOCIATES, P.A.

REV. PER APPLICANT | 8/10/23 | MJH

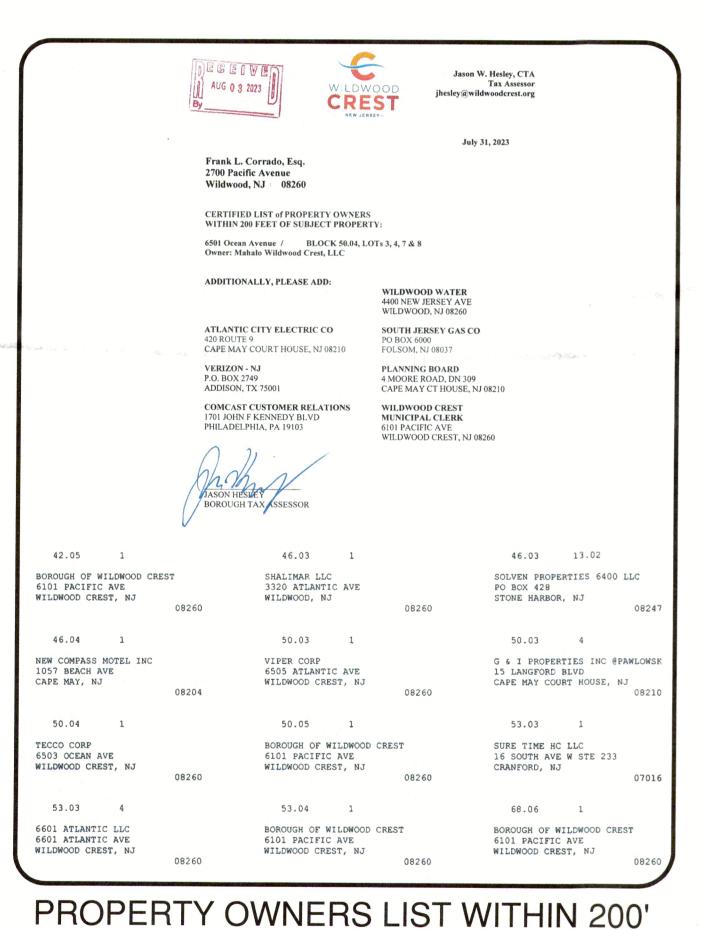
REV. PARKING LAYOUT 7/27/23 MJH

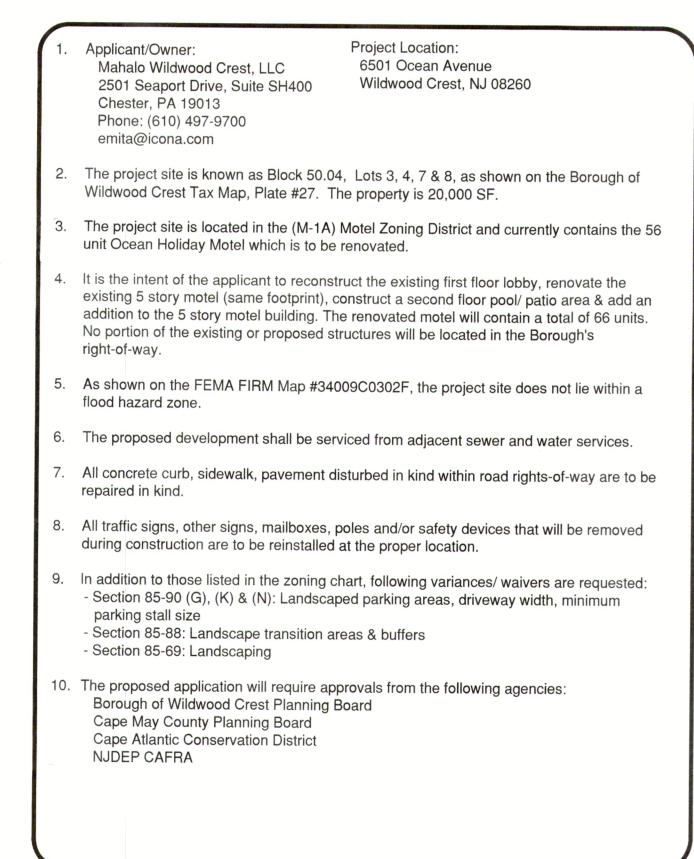
12/21/2022 MAJ

DATE BY

REV. PER WCLUB

REVISION





SURVEY INFORMATION

12/8/2021.

This set of plans has been prepared for purposes of municipal and agency review and approval. This set of plans shall not be utilized as construction documents until all conditions of approval have been satisfied on the drawings and each drawing has been revised to indicate "Issued for Construction."

Outbound and topographic information taken from plan entitled "Topographic Survey"

6501 Ocean Avenue Block 50.04 Lots 3, 4, 7 & 8, Borough of Wildwood Crest, Cape

Proposed site conditions taken from plan entitled "Addition and Renovations" 6501

Ocean Avenue, Wildwood Crest, NJ 08260 prepared by AEON Architecture & dated

& revised through 11/16/2022. Elevations are in feet and refer to NAVD88

May County, NJ prepared by HDG, Thomas R. Deneka, NJPLS # 35828, dated 7/22/19

Contractor shall check and verify all existing utilities, grades, site dimensions and existing conditions before proceeding with construction. Any discrepancies or unusual conditions are to be reported to design engineer/project staff immediately for adjustments or directions.

All construction to be performed in accordance with NJDOT Standard 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 compliance with the Occupational Safety and Health Act of 1970 and all rules and regulations appurtenant to this project.

Zoning Information M-1A Zoning District 20,000 SF No Lot Frontage Front Yard Setback Ocean Avenue (N/S) Beach Avenue (N/S) Rosemary Road (E/W) Side Yard Setback Rear Yard Setback **Building Coverage** Lot Coverage 100% **Building Height** 58.36' 58.36' Minimum Unit Area 257 SE Fence Setback to Water Pool Deck Setback Pool within Front Yard Not Permitted YES Loudspeaker/Amp. Devices Not Permitted **Building Mounted** Sign Area 25 SF Ea. 105 SF 144 SF 244.08 SF 349.08 SF 432 SF Parking Requirement 66 Motel Units 53 spaces 67 spaces YES 65 spaces YES (1.2 spaces/unit) Minimum Space Size 9' x 18' 17.25' x 8' YES 18' x 7.66' YES Circulation, Parking & Loading, Curbing Handicap Parking Spaces Not Required Back-Out Parking Not Permitted Yes Tandem Parking Not Permitted No No Prkg. Setback to Dwelling Drive Aisle Width 15.75' YES Location of Prkg. Spaces on-tract Off Street Loading YES Max. Number of Curb Cuts 1 Minimum Raised Curb 50.2% YES Min. Cont. Raised Curb 35% Curb Cut to Street Setback 20' Landscaped Parking Area Yes YES Trash/Recycle Screening Yes *Denotes PreExisting NonConformity **Lot has 3 front yards and 1 rear yard

ZONING INFORMATION

SITE PLAN FOR MAHALO HOTELS, LLC

GENERAL NOTES

BLOCK 50.04, LOTS 3, 4, 7 & 8 BOROUGH OF WILDWOOD CREST CAPE MAY COUNTY, NEW JERSEY

SCHEDULE OF SHEETS	SHEET	ORIGINAL DATE	LAST REVISION DATE
EXISTING CONDITIONS PLAN	· 2 OF 7	8/15/2022 8/15/2022	8/10/2023 12/21/2022
PROPOSED CONDITIONS PLANGRADING & UTILITY / LIGHTING PLAN	. 4 OF 7	8/15/2022 8/15/2022	8/8/2023 8/8/2023
ENGINEERING DETAILS ENGINEERING DETAILS SOIL EROSION AND SEDIMENT CONTROL PLAN	6 OF 7	8/15/2022 8/15/2022	12/21/2022 12/21/2022
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CONTRACTOR NOTES

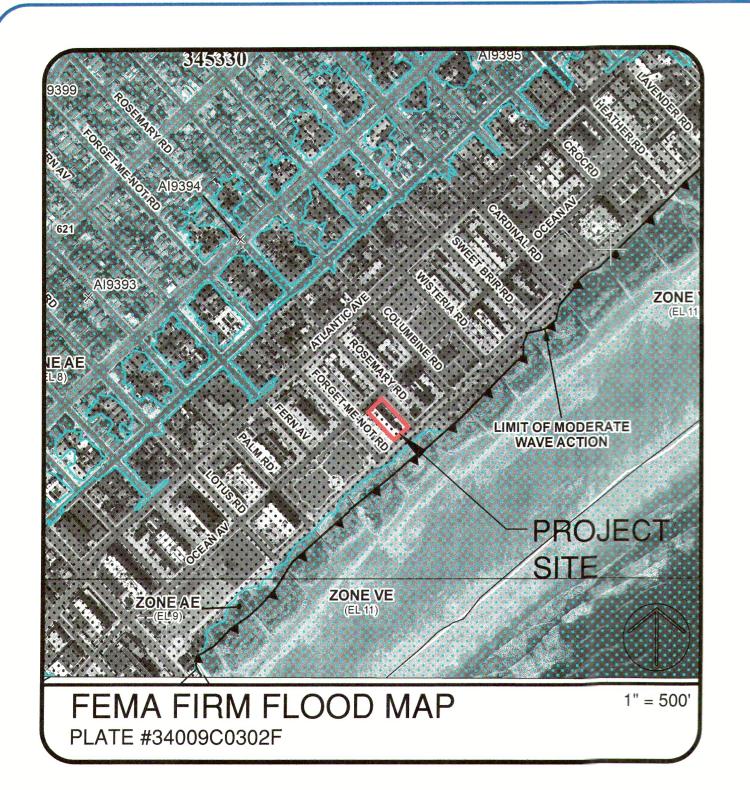
BOROUGH OF WILDWOOD CREST APPROVAL

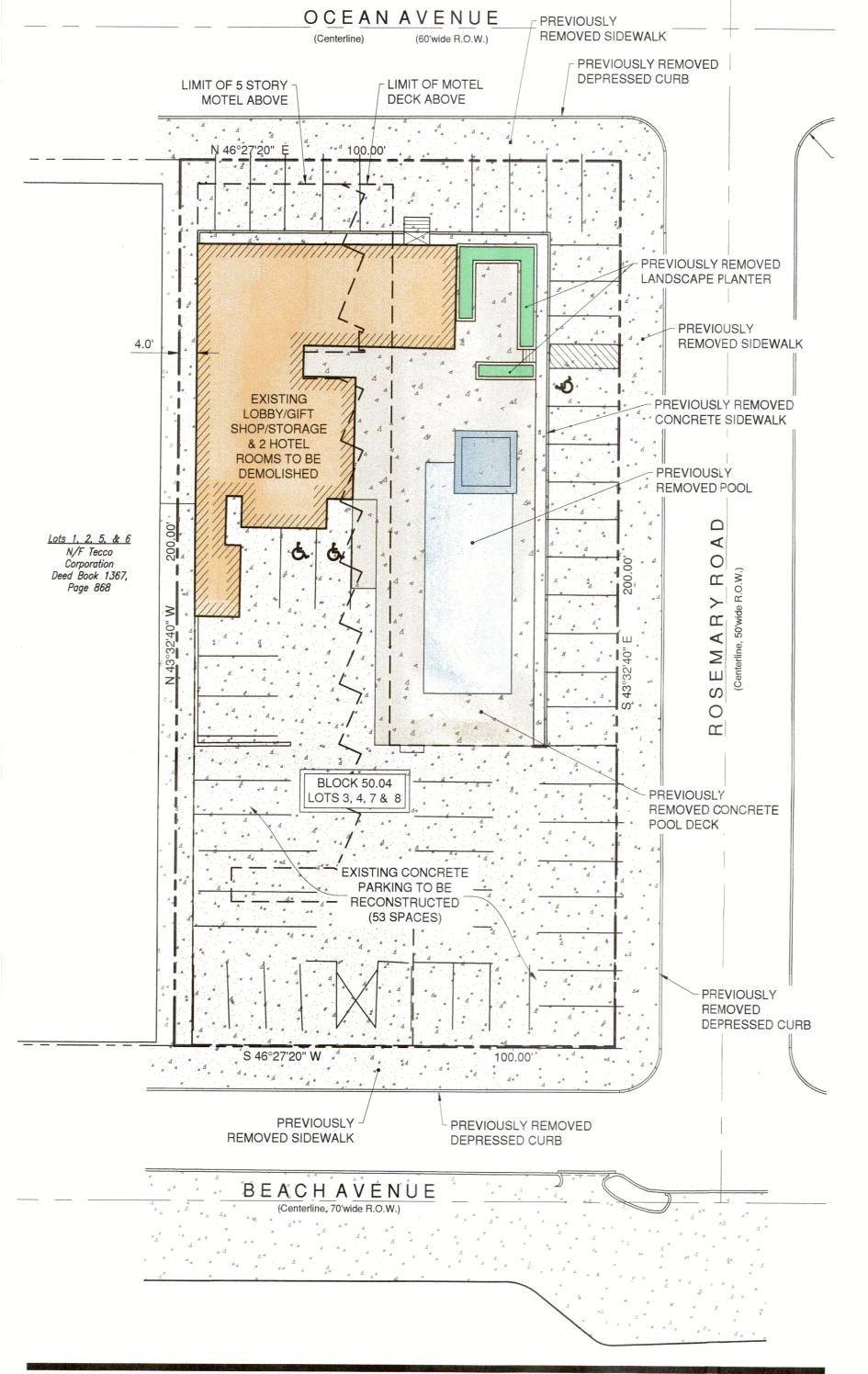


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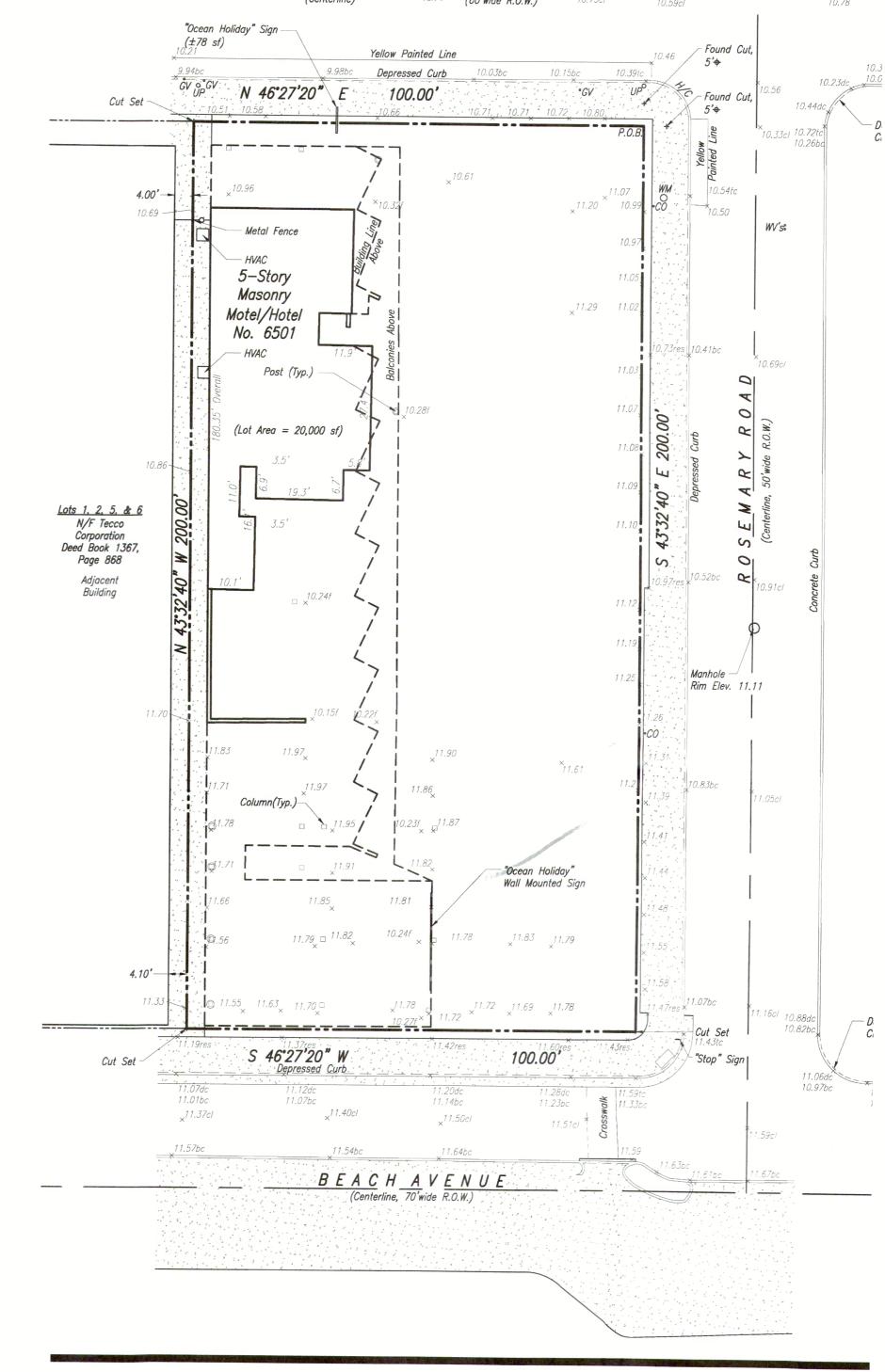
PROJECT #: 8859 SHEET: 1 0F 7





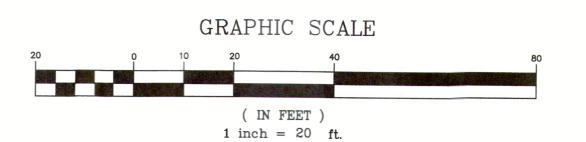
EXISTING CONDITIONS(AS OF 11/26/2019 - GROUND FLOOR)

Existing condtions taken from plan entitled "Topographic Survey" 6501 Ocean Avenue Block 50.04 Lots 3, 4, 7 & 8, Borough of Wildwood Crest, Cape May County, NJ prepared by HDG, Thomas R. Deneka, NJPLS # 35828, dated 7/22/19 & revised through 11/26/19.



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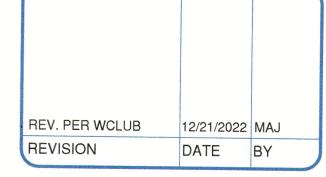


1" = 20'





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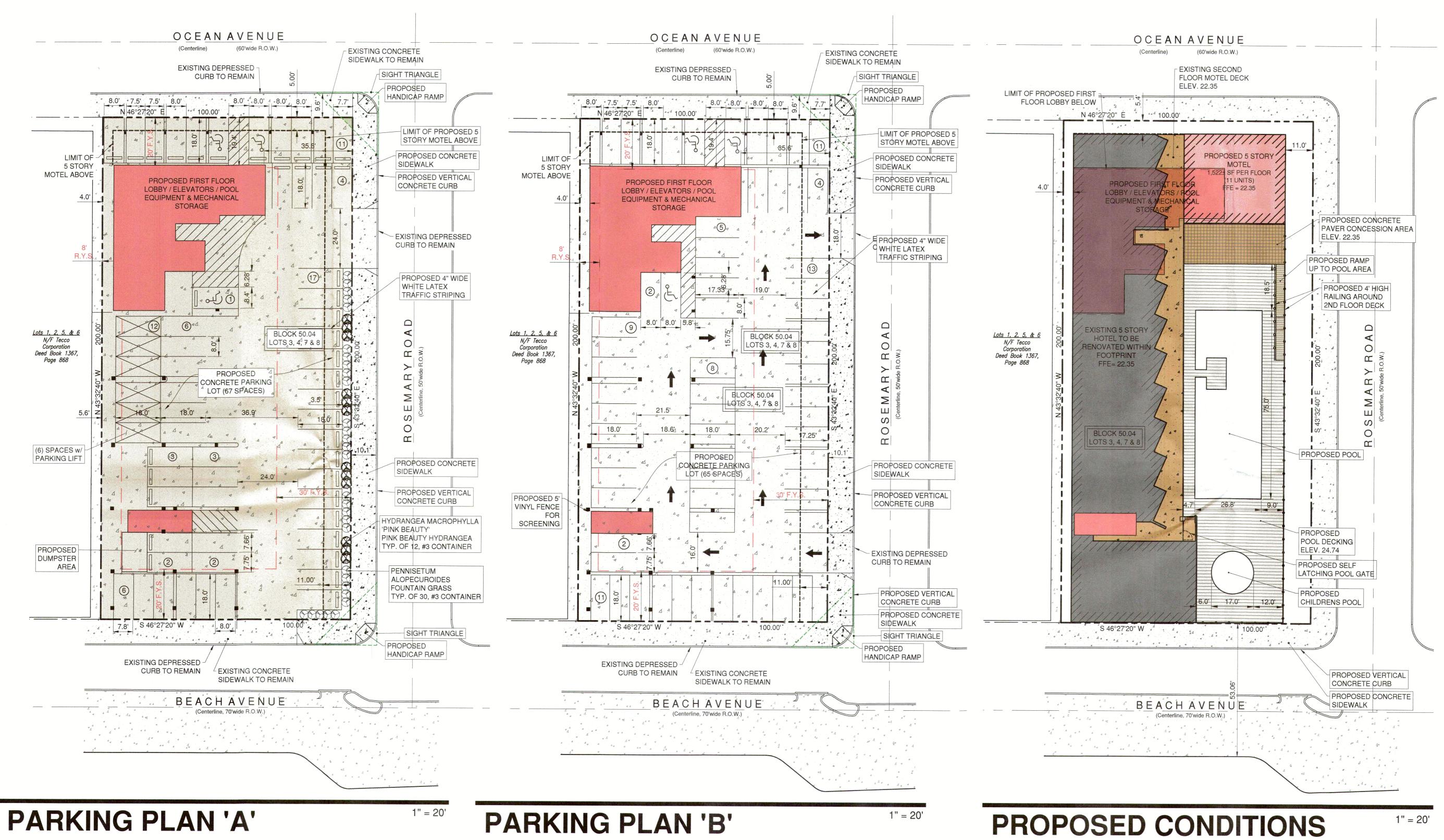


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PROJECT #: 8859 SHEET: 2 0F 7





Engineering

Engineering

Engineering

CAMBRIDGE PROFESSIONAL OFFICES

5 Cambridge Drive Ocean View New Jersey 08230

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CAPE MAY COUNTY, NEW JERS

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REV. PER APPLICANT REV. PARKING LAYOUT REV. PER WCLUB	8/8/23 7/27/23 12/21/2022	MJH MJH MAJ
REVISION	DATE	BY



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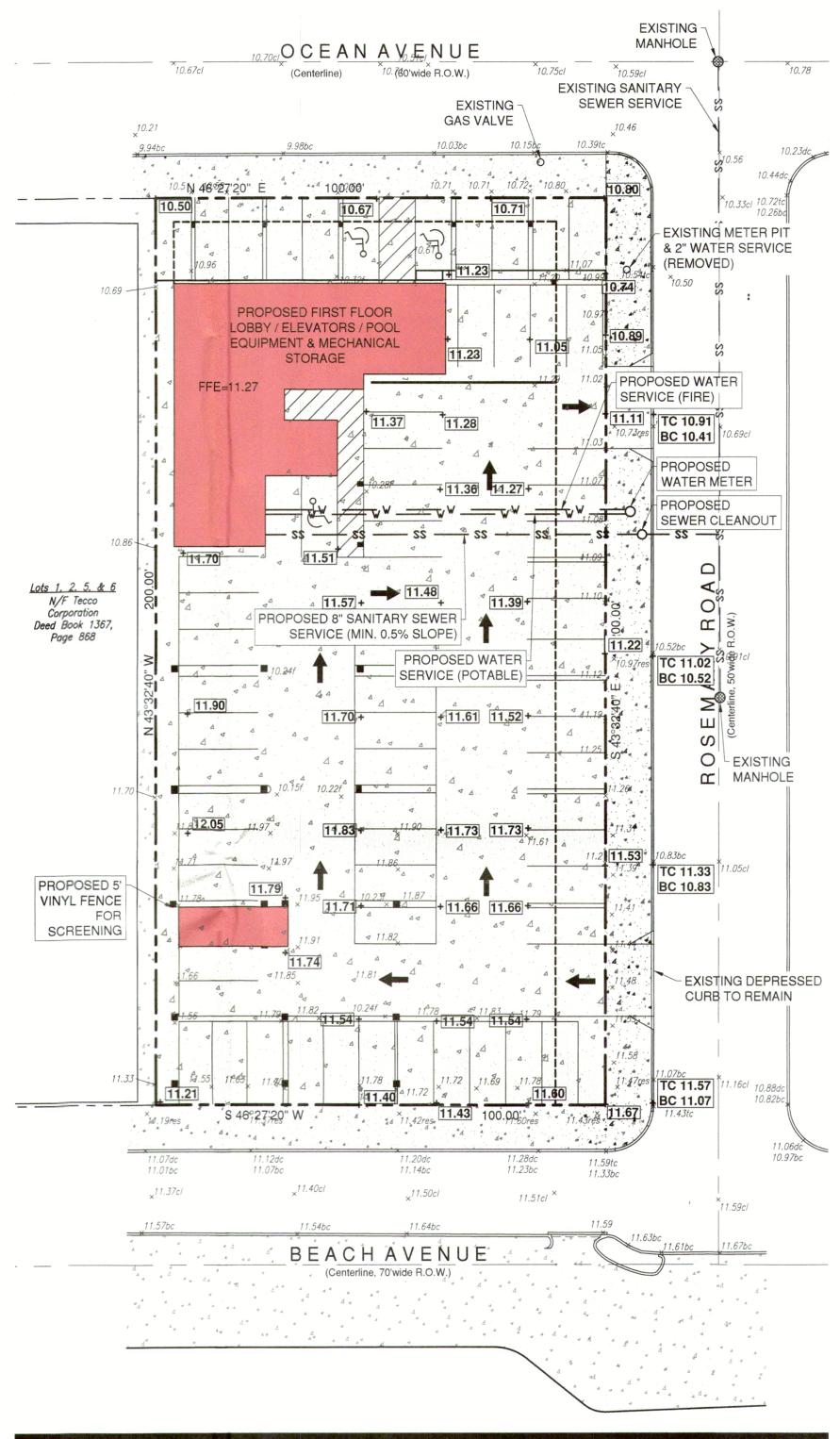
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GRAPHIC SCALE 1"=20'

PROPOSED UNIT ANALYSIS
(SEE ARCHITECT'S PLAN FOR LAYOUT & DIMENSIONS)

(16) UNIT A - 305 SF (EXISTING TO BE RENOVATED)
(32) UNIT C - 437 SF (EXISTING TO BE RENOVATED)
(4) UNIT D - 534 SF (EXISTING TO BE RENOVATED)
(2) UNIT E - 257 SF (4 EXISTING UNITS REDUCED TO 2 UNITS)
(12) UNIT F - 440 SF (PROPOSED UNITS)

(SECOND FLOOR)



GRADING & UTILITY PLAN (GROUND FLOOR)

Note: Existing spot elevations taken from plan entitled "Topographic Survey" 6501 Ocean Avenue Block 50.04 Lots 3, 4, 7 & 8, Borough of Wildwood Crest, Cape May County, NJ prepared by HDG, Thomas R. Deneka, NJPLS # 35828, dated 7/22/19 & revised through 11/16/2022.

OCEAN AV.F.NUE × 10.75cl LOBBY / ELEVATORS / POOL **EQUIPMENT & MECHANICAL** WHITE LATEX TRAFFIC STRIPING Lots 1, 2, 5, & 6 N/F Tecco Corporation Deed Book 1367, Page 868 CONCRETE PARKING LOT (65 SPACES) VINYL FENCE FOR SCREENING PROPOSED CEILING LIGHT (TYP. 38) PROPOSED VERTICA PROPOSED CONCRE 1.43tc SIDEWALK BEACHAVENUE 1" = 20'

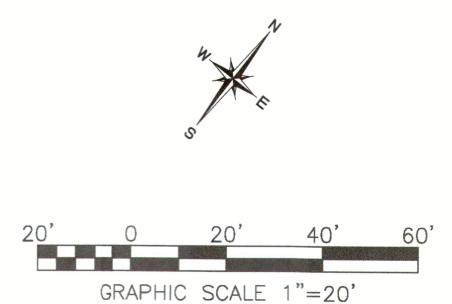
LIGHTING PLAN (GROUND FLOOR)

LEGEND

× 10.77 EXISTING SPOT ELEVATIONS

+ 10.82 PROPOSED SPOT ELEVATIONS

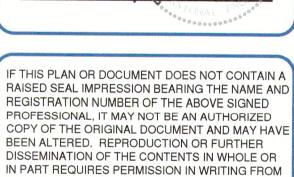
1" = 20'





PROFESSIONAL ENGINEER

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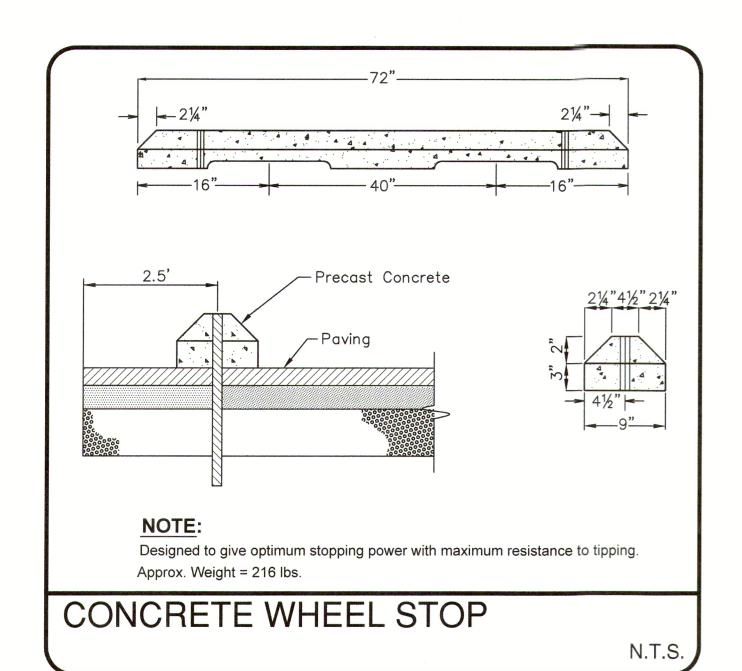
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0.000	REV. PER WCLUB	12/21/2022	MAJ
	REVISION	DATE	BY

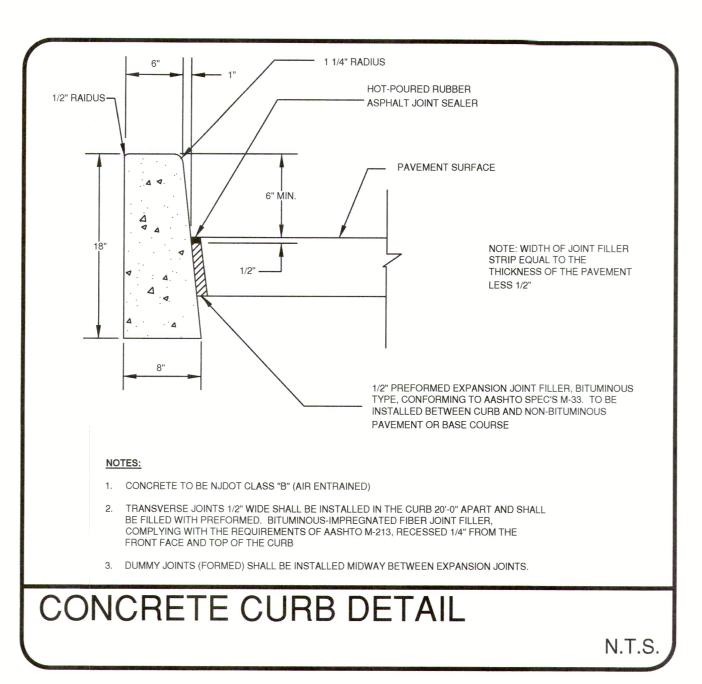
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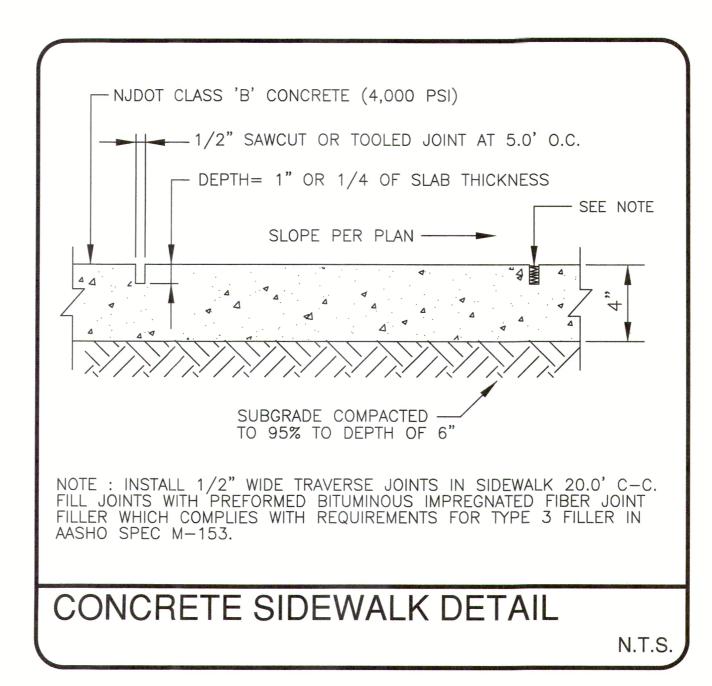


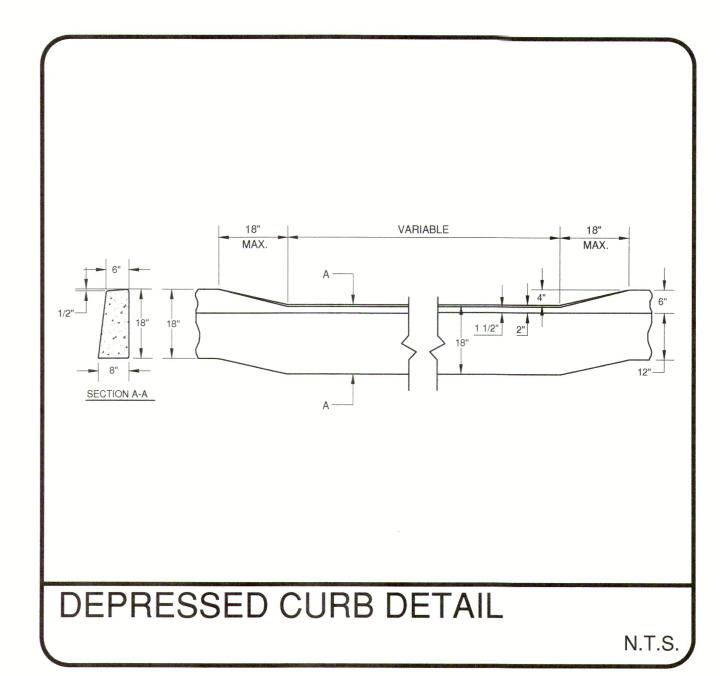
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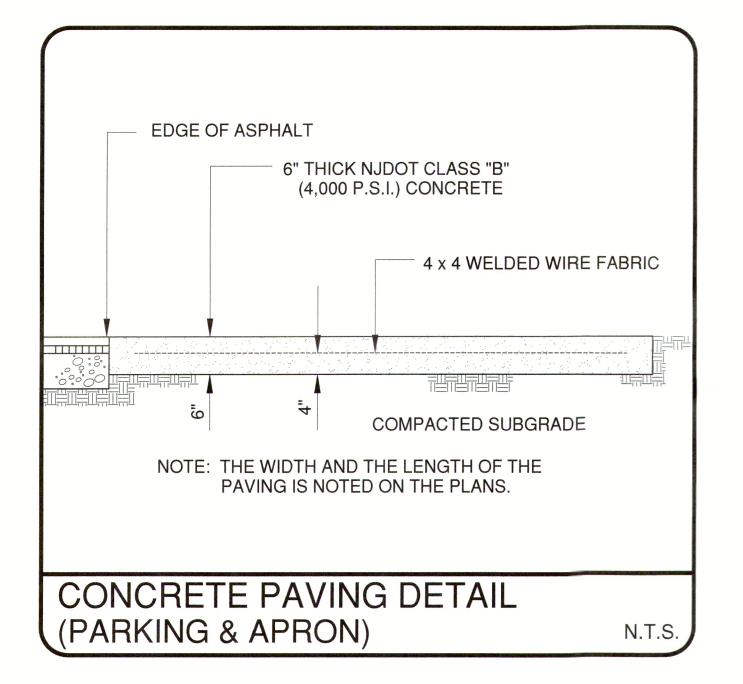


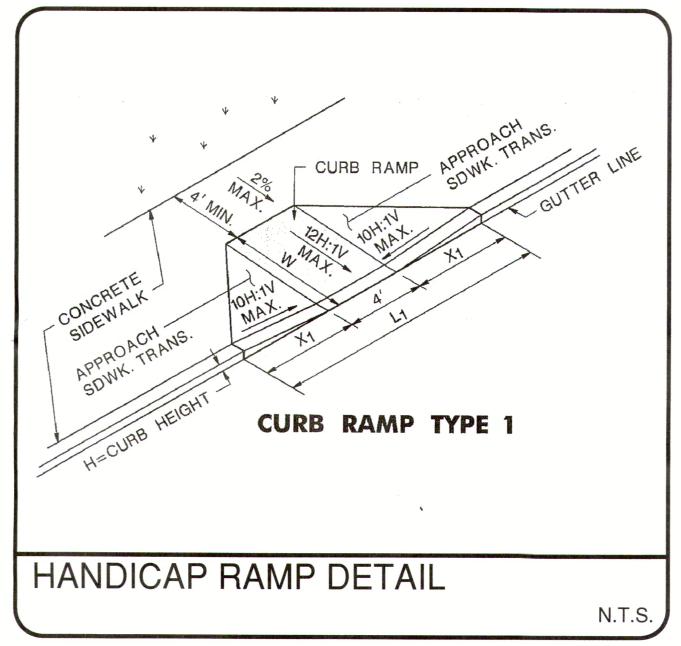




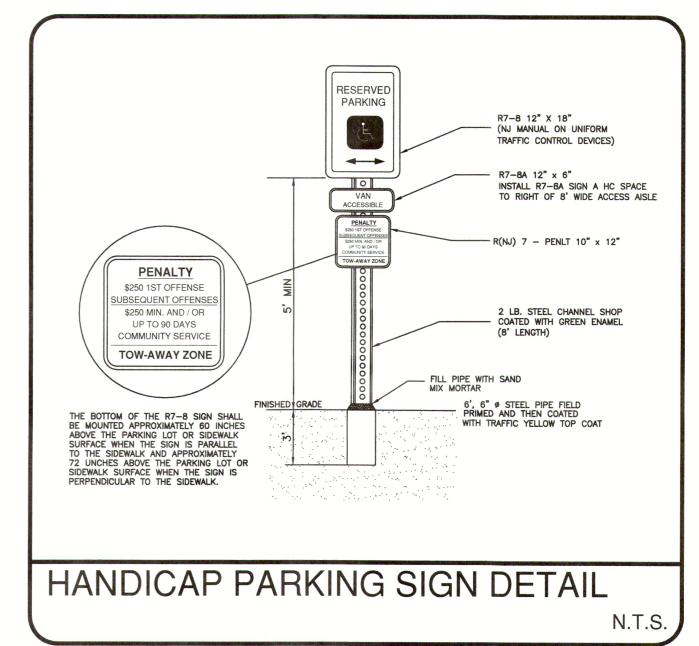


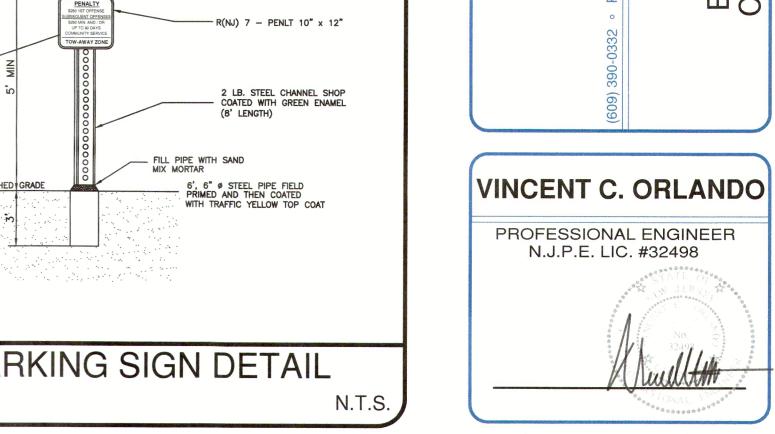


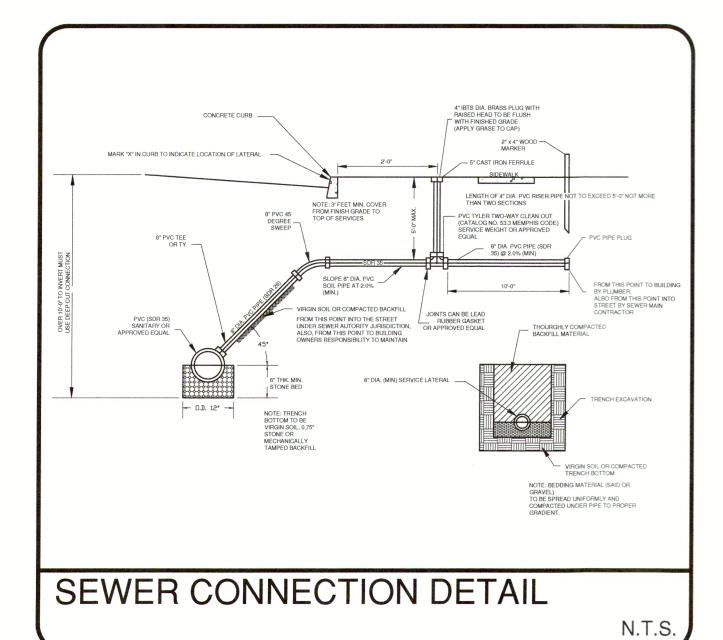


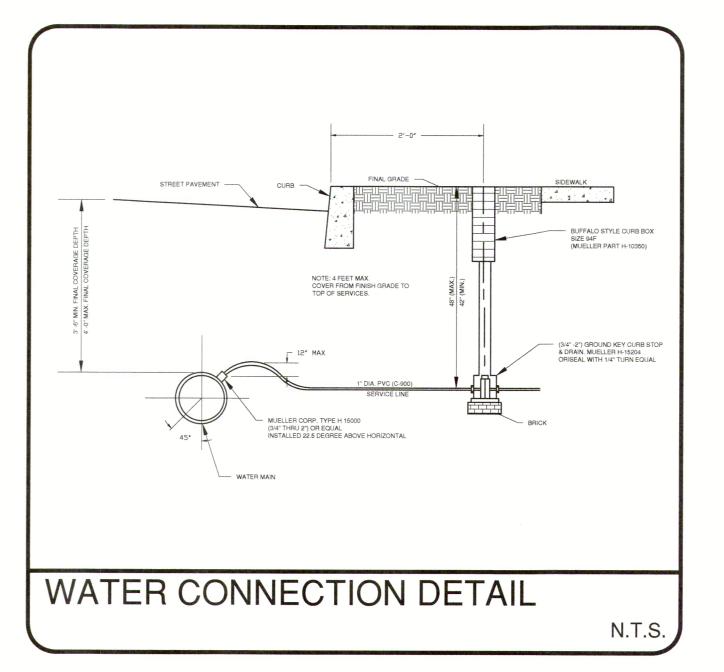


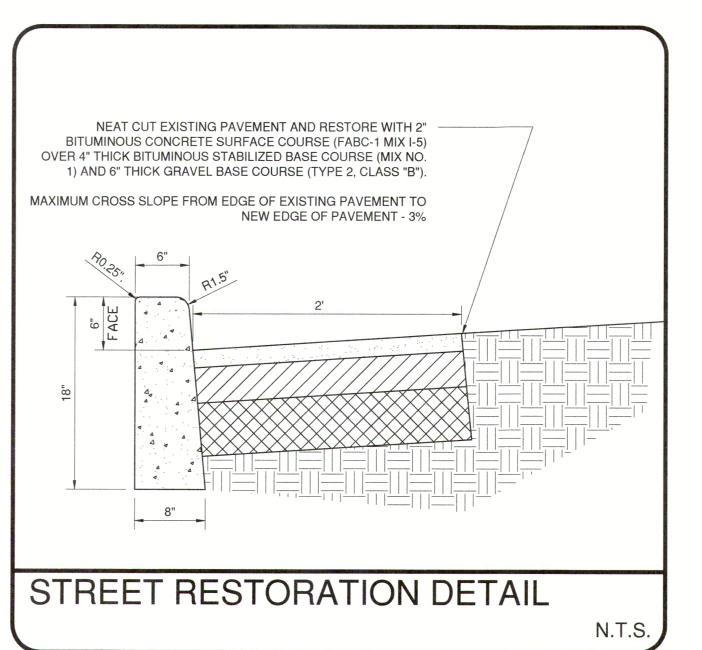


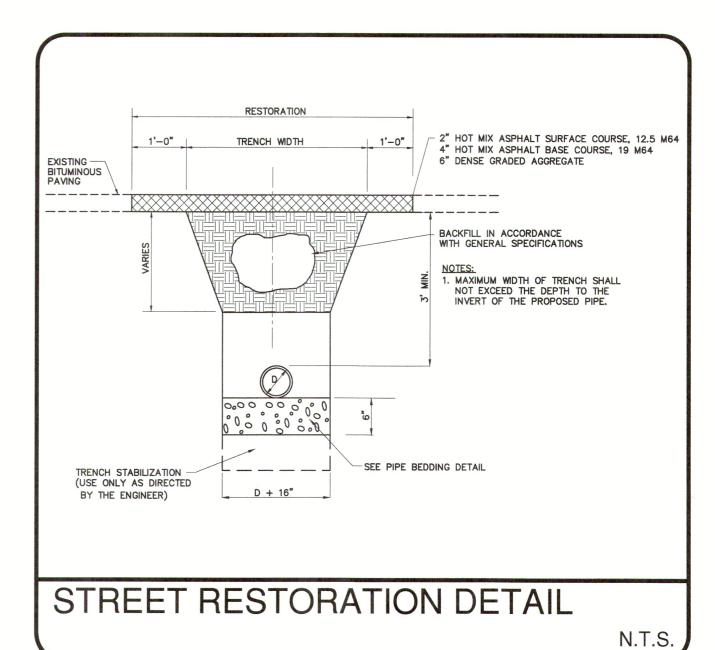


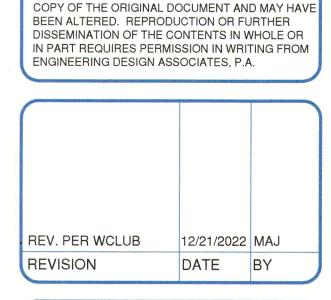










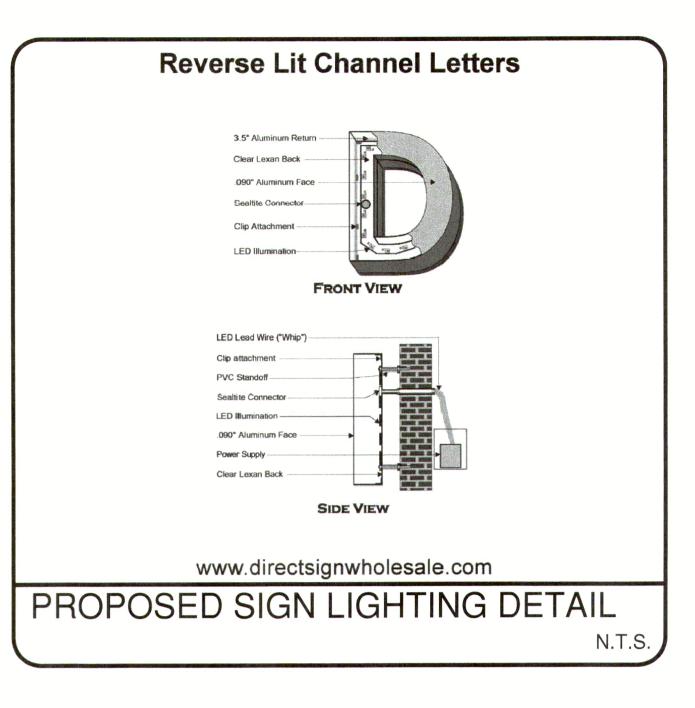


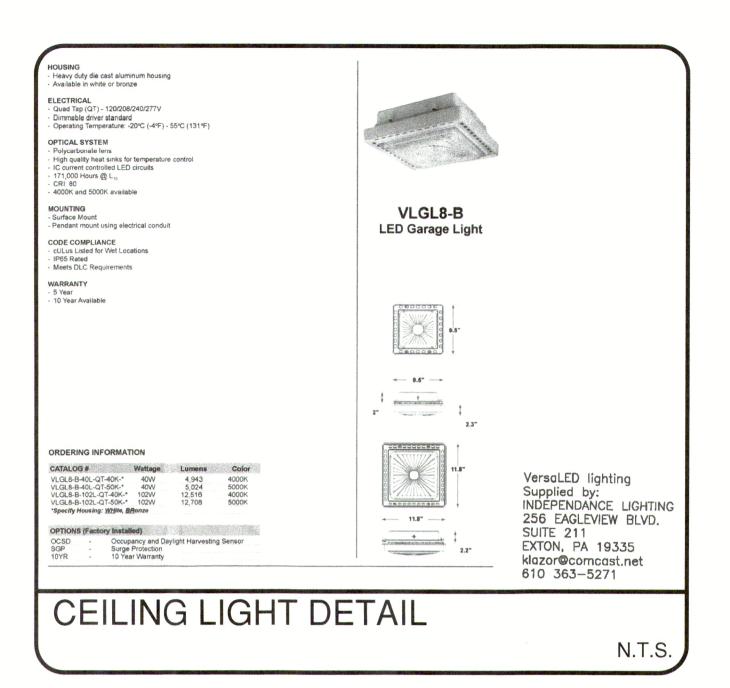
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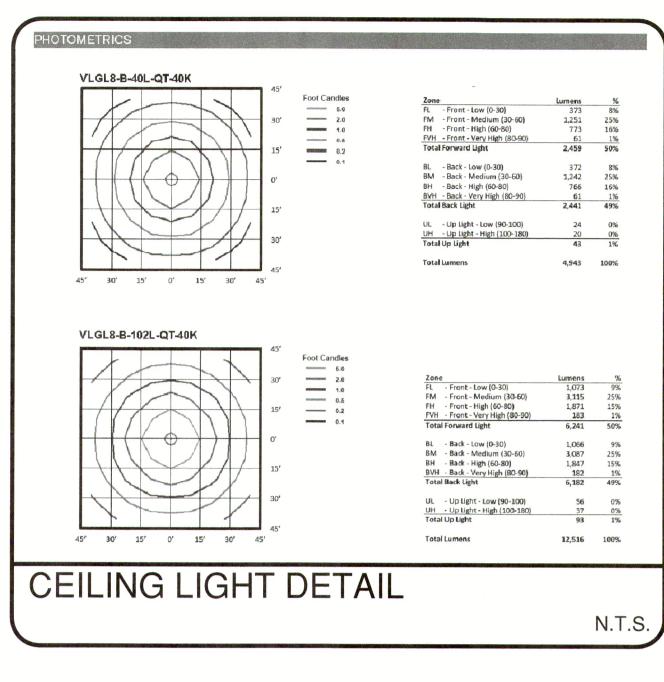


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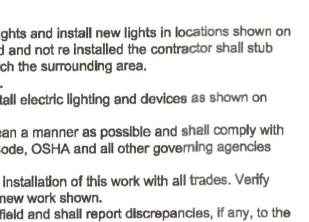








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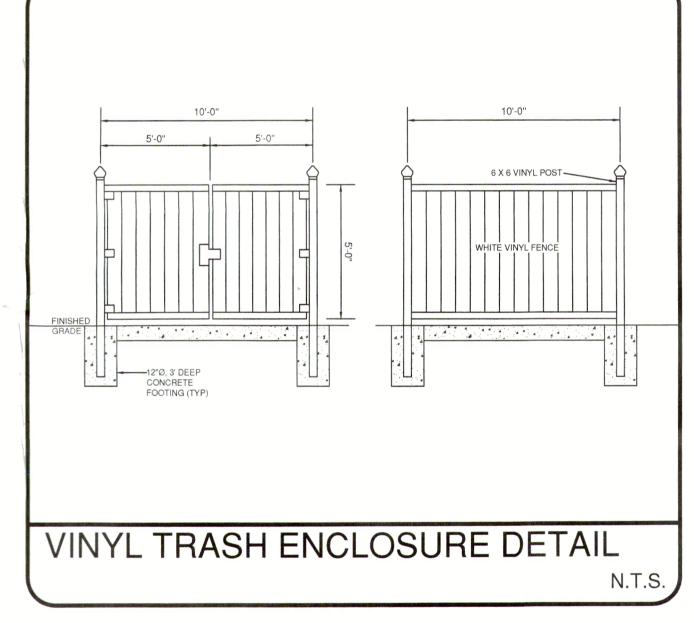
Borough of Wildwood Crest and the electric work, must visit the site and familiarize himself having visited the premises, the Contractor shall it relates to such visible existing conditions. The wledgment on part of the bidder of his visitation to

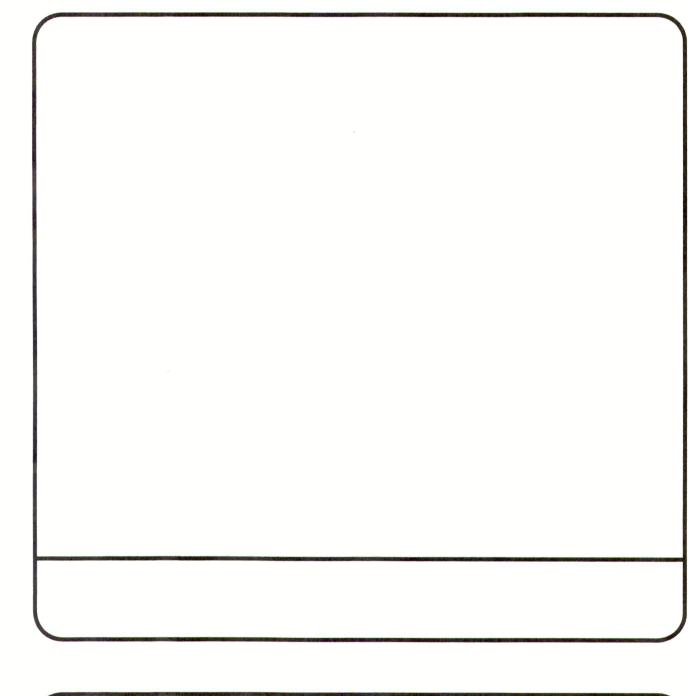
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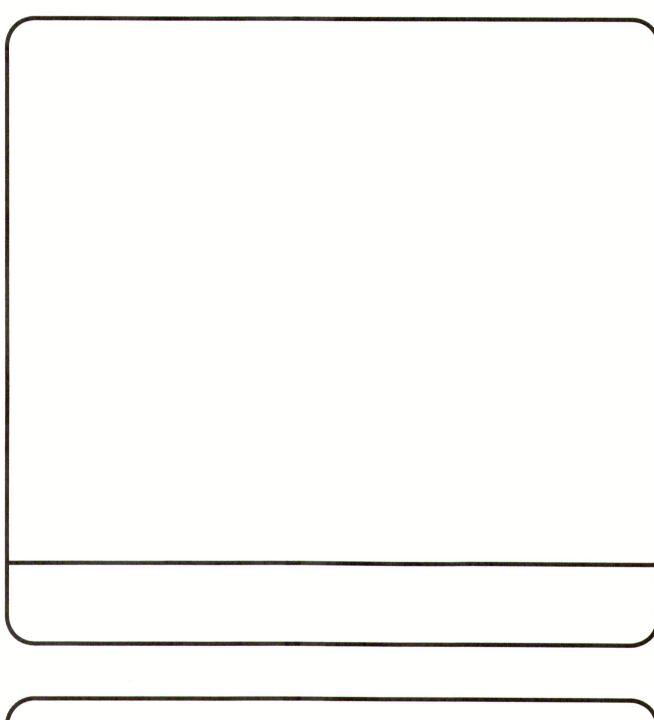
plans and detail drawings. nections and inspections with the local electric

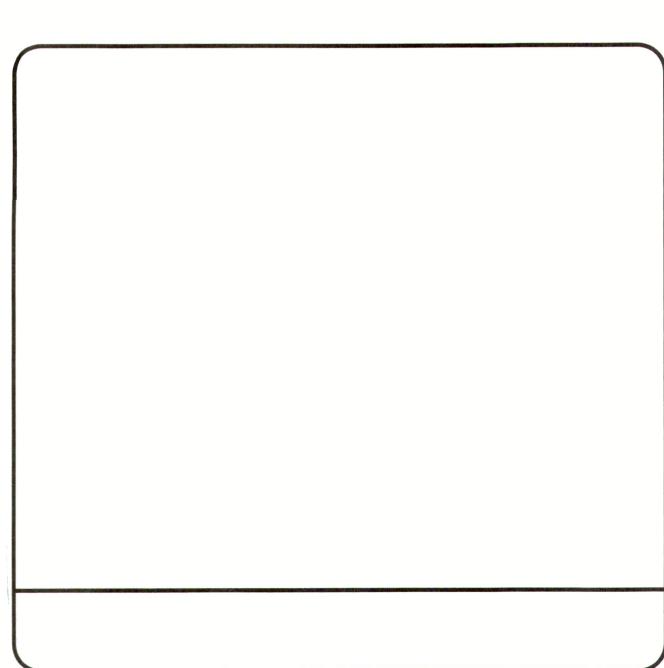
I Identified perimeter lights to ensure that a max. operty line. This shall be coordinated with s and parking areas per section 525-59 (F).

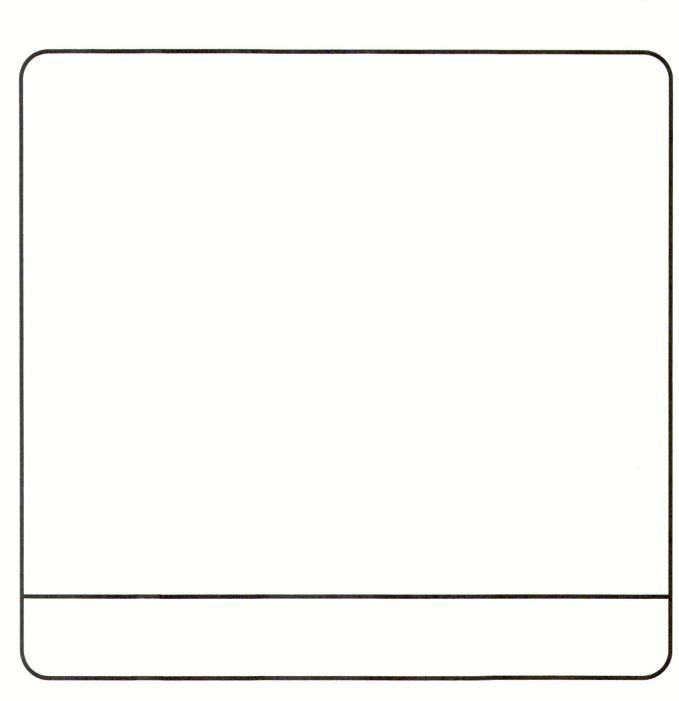
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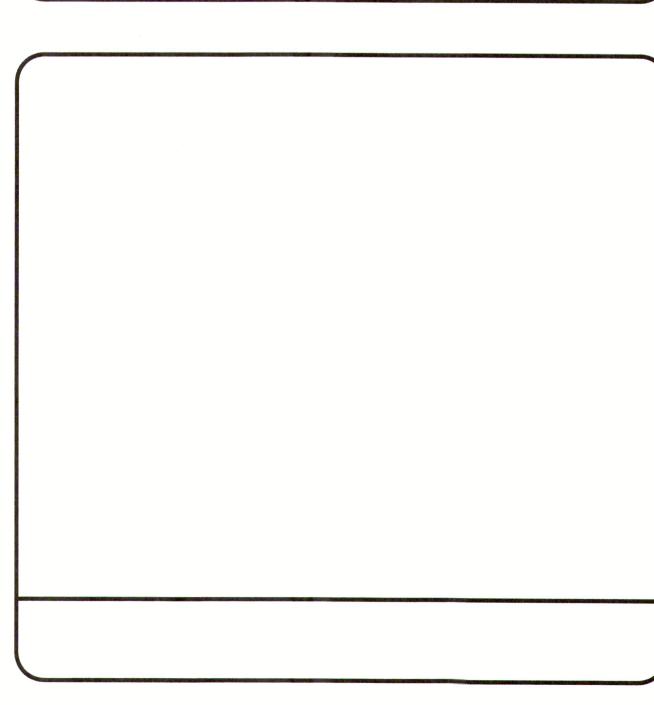












SOIL EROSION AND SEDIMENT CONTROL PLAN

- 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, furnish 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 application and rates of application at the request of the Cape Atlantic Soil Conservation District.
- 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 access.
- All driveways must be stabilized with 2 1/2" crushed stone or subbase prior to individual lot construction.
- All payed 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 must be dewatered to normal pool within 10 days of the design storm. NJSA 4:24-39, Et 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 occupancy by the municipality.
- 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 Frosion and Sediment Control Plan must be maintained on the project site during construction. The Cape Atlantic Soil 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
- . Immediately after the completion of stripping and stockpiling of topsoil, the stockpile must be stabilized according to the standard for temporary vegetative cover. Stabilize topsoil 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 a floodplain, slope, roadway or drainage facility and the base must be protected with a sediment barrier Any changes to the site plan will require the submission of a revised Soil Erosion and Sediment Control Plan to the Cape Atlantic Soil
- 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 pH 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 (i.e. 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 district. Dust is to be controlled by an approved method according to the New Jersey Standards and may include watering with a solution of calcium
- . Adjoining properties shall be protected from excavation and land filling operations on the proposed site. 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. . The soil erosion inspector may require additional soil erosion measures to be installed, as directed by the district inspector.

STORMWATER MANAGEMENT MAINTENANCE PROGRAM

of an impermeable layer.

n order to ensure that all retention and detention basins function properly, a maintenance program must be followed. The following are the minimum equirements for the maintenance of all basins.

- Annual visual inspection of outlet structures and basins.
- a. 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 floor and sides will grow through sediment deposits, thus forming a porous turf and preventing the formation
- 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.
- Seed type: A mixture of the following special water-tolerant seed will ensure a high quality grass for retention basins.

Mixture 8 SEEDING RATE 2.1Lb./1,000 SF 0.25Lb./1,000 SF Perennial Rve Grass 0.25Lb./1.000 SF Kentucky Bluegrass White Clover 0.10Lb./1.000 SF

- e. Fertilizing and liming: Bi-annually Fertilize with 10-20-10 at a rate of 11lbs./1,000 SF
- Lime with pulverized dolomite limestone at a rate of 90lbs./1,000 SF Long term Maintenance
- 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

STORM WATER STRUCTURE MAINTENANCE

b. OUTLET STRUCTURE/CONDUIT

intenance 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 enstruction period and long term maintenance following construction. Both stages are necessary for the life of the storm water structures and systems.

- MINIMUM REQUIREMENTS FOR MAINTENANCE
- a. TRENCHES/SWALES Trenches/Swales to be inspected for rubbish or channel obstructions, bank failure, accumulation of silts and sediments, undesirable vegetation growth, rodents, and overall system failure.
- 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, obstructions (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

imited to installation, inspection, and maintenance.

The primary mechanical equipment use in the Annual 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 nduced 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

- 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 square feet.)
- Asphalt emulsion is recommended at the rate of 600 to 1,200 gallons per acres. This is suitable for a limited period of time where travel
- Synthetic or organic soil stabilizers may be used under suitable conditions and in quantities 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 plug it. 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.
- b. Mulch anchoring should be accomplished immediately after placement to minimize loss by wind or water. This may be done by one or the following methods, depending upon the size of the area, steepness of slopes, and costs depending upon the size of the area,
- 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 3 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 of slopes. Straw mulch rate must be 3 tons per acre. No tackifying or adhesive agent is required.

SOIL CONSERVATION NOTES

- Liquid Mulch-Binders May be used to anchor salt hay, hay, or straw mulches Applications should be heavier at edges where wind catches the mulch, in valleys, and at crests of banks. Remainder of area should be uniform in appearance.
- Use one of the following: (1) Emulsified asphalt - (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, and CRS-2). Apply 0.04 gal/sg./yd. or 194 gal/acre on flat slopes less than 8 feet high. On slopes 8 feet or more high, use 0.075 gal./sq./yd. or 363 gal/acre. These materials may be difficult to apply uniformly and will discolor surfaces.
- (2) Organic and Vegetable Based Binders Naturally occurring, power based, hydrophilic materials that mixed with formulates a gel and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluble polymers. The vegetative gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turfgrass. Vegetable based gels shall be applied at rates and weather conditions recommended by the manufacturer. (3) High polymer synthetic emulsion, with water when diluted and following application to mulch, drying and curing shall no longer be soluble or dispersed in water. It shall be applied at rates weather conditions recommended by the manufacturer and remain tacky until germination of grass

STANDARDS FOR TOPSOILING

METHODS AND MATERIALS

- Topsoil should be friable1, loamy2, 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 may be raised by additives.
- 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.
- Stripping and Stockpiling Field exploration should be made to determine whether quantity and or quality of surface soil justifies stripping.
- Stripping shall be confined to the immediate construction area. Where feasible, lime may be applied before stripping at a rate determined by soil tests to bring the soil pH to approximately 6.5. 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. 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.
- 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 Grade as needed and feasible to permit the use of conventional equipment for seedbed preparation, seeding, mulch application and anchoring, and maintenance
- 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 Prior to topsoiling, the subsoil shall be in compliance with the Standard for Land Grading, pg. 19-1
- Employ needed erosion control practices such as diversions, grade stabilization structures, channel stabilization measures, sedimentation basins, and waterways. See Standards 11 through 42. Topsoil should be handled only when it is dry enough to work without damaging soil structure; i.e., less than field capacity (see glossary).
- A uniform application to an average depth of 5.0 inches, minimum of 4 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). 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.

DUST CONTROL STANDARDS

The following methods should be considered for dust control at the request of the Township Construction Code Official, or upon inspection by

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

	Water Dilution	Type of Nozzle	Apply Gallons/Acre
Anionic asphalt emulsion	7:1	Coarse spray	1,200
Latex emulsion	12 1/2 :1	Fine spray	235
Resin in water	4:1	Fine spray	300

- 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 desired effect.
- Sprinkling Site is sprinkled until the surface is wet. Barriers - Solid board fences, snow fences, burlap fences, crate walls, bales of hav 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. Mulch - Stabilization with approved mulches and vegetation cover being temporary of permanent.

SEEDING SPECIFICATIONS

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

Perennial Rye Grass

Vork 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. Note: Optimum seeding dates February 1 to April 30 and August 15 to October 30.

STANDARD FOR LAND GRADING

PLANNING CRITERIA

The 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 elevation 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. Facilities such as waterways, ditches, diversions, grade stabilization structures, retaining walls and subsurface drains should be included where necessary.

0.7 Lbs./1,000 SF

- Erosion control measures shall be designed and installed in accordance with the applicable standard contained herein. The 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. Provisions 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 slopes. 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 environmental functions of the stream.

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 vegetative cover This section of this Standard addresses the potential for excessive soil compaction in light of the intended land use, testing for excessive soil compaction where permanent vegetation is to be established and mitigation of excessive soil compaction when

- Due 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)
- Airports, railways or other transportation facilities Areas requiring industry or government specified soil designs, including golf courses, landfills, wetland restoration, septic disposal fields, wet/lined ponds, etc.
- Areas governed or regulated by other local, state or federal regulations which dictate soil conditions 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.

1. 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

proposed as part of the sequence of construction.

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 testing. 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 compacted areas would require compaction mitigation. Soil compaction testing is not required if/when subsoil compaction remediation (scarification/tillage (6" minimum depth) or similar) is

SOIL CONSERVATION NOTES

Soil Test Method Options

Probing Wire Test Method This 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 ength, with 6" inches 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 several 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 bends 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 penetration fails and an obstruction is suspected (rocks, root, debris, etc.) the test can be epeated 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 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.

Handheld Soil Penetrometer Test Method

his test shall be conducted based on the Standard Operation Procedure (SOP) #RCE2010-001, prepared by the Rutgers Cooperative Extension, Implemented 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.

This test shall be certified by a New Jersey Licensed Professional Engineer utilizing only undisturbed samples (reconstitution of the sample not ermitted) collected 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 texture 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 channels prevent the taking of undisturbed samples, this test shall not be used. Where 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

f 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) 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 excessively compacted and compaction mitigation is required.

his test shall be certified by a New Jersey Licensed Professional Engineer and conducted by a nuclear gauge certified inspector pursuant to ASTM D6938 . The bulk density measurement results shall be compared with the Maximum Dry Bulk Densities in Table 19-1. A result of less han 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 excessively compacted and compaction mitigation is required.

Maximum Dry Bulk Densities (grams/cubic centimeter) by soil type

Soil Type/Texture	Bulk Densi
Coarse, Medium and Fine Sands and Loamy Sands	1.80
Very Fine Sand and Loamy Very Fine Sand	1.77
Sandy Loam	1.75
Loam, Sandy Clay Loam	1.70
Clay Loam	1.65
Sandy Clay	1.60
Silt, Silt Loam	1.55
Silty Clay Loam	1.50
Silty Clay	1.45
Clay	1.40
•	

Source: USDA Natural Resource Conservation Service, Soil Quality Information Sheet, Soil Quality Resource Concerns: Compaction, April 1996 5. Additional testing methods which conform to ASTM standards and specifications, and which produce a dry weight, soil bulk density neasurement may be allowed subject to District approval.

Procedures for Soil Compaction Mitigation

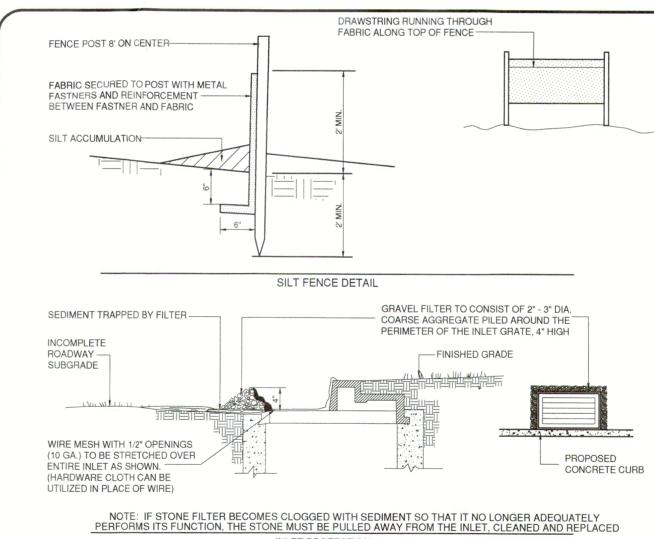
If subgrade soils are determined to be excessively compacted by testing, as identified above, procedures shall be used to mitigate excessive soil compaction prior to placement of topsoil and establishment of permanent vegetative cover. Restoration of compacted soils shall be through deep scarification/tillage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

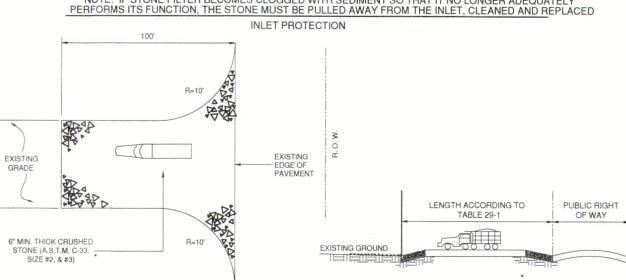
- Timber, logs, brush, rubbish, rocks, stumps and vegetative matter which will interfere with the grading operation or affect the planned stability or fill areas shall be removed and disposed of according to the plan.
- Topsoil is to be stripped and stockpiled in amounts necessary to complete finish grading of all exposed areas requiring topsoil. See
- Fill material is to be free of brush, rubbish, timber, logs, vegetative matter and stumps in amounts that will be detrimental to constructing All structural fills shall be compacted as determined by structural engineering requirements for their intended purpose and as required to

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

reduce slipping, erosion or excessive saturation All disturbed areas shall be left with a neat and finished appearance and shall be protected from erosion. See Standards for Permanent Vegetative Cover for Soil Stabilization

SOIL CONSERVATION NOTES





CONTRACTOR TO PROVIDE APPROPRIATE TRANSITION BETWEEN THE STABILIZED ENTRY AND THE R.O.W. STABILIZED CONSTRUCTION ENTRANCE

Maintenance

he entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto roadways. This may require periodic dressing with additional stone or additional length as conditions demand and repair and/or cleanout of any measures used to trap sediment. All ediment spilled, dropped, washed, or tracked onto roadways (public or private) or other impervious surfaces must be removed immediately.

Where accumulation of dust/sediment is inadequately cleaned or removed by conventional methods, a power broom or street sweeper will be

required to clean paved or impervious surfaces. All other access points which are not stabilized shall be blocked off SOIL CONSERVATION DETAILS



S.C.D. SOILS MAP

1'' = 500'

USPSBR—Urban land-Psamments, wet substratum complex, 0 to 2 percent slopes, rarely flooded Properties and qualities Slope: 0 to 2 percent

Mean annual air temperature: 46 to 58 degrees Frost-free period: 190 to 260 days Farmland classification: Not prime farmland

Mean annual precipitation: 41 to 50 inches

Map Unit Setting

National map unit symbol: 2xhpc Elevation: 0 to 30 feet

Minor components: 10 percent

Slope: 0 to 2 percent

Typical profile

Map Unit Composition Urban land, wet substratum, occasionally flooded: 60 percent Psamments, wet substratum, occasionally flooded, and similar soils: 30

Estimates are based on observations, descriptions, and transects of the Description of Urban Land, Wet Substratum, Occasionally Flooded Properties and qualities

Runoff class: Very high Frequency of flooding: Occasional Interpretive groups

Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 8s Hydric soil rating: No Description of Psamments, Wet Substratum, Occasionally Flooded

Landform: Flats Landform position (two-dimensional): Footslope Landform position (three-dimensional): Talf Down-slope shape: Linear Across-slope shape: Linear

2 to 36 inches: gravelly coarse sand

^A - 0 to 12 inches: coarse sand

^C2 - 36 to 80 inches: sand

Percent of map unit: 5 percen Parent material: Sandy human-transported material

Depth to restrictive feature: More than 80 inches Drainage class: Moderately well drained Runoff class: Very high Capacity of the most limiting layer to transmit water (Ksat): High to very high (6.00 to 20.00 in/hr) Depth to water table: About 18 to 42 inches Frequency of flooding: Occasional Frequency of ponding: None

Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0

Available water capacity: Low (about 3.6 inches) Interpretive groups Land capability classification (irrigated): None specified Land capability classification (nonirrigated): 7s

Minor Components Mullica, occasionally flooder

Hydrologic Soil Group: A

Percent of map unit: 5 percent Landform: Depressions on flats, drainageways on flats, swales on Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Talf, dip Down-slope shape: Linear, concave Across-slope shape: Linear, concave

Hydric soil rating: Yes Berryland, occasionally flooded

Hydric soil rating: Yes

Landform: Deflation flats on flats, drainageways on flats, depression Landform position (two-dimensional): Toeslope Landform position (three-dimensional): Talf, dip Down-slope shape: Linear, concave

SOILS DESCRIPTION

ESTABLISH EROSION CONTROL MEASURES SITE CLEARING 8 DAYS ROUGH GRADING 5 DAYS CONSTRUCT STORM WATER BASIN INCLUDING VEGETATIVE STABILIZATION N/A CONSTRUCT SANITARY SEWER SYSTEM & WATER SYSTEM 2 DAYS CONSTRUCT STORM DRAINAGE STRUCTURES FINE GRADE AND CONSTRUCT STONE BASE 5 DAYS CONSTRUCT DRAINAGE SWALES SOIL COMPACTION TESTING PRIOR TO THE INSTALLATION OF TOPSOIL N/A RESTORATION AS REQUIRED PERFORM TEMPORARY SEEDING AS NECESSARY PERFORM PAVING AND CONSTRUCT SIDEWALKS 14 DAYS LAY BUILDING FOUNDATIONS 90 DAYS PERFORM PERMANENT SEEDING AND LANDSCAPING

CONSTRUCTION WILL BEGIN FALL 2022. CONSTRUCTION SEQUENCE

LAND COVER . 0.46 Acres Developed

Total Area of Disturbance:

VARIOUS LOT GRADING TO CONTINUE THROUGHOUT CONSTRUCTION SEQUENCE.

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

Adjacent Site Conditions: RESPONSIBILITY

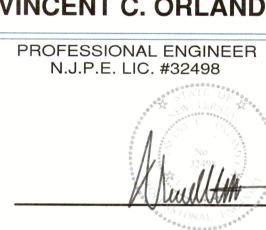
All soil erosion and sediment control measures and facilities shall be the sole responsibility of the developer/owner. The responsibility shall include, but not be limited to installation, inspection, and maintenance of conditions during and following construction.

APPLICANT/OWNERS: Mahalo Hotels, LLC c/o Eustace Mita 2501 Seaport Drive, Suite 400 Chester, PA 19013 (610)497-9700

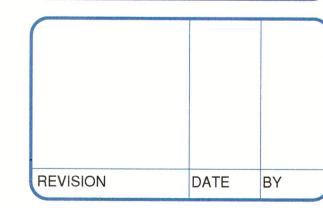
GENERAL INFORMATION



VINCENT C. ORLANDO



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DATE: 8/15/2022 DRAWN BY: MAJ SCALE: AS NOTED | CHECKED BY: VCO PROJECT #: 8859 SHEET: 7 0F 7

