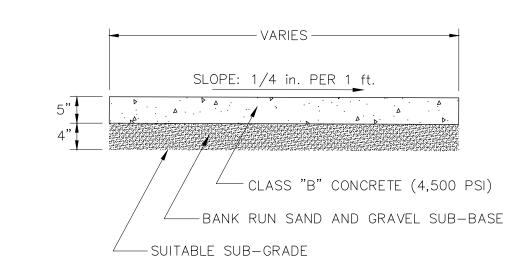


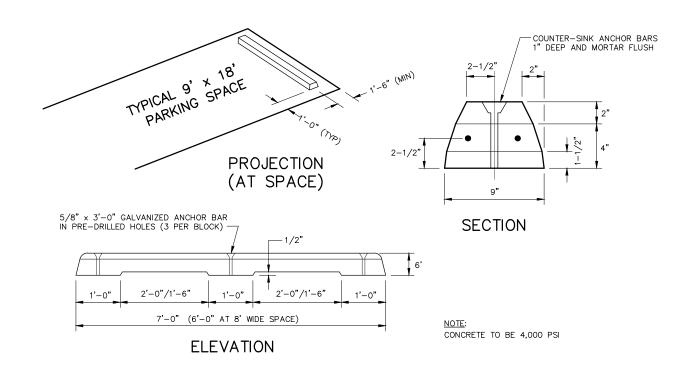
NOTE:

REPLACEMENT OF EXISTING SURFACES OTHER THAN CONCRETE OR BITUMINOUS PAVEMENT WILL BE AS DIRECTED BY THE MUNICIPAL ENGINEER.

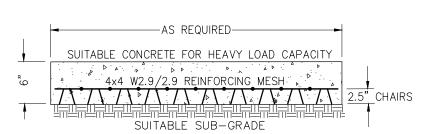
TYPICAL PARKING AREA PAVEMENT DETAIL



TYPICAL SIDEWALK DETAIL

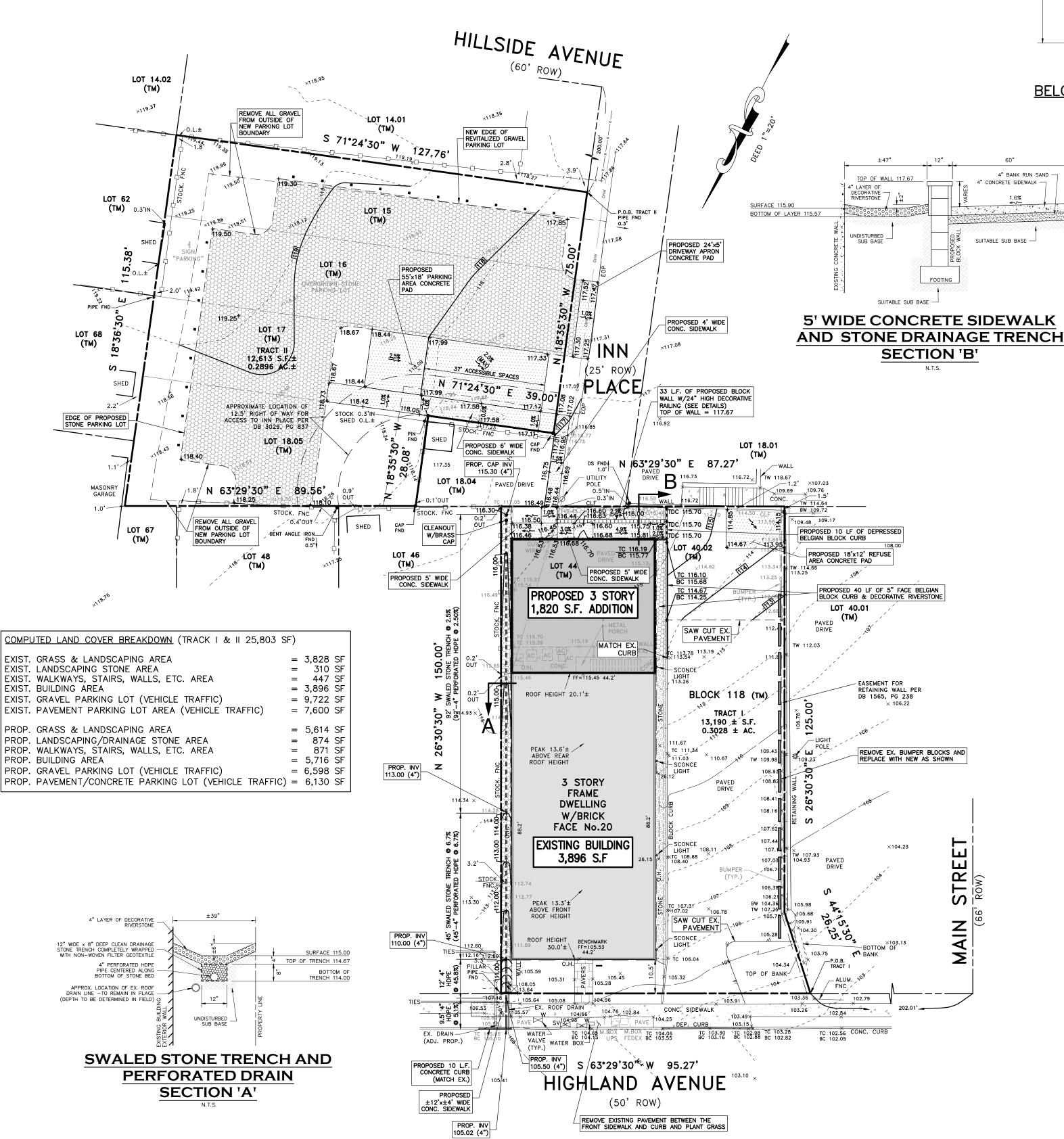


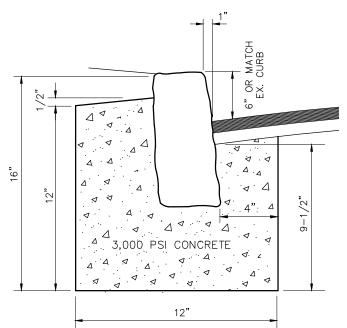
PRECAST CONCRETE BUMPER BLOCK DETAIL



TYPICAL SECTION OF PROPOSED 6" THICK CONCRETE PAD

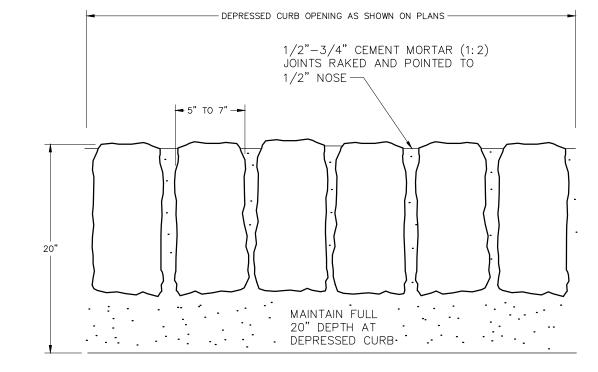
(AT REFUSE AREA, PARKING AREA AND DRIVEWAY APRON)



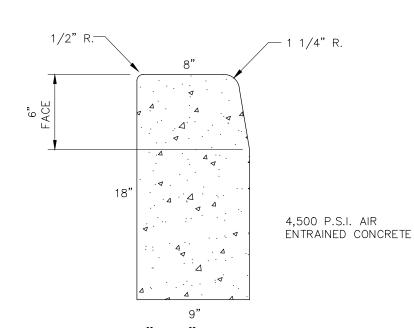


BELGIAN BLOCK CURB DETAIL

NOT TO SCALE



BELGIAN BLOCK DEPRESSED CURB DETAIL



TYPICAL 9"x18" CURB DETAIL

(AT HIGHLAND AVENUE ONLY)

CONSTRUCTION NOTES:

- PRIOR TO COMMENCEMENT OF ANY WORK, THE CONTRACTOR SHALL OBTAIN ALL THE NECESSARY STATE, COUNTY AND TOWNSHIP PERMITS.
- 2. THE CONTRACTOR SHALL CONTACT THE UTILITIES COORDINATION COMMITTEE AT 1-800-272-1000 FOR A UTILITY MARK UP IN THE AREA OF THE CONSTRUCTION AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF ANY WORK.
- 3. THESE PLANS IN NO WAY SHOW ALL THE EXISTING UNDERGROUND OR ABOVE GROUND UTILITIES LOCATED WITHIN THE PROJECT SITE, HIGHLAND AVE. R.O.W. AND INN PLACE R.O.W. IT IS THEREFORE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY THE EXACT LOCATION AND DEPTH OF ALL THE EXISTING UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO COMMENCEMENT OF ANY WORK.
- 4. WHERE EXISTING UTILITIES ARE TO BE CROSSED BY THE PROPOSED CONSTRUCTION, TEST PITS SHALL BE DUG BY THE CONTRACTOR PRIOR TO ANY CONSTRUCTION ACTIVITY TO ASCERTAIN EXISTING INVERTS, MATERIALS AND SIZES. THE TEST PIT INFORMATION SHALL BE PROVIDED TO THE ENGINEER PRIOR TO CONSTRUCTION IN ORDER TO PERMIT ADJUSTMENTS, IF REQUIRED.
- 5. ALL THE EXISTING CURBS, SIDEWALK AND DRIVEWAYS DISTURBED DUE TO THE PROPOSED IMPROVEMENTS SHALL BE RESTORED IN ACCORDANCE WITH THE CURRENT TOWNSHIP AND MIDDLESEX COUNTY'S STANDARDS AND SPECIFICATIONS.
- 6. ALL THE EXISTING POWER POLES WITHIN 10 FEET OF THE PROPOSED IMPROVEMENTS SHALL EITHER BE RELOCATED OR SUPPORTED PER THE RECOMMENDATIONS OF THE UTILITY COMPANY.
- 7. SEWERS CONVEYING SANITARY FLOW, COMBINED SANITARY AND STORMWATER FLOW, OR INDUSTRIAL FLOW SHALL BE SEPARATED FROM WATER MAINS BY A DISTANCE OF AT LEAST 10 FEET HORIZONTALLY. IF SUCH LATERAL SEPARATION IS NOT POSSIBLE, THE PIPES SHALL BE IN SEPARATE TRENCHES WITH THE SEWER AT LEAST 18 INCHES BELOW THE BOTTOM OF THE WATER MAIN, OR SUCH OTHER SEPARATION AS APPROVED BY THE NEW JERSEY DEPARTMENT ENVIRONMENTAL PROTECTION.
- 8. WHERE APPROPRIATE SEPARATION FROM WATER MAIN IS NOT POSSIBLE, THE SEWER SHALL BE ENCASED IN CONCRETE, OR CONSTRUCTED OF DUCTILE IRON PIPE USING MECHANICAL OR SLIP—ON JOINTS FOR A DISTANCE OF AT LEAST 10 FEET ON EITHER SIDE OF THE CROSSING. IN ADDITION, ONE FULL LENGTH OF SEWER PIPE SHOULD BE LOCATED SO BOTH JOINTS WILL BE AS FAR FROM THE WATER LINE AS POSSIBLE. WHERE WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT FOR THE SEWER SHALL BE PROVIDED. THE DEPARTMENT MAY REQUIRE ADDITIONAL STRUCTURAL SUPPORT FOR STORM SEWERS CROSSING OVER SEWER.
- 9. THE OUTBOUND SURVEY AND TOPOGRAPHIC INFORMATION AS SHOWN ON THIS PLAN HAS BEEN PROVIDED BY THE APPLICANT.
- 10. THE SURVEY INFORMATION AS SHOWN ON THESE PLANS IS SUBJECT TO SUCH FACTS AS AN ACCURATE TITLE SEARCH MAY DISCLOSE.
- 11. MAINTAIN EXISTING UTILITY CONNECTIONS WHERE POSSIBLE.



GRAPHIC SCALE 1" = 20'

O 20 40 60

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ENGINEERING GROUP, INC. CERTIFICATE OF AUTHORIZATION NUMBER: 24GA28084700

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SITE PLAN
PREPARED FOR:
MIXED USE

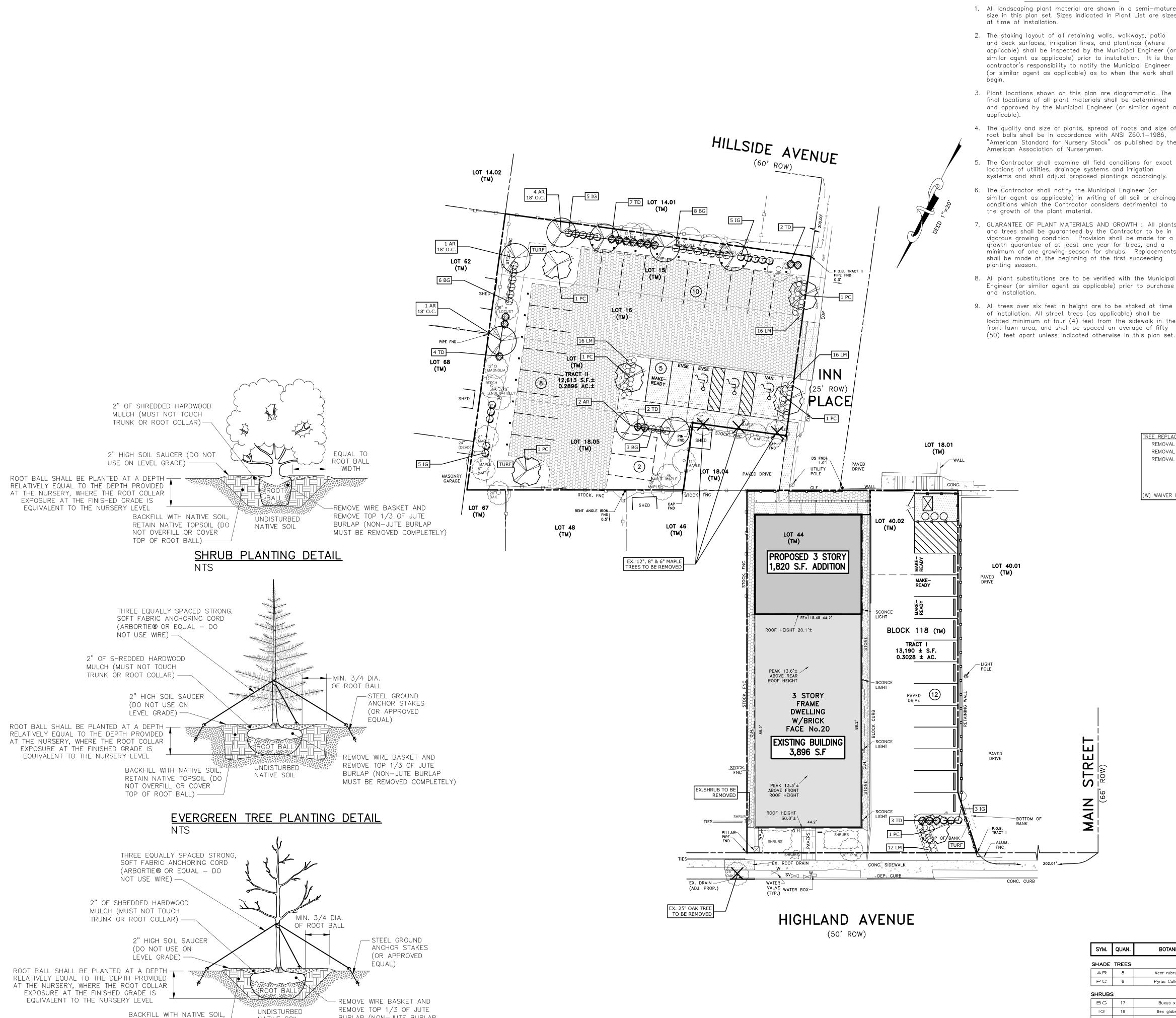
LOTS 15-17, 18.05, 40.02 & 44 IN BLOCK 118 20 HIGHLAND AVENUE

> SITUATED IN: BOROUGH OF METUCHEN MIDDLESEX COUNTY, NEW JERSEY

CAD: 46-65 DATE: 10/18/23 SCALE: 1" = 20'
FILE: 046.0065 DRAWN: DSA SHEET 3 OF 6

LESLIE A. WALKER III, PE PROFESSIONAL ENGINEER

NEW JERSEY LICENSE NUMBER: 24GE04729700



BURLAP (NON-JUTE BURLAP

MUST BE REMOVED COMPLETELY)

NATIVE SOIL

DECIDUOUS TREE PLANTING DETAIL

RETAIN NATIVE TOPSOIL (DO

TOP OF ROOT BALL) -----

NOT OVERFILL OR COVER

PLANTING NOTES

- 1. All landscaping plant material are shown in a semi—mature size in this plan set. Sizes indicated in Plant List are sizes
- 2. The staking layout of all retaining walls, walkways, patio and deck surfaces, irrigation lines, and plantings (where applicable) shall be inspected by the Municipal Engineer (or similar agent as applicable) prior to installation. It is the contractor's responsibility to notify the Municipal Engineer (or similar agent as applicable) as to when the work shall
- 3. Plant locations shown on this plan are diagrammatic. The final locations of all plant materials shall be determined and approved by the Municipal Engineer (or similar agent as
- 4. The quality and size of plants, spread of roots and size of root balls shall be in accordance with ANSI Z60.1—1986, "American Standard for Nursery Stock" as published by the
- 5. The Contractor shall examine all field conditions for exact locations of utilities, drainage systems and irrigation
- 6. The Contractor shall notify the Municipal Engineer (or similar agent as applicable) in writing of all soil or drainage conditions which the Contractor considers detrimental to
- 7. GUARANTEE OF PLANT MATERIALS AND GROWTH: All plants and trees shall be guaranteed by the Contractor to be in vigorous growing condition. Provision shall be made for a growth guarantee of at least one year for trees, and a minimum of one growing season for shrubs. Replacements shall be made at the beginning of the first succeeding
- 8. All plant substitutions are to be verified with the Municipal Engineer (or similar agent as applicable) prior to purchase
- of installation. All street trees (as applicable) shall be located minimum of four (4) feet from the sidewalk in the front lawn area, and shall be spaced an average of fifty (50) feet apart unless indicated otherwise in this plan set.

- 10. All landscape areas, either newly created or in existing areas that require repair shall be provided with a 4" thick minimum topsoil layer if none less than 4" are present and shall be temporarily seeding during construction at the rates and applications as specified in the 'Temporary Stabilization Specs' notation of the Soil Erosion and Sediment Control Details within this plan set. If lawns are to be provided, seed at the rates and applications as specified in the 'Permanent Stabilization Specs' notation of the soil erosion and sediment control details within this
- 11. All side slopes and bottoms of intermittent water-containing structures (such as grassed waterways or detention basins, if applicable) shall be provided with 6" thick minimum topsoil layers and shall be seeding at the rates and applications as specified in the 'Intermittent Waterways — Permanent Seeding Specs' notation of the Soil Erosion and Sediment Control Details within this plan set.
- 12. The Contractor shall lime, fertilize and mulch all landscape areas at the rate specified by the Soil Erosion and Sediment Control Permanent Stabilization notes within this
- 13. It is the Contractor's responsibility to determine soil acidity levels of the underlying soils of the new lawn areas. A PH level of 4 or less will require a new 12" minimum layer of soil with a PH of 5 or greater before the topsoil is applied. The acidic underlying soil shall either be ameliorated by scarifying 12" of the soil and adding limestone until the soil is no longer acidic or a new layer will be applied on top, which ever is most applicable.
- 14. No soil shall be placed atop the planting rootball and the root collar must be exposed. Wire baskets and the top $\frac{1}{3}$ of jute burlap are to be removed prior to backfilling the planting pit. Any material other than jute burlap must be removed completely. The sub-soil should not be disturbed directly under the root ball platform.
- 15. The Contractor shall fertilize all landscaping plant material with 5-10-5 fertilizer, or approved equal, at the rate specified by the manufacturer.
- All tree pits, plant beds and ground cover areas shall be mulched to a 3—inch depth (after settlement) with shredded hardwood mulch. Shredded hardwood mulch with a maximum of one (1) inch of mulch shall be placed within twelve (12) inches of tree trunks. The mulch should not come in contact with the trunk or the root collar. The mulch shall have no leaves, weeds, branches, shavings, twigs over $\frac{1}{2}$ " diameter, or foreign material such as stones,

REMOVAL OF 1 TREE 24" DBH TO < 30" DBH \times (7) REPLACEMENTS = 7 TREES

REMOVAL OF 1 TREE 12" DBH TO < 18" DBH x (4) REPLACEMENTS = 4 TREES

(W) WAIVER REQUESTED

REMOVAL OF 2 TREES 6" DBH TO < 12" DBH \times (6) REPLACEMENTS = 6 TREES

TOTAL REPLACEMENT TREES REQUIRED: (7+5+6) = 18 TREES

TOTAL REPLACEMENT TREES PROVIDED: = 14 TREES (W)

- 17. All water applied to planted or lawn areas shall be free from impurities harmful to vegetation and applied at a rate of five gallons of water per square yard of plant pit. all watering is the responsibility of the applicant. 18. Backfill material for raised plant beds shall consist of
 - natural loam topsoil, free from subsoil, and shall be obtained from an area which has never been stripped. Topsoil shall have been removed from a depth of no more than 1 foot, or less if subsoil is encountered. Topsoil shall be of uniform quality, free from hard clods, stiff clay hard pan, sods, partially disintegrated stone, lime cement, tar residues, chips or any other undesirable material.
- 18. All proposed trees (as applicable) should be provided with anchoring and stakes. Anchoring must be cord made of strong, soft fabric material (NO WIRE). All anchoring and
- stakes must be removed after one (1) year. 19. Areas disturbed by landscape operations shall be graded to
- 20. Provide Tree protection fencing as specified in the Soil Erosion and Sediment Control Details within this plan set.

match existing. Topsoil and seed as required.

FREE-STANDING PLANTS OR TREES!!!

- 21. Plant material shown in a mass or touching each other shall be allowed to grow together to perform as a screen or hedge. DO NOT PRUNE OR SHEAR INTO INDIVIDUAL
- 22. FALL HAZARD NOTES: All plant materials that are known or suspected to have a Fall Planting Hazard shall be dug, transplanted and installed during the Spring Planting season only!! The following plant species are known to have a Fall Planting Hazard:

Acer rubrum & vars. Platanus acerifolia Prunus - all stone fruits Betula varieties Carpinus varieties Pyrus - all pears Cornus varieties Quercus - all oaks Crataegus varieties Salix - weeping varieties Koelreuteria Styrax japonica Liquidambar styraciflua Tilia tomentosa Liriodendron tulipifera Zelkova varieties Magnolia varieties

23. This drawing is to be used for Landscaping development purposes only.

24. All landscaping procedures and applications as indicated in this plan set shall be performed in strict compliance with the Standards for Soil Erosion and Sediment Control in New

> REV. DESCRIPTION DATE BY LANDSCAPING PLAN & DETAILS

GRAPHIC SCALE 1" = 20'

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> SITE PLAN PREPARED FOR: MIXED USE

LOTS 15-17, 18.05, 40.02 & 44 IN BLOCK 118

20 HIGHLAND AVENUE SITUATED IN: BOROUGH OF METUCHEN

MIDDLESEX COUNTY, NEW JERSEY 46-65 DATE: 10/18/23 SCALE: 1" = 20'046.0065 DRAWN: DSA SHEET 4 OF 6

PROFESSIONAL ENGINEER NEW JERSEY LICENSE NUMBER: 24GE04729700

PLANT LIST

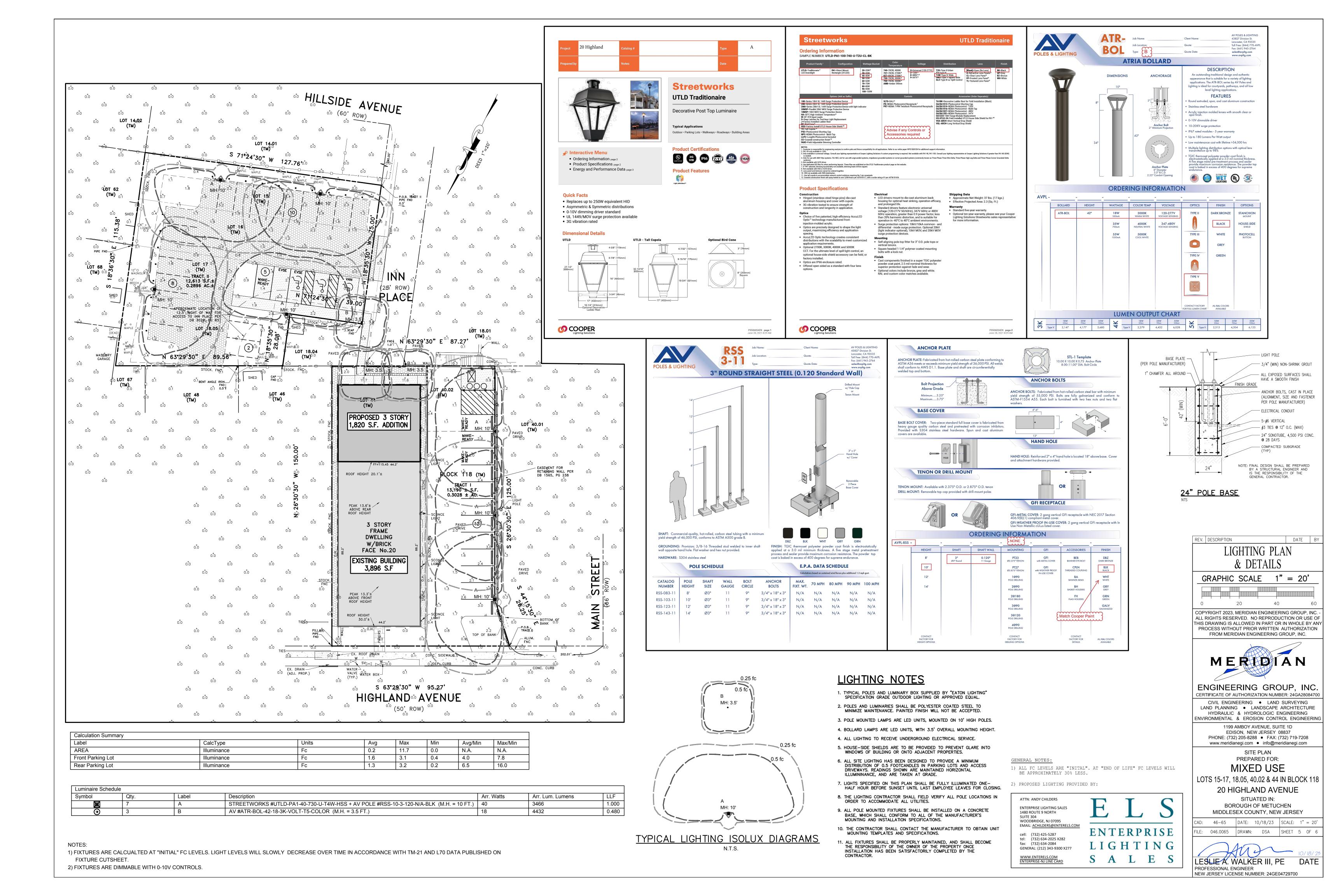
PLANTING SIZE REMARKS BOTANICAL NAME COMMON NAME 2.5" Cal. Acer rubrum 'JFS-KW78' Armstrong Gold Maple Tree Pyrus Calleryana 'Capital' Capital Pear Tree 2.5" Cal. В&В B&B Buxus x 'Green Gem' Green Gem Boxwood 24" High IG 18 llex glabra 'Compacta' Compact Inkberry 36" High B&B Big Blue Lilyturf 12" High #1 Cont. Liriope muscari

Dense Japanese Yew

36" High

TD 18

Taxus cuspidata 'Densiformis'



PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION 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 Standard for Land Grading. B. Immediately prior to seeding and topsoil application, the subsoil shall be evaluated for compaction in accordance with the Standard for Land C. Topsoil should be handled only when it is dry enough to work without damaging the soil structure. A uniform application to a depth of 5 inches (unsettled) is required on all sites. Topsoil shall be amended with organic matter, as needed, in accordance with the Standard for D. Install needed erosion control practices or facilities such as diversions, grade-stabilization structures, channel stabilization measures, sediment basins, and waterways Seedbed Preparation A. Uniformly apply ground limestone and fertilizer to topsoil which has been spread and firmed, according to soil test recommendations such as offered by Rutgers Co-operative Extension Soil sample mailers are available from the local Rutgers Cooperative Extension offices (http://njaes.rutgers.edu/county/). Fertilizer shall be applied at a rate of 500 pounds per acre or 11 pounds per 1,000 square feet of 10-10-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise and incorporated into the surface 4 inches If fertilizer is not incorporated, apply one-half the rate described above during seedbed preparation and repeat another one-half rate application of the same fertilizer within 3 to 5 weeks after seeding. B. Work lime and fertilizer into the topsoil as nearly as practical to a depth of 4 inches with a disc, spring-tooth harrow, or other suitable equipment. The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonable uniform seedbed C. High acid producing soil. Soils having a pH of 4 or less or containing iron sulfide shall be covered with a minimum of 12 inches of soil having a pH of 5 or more before initiating seedbed reparation. See Standard for Management of High Acid-Producing Soils for specific Seeding A. Select a mixture from Table 4-3 or use a mixture recommended by Rutgers Cooperative Extension or Natural Resources Conservation Service which is approved by the Soil Conservation District. Seed germination shall have been tested within 12 months of the planting date. No seed shall be accepted with a germination test date more than 12 months old unless retested. 1. Seeding rates specified are required when a report of compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in rates may be used when permanent vegetation is established prior to a report of compliance inspection. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative coverage with the specified seed mixture for the seeded area and mowed once. 2. Warm-season mixtures are grasses and legumes which maximize growth at high temperatures, generally 85° F and above. See able 4-3 mixtures 1 to 7. Planting rates for warm-season grasses shall be the amount of Pure Live Seed (PLS) as determined by germination testing results. 3. Cool-season mixtures are grasses and legumes which maximize growth at temperatures below 85°F. Many grasses become active at 65° F. See Table 4-3, mixtures 8-20. Adjustment of planting rates to compensate for the amount of PLS is not required for cool season grasses. B. Conventional Seeding is performed by applying seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked seedings, seed shall be incorporated into the soil within 24 hours of seedbed $preparation \ to \ a \ depth \ of \ 1/4 \ to \ 1/2 \ inch, \ by \ raking \ or \ dragging. \ Depth \ of \ seed \ placement \ may \ be \ 1/4 \ inch \ deeper \ on \ coarse-textured \ soil.$. After seeding, firming the soil with a corrugated roller will assure good seed-to-soil contact, restore capillarity, and improve seedling emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be maximized. Hydroseeding is a broadcast seeding method usually involving a truck, or trailer-mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Shortfibered mulch may be applied with a hydroseeder following seeding (also see Section 4-Mulching below). Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. When poor seed to soil contact occurs, there is a reduced seed germination and growth. Mulching is required on all seeding. Mulch will protect against erosion before grass is established and will promote faster and earlier establishment. The existence of vegetation sufficient to control soil erosion shall be deemed compliance with this mulching requirement. Refer to the detail "EXPOSED SOILS STABILIZED WITH MULCH ONLY DURING NON-GROWING SEASON & FOR FASTER ESTABLISHMENT" for application If soil moisture is deficient supply new seeding with adequate water (a minimum of 1/4 inch applied up to twice a day until vegetation is well established). This is especially true when seedings are made in abnormally dry or hot weather or on droughty sites. Since soil organic matter content and slow release nitrogen fertilizer (water insoluble) are prescribed in Section 2A - Seedbed Preparation in this Standard, no follow-up of topdressing is mandatory. An exception may be made where gross nitrogen deficiency exists in the soil to the extent that turf failure may develop. In that instance, topdress with 10-10-10 or equivalent at 300 pounds per acre or 7 pounds per 1,000 square feet every 3 to 5 weeks until the gross nitrogen deficiency in the turf is ameliorated. The quality of permanent vegetation rests with the contractor. The timing of seeding, preparing the seedbed, applying nutrients, mulch and other management are essential. The seed application rates in Table 4-3 are required when a Report of Compliance is requested prior to actual establishment of permanent vegetation. Up to 50% reduction in application rates may be used when permanent vegetation is established prior to requesting a Report of Compliance from the district. These rates apply to all methods of seeding. Establishing permanent vegetation means 80% vegetative cover (of the seeded species) and mowed once. Note this designation of mowed once does not guarantee the permanency of the turf should other maintenance factors be neglected or otherwise mismanaged. TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION (reference: Section 7-1, The Standards for Soil Erosion and Sediment Control in NJ, 7th Edition, January 2014) Site Preparation 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. C. Immediately prior to seeding, the surface should be scarified 6" to 12" where there has been soil compaction. This practice is permissible only where there is no danger to underground utilities (cables, irrigation systems, etc.). Seedbed Preparation A. Apply ground limestone and fertilizer according to soil test recommendations such as offered by Rutgers Co-operative Extension, Soil sample mailers are available from the local Rutgers Cooperative Extension offices. Fertilizer shall be applied at the rate of 500 pounds per acre or 11 pounds per 1,000 square feet of 10-20-10 or equivalent with 50% water insoluble nitrogen unless a soil test indicates otherwise. Limestone rates shall be established by soil testing only. Calcium carbonate is the equivalent and standard for measuring the ability of liming materials to neutralize soil acidity and supply calcium and magnesium to grasses and legumes. B. Work lime and fertilizer into the soil as nearly as practical to a depth of 4 inches with a disc, springtooth harrow, or other suitable equipment The final harrowing or disking operation should be on the general contour. Continue tillage until a reasonable uniform seedbed is prepared D. Soils high in sulfides or having a pH of 4 or less refer to Standard for Management of High Acid Producing Soils, pg. 1-1. Select seed from recommendations in table below TEMPORARY SEEDING SPECIFICATIONS (PLANT HARDINESS ZONE 6B): SEED SELECTIONS 1. PERENNIAL RYEGRASS 100 LBS./AC (1.0 LBS./1,000 S.F.) 0.5" (1" IN SANDY SOILS) 86 LBS./AC (2.0 LBS./1,000 S.F.) 1.0" (2" IN SANDY SOILS) 2. SPRING OATS 3. WINTER BARLEY 96 LBS./AC (2.2 LBS./1,000 S.F.) 1.0" (2" IN SANDY SOILS) 100 LBS./AC (1.0 LBS./1,000 S.F.) 0.5" (1" IN SANDY SOILS) 4. ANNUAL RYEGRASS 5 WINTER CEREAL RYE 112 LRS /AC (2.8 LRS /1.000 S.E.) 1.0" (2" IN SANDY SOILS) AUGUST 1 TO NOVEMBER 1 WARM SEASON GRASSE SEED SELECTIONS 6. PEARL MILLET 20 LBS./AC (0.5 LBS./1,000 S.F.) 1.0" (2" IN SANDY SOILS) MAY 15 TO AUGUST 15 7. MILLET (GERMAN OR HUNGARIAN) 30 LBS./AC (07 LBS./1,000 S.F.) 1.0" (2" IN SANDY SOILS) MAY 15 TO AUGUST 15 Seeding rate for warm season grass, selections 5 - 7 shall be adjusted to reflect the amount of Pure Line Seed (PLS) as determined by a germination test result. No adjustment is required for cool season grasses. May be planted throughout summer if soil moisture is adequate or seeded area can be irrigated . Plant Hardiness Zone. (see figure 7-1, pg. 7-4) Conventional Seeding. Apply seed uniformly by hand, cyclone (centrifugal) seeder, drop seeder, drill or cultipacker seeder. Except for drille hydroseeded or cultipacked seedings, seed shall be incorporated into the soil, to a depth of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on coarse textured soil Hydroseeding is a broadcast seeding method usually involving a truck or trailer mounted tank, with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Short fibered mulch may be applied with a hydroseeder following seeding. (also see Section IV Mulching) Hydroseeding is not a preferred seeding method because seed and fertilizer are applied to the surface and not incorporated into the soil. Poor seed to soil contact occurs reducing see ination and growth. Hydroseeding may be used for areas too steep for conventional equipment to traverse or too obstructed with rocks, D. After seeding, firming the soil with a corrugated roller will assure good seed-to-soil contact, restore capillarity, and improve seedling emergence. This is the preferred method. When performed on the contour, sheet erosion will be minimized and water conservation on site will be . Mulching Mulching is required on all seeding. Mulch will protect against erosion before grass is established and will promote faster and earlier the detail "EXPOSED SOILS STABILIZED WITH MULCH ONLY DURING NON-GROWING SEASON & FOR FASTER ESTABLISHMENT" for application Figure 9-3: Root Protection During Construction Guide stimate a tree's Protected Root one (PRZ) by calculating the se) in inches. Multiply measured dbh by 1.5 or 1.0. Express the result in feet. Dbh x 1.5: Critical root radius Dbh x 1.0: Critical root radius) BOX TREES WITHIN 25 FEET OF A BUILDING SITE TO PREVENT MECHANICAL INJURY. FENCING OR OTHER BARRIER SHOULD BE INSTALLED AT THE DRIP LINE OF THE TREE BRANCHES. BOARDS WILL NOT BE NAILED TO TREES DURING BUILDING OPERATIONS. FEEDER ROOTS SHOULD NOT BE CUT IN AN AREA INSIDE THE DRIP LINE OF THE TREE BRANCHES.

TREE LIMB REMOVAL, WHERE NECESSARY, WILL BE DONE FLUSH TO TRUNK OR MAIN BRANCH AND THAT AREA PAINTED WITH A GOOD GRADE OF TREE

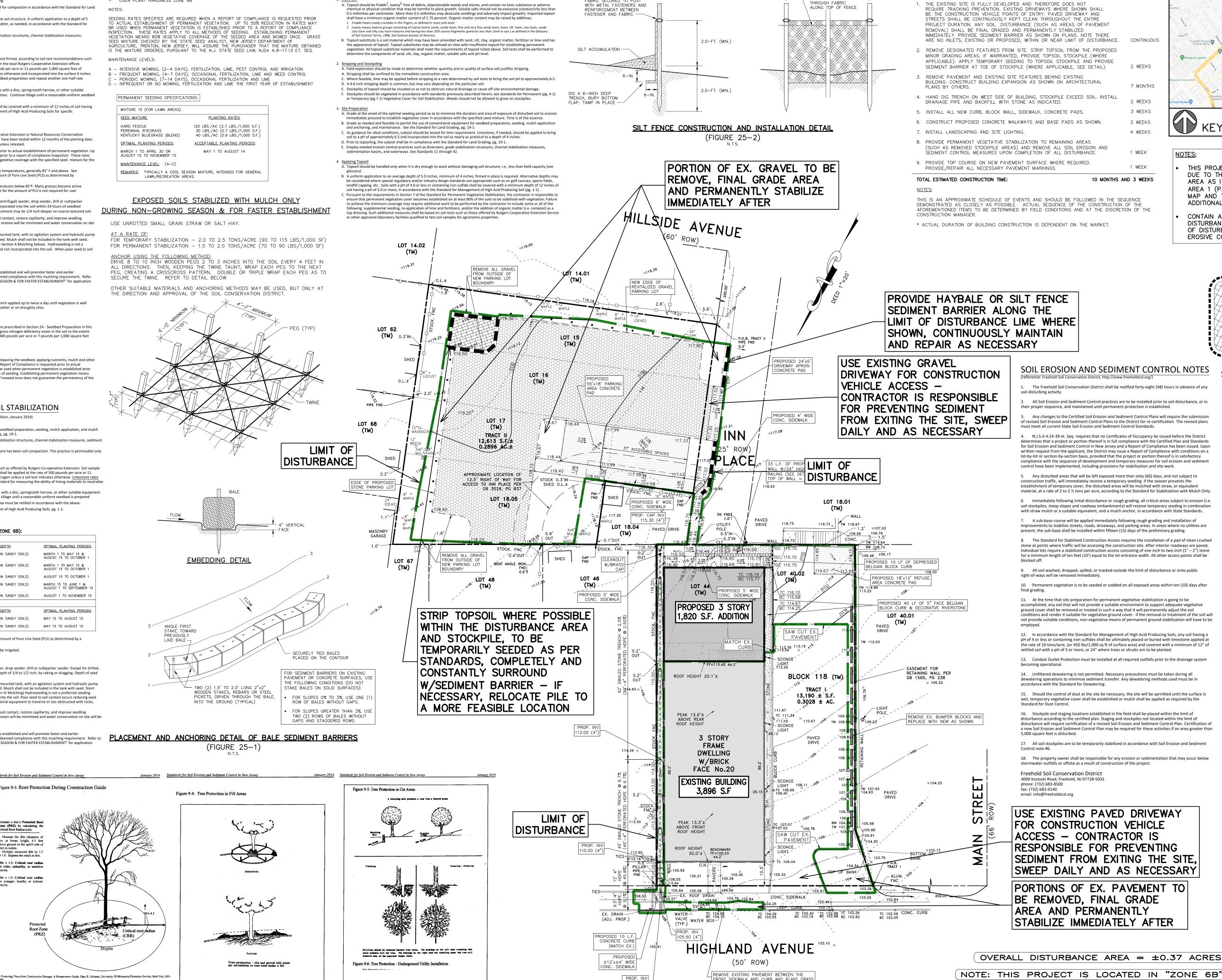
TREE PROTECTION FENCING DETAIL

N.T.S.

OPTIMAL PLANTING PERIODS:

MARCH 1 TO MAY 15 & AUGUST 15 TO OCTOBER

AUGUST 15 TO OCTOBER



105.02 (4")

STANDARD FOR TOPSOILING

reference: Section 8-1. The Standards for Soil Frosion and Sediment Control in NJ, 7th Edition, January 2017

generated (in post conditions, enough volume of material to cover 4" minimum in all vegetated areas within the limit of disturbance), follow the standards below:

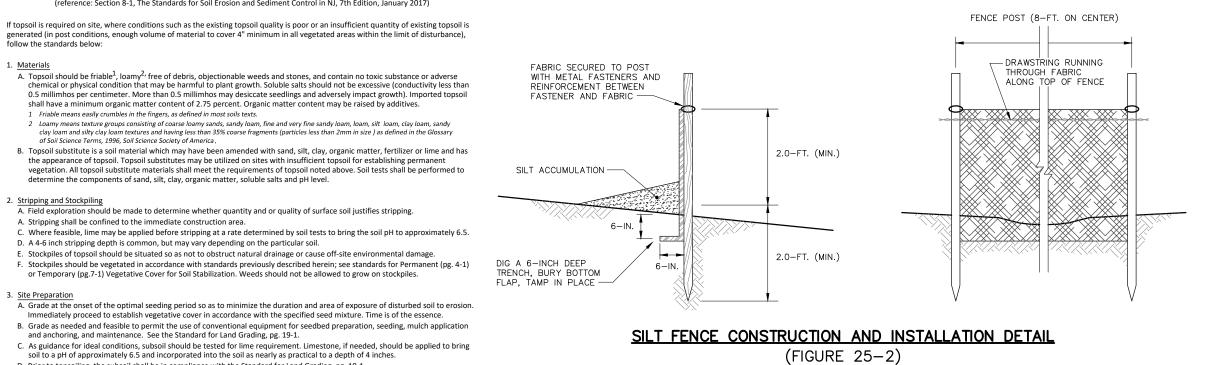
PERMANENT STABILIZATION SEED MIXTURES (FROM TABLE 4-3, SSESCNJ)

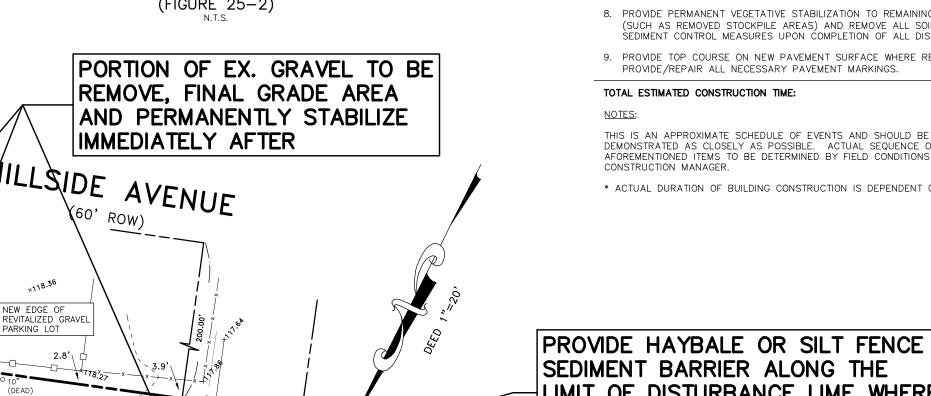
SITE CONDITIONS

COMMERCIAL US

SITE CONSISTS OF MOSTLY BOONTON URBAN LAND WELL DRAINED SOILS

USDA PLANT HARDINESS ZONE 6B





IMMEDIATELY. PROVIDE SEDIMENT BARRIER AS SHOWN ON PLANS. NOTE THERE CONTINUOUS ARE NO INLETS, EXISTING OR PROPOSED, WITHIN OR NEAR LIMIT OF DISTURBANCE. 2. REMOVE DESIGNATED FEATURES FROM SITE. STRIP TOPSOIL FROM THE PROPOSED MINOR GRADING AREAS. IF WARRANTED, PROVIDE TOPSOIL STOCKPILE (WHERE APPLICABLE). APPLY TEMPORARY SEEDING TO TOPSOIL STOCKPILE AND PROVIDE 2 WEEKS SEDIMENT BARRIER AT TOE OF STOCKPILE (WHERE APPLICABLE, SEE DETAIL). REMOVE PAVEMENT AND EXISTING SITE FEATURES BEHIND EXISTING BUILDING. CONSTRUCT BUILDING EXPANSION AS SHOWN ON ARCHITECTURAL 7 MONTHS 4. HAND DIG TRENCH ON WEST SIDE OF BUILDING, STOCKPILE EXCEED SOIL. INSTALL 2 WEEKS DRAINAGE PIPE AND BACKFILL WITH STONE AS INDICATED.

ESTIMATED SEQUENCE OF CONSTRUCTION

THE SEQUENCE OF CONSTRUCTION SHALL BE AS FOLLOWS (SEE NOTE BELOW)

DISTRICT A MINIMUM 48 HOURS PRIOR TO INITIAL SOIL DISTURBANCE.

CONTRACTOR TO PROVIDE WRITTEN NOTIFICATION TO FREEHOLD SOIL CONSERVATION

3 WEEKS 5. INSTALL ALL NEW CURB, BLOCK WALL, SIDEWALK, CONCRETE PADS. 6. CONSTRUCT PROPOSED CONCRETE WALKWAYS AND BASE PADS AS SHOWN. 3 WEEKS 4 WEEKS 8. PROVIDE PERMANENT VEGETATIVE STABILIZATION TO REMAINING AREAS (SUCH AS REMOVED STOCKPILE AREAS) AND REMOVE ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES UPON COMPLETION OF ALL DISTURBANCE. 1 WEEK

9. PROVIDE TOP COURSE ON NEW PAVEMENT SURFACE WHERE REQUIRED. 1 WEEK PROVIDE/REPAIR ALL NECESSARY PAVEMENT MARKINGS. 10 MONTHS AND 3 WEEKS

THIS IS AN APPROXIMATE SCHEDULE OF EVENTS AND SHOULD BE FOLLOWED IN THE SEQUENCE DEMONSTRATED AS CLOSELY AS POSSIBLE. ACTUAL SEQUENCE OF THE CONSTRUCTION OF THE AFOREMENTIONED ITEMS TO BE DETERMINED BY FIELD CONDITIONS AND AT THE DISCRETION OF THE

* ACTUAL DURATION OF BUILDING CONSTRUCTION IS DEPENDENT ON THE MARKET.

DURATION SCALE: 1" = 400

THIS PROJECT IS EXEMPT FROM SOIL COMPACTION TESTING DUE TO THE QUALIFICATION OF URBAN REDEVELOPMENT AREA AS IT IS DESIGNATED AS METROPOLITAN PLANNING AREA 1 (PA1) ON THE NEW JERSEY STATE PLAN POLICY MAP AND THE PROJECT SITE IS PREVIOUSLY DEVELOPED. ADDITIONALLY.

CONTAIN ALL DEBRIS AND SEDIMENT WITHIN THE LIMIT OF DISTURBANCE. ANY SEDIMENT TRACKED OUT OF THE LIMIT OF DISTURBANCE SHALL BE CLEANED UP IMMEDIATELY AND EROSIVE CONDITION MUST BE IDENTIFIED AND REMEDIATED.

> STOCKPILE NOT TO EXCEED 10 VERTICAL FEET --- HAYBALE SEDIMENT BARRIER (IF ON PAVEMENT, DO NOT STAKE) _TOE-OF-SLOPE

TOPSOIL STOCKPILE AREA (OR STORAGE IF APPLICABLE) TO BE TEMPORARILY SEEDED AS PER STANDARDS, COMPLETELY AND CONSTANTLY SURROUND W/SILTATION BARRIER - LOCATION TO BE DETÉRMINED PER FIELD CONDITIONS

`~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ TOPSOIL/STORAGE

STOCKPILE DETAIL (IF APPLICABLE)

SOIL EROSION AND SEDIMENT CONTROL NOTES The Freehold Soil Conservation District shall be notified forty-eight (48) hours in advance of any soil disturbing activity.

All Soil Erosion and Sediment Control practices are to be installed prior to soil disturbance, or in their proper sequence, and maintained until permanent protection is established Any changes to the Certified Soil Erosion and Sediment Control Plans will require the submission

of revised Soil Erosion and Sediment Control Plans to the District for re-certification. The revised plans must meet all current State Soil Erosion and Sediment Control Standards. N.J.S.A 4:24-39 et. Seg. requires that no Certificates of Occupancy be issued before the District determines that a project or portion thereof is in full compliance with the Certified Plan and Standards for Soil Erosion and Sediment Control in New Jersey and a Report of Compliance has been issued. Upon written request from the applicant, the District may issue a Report of Compliance with conditions on a

compliance with the sequence of development and temporary measures for soil erosion and sediment control have been implemented, including provisions for stabilization and site work. 5. Any disturbed areas that will be left exposed more than sixty (60) days, and not subject to construction traffic, will immediately receive a temporary seeding. If the season prevents the establishment of temporary cover, the disturbed areas will be mulched with straw, or equivalent

material, at a rate of 2 to 2 ½ tons per acre, according to the Standard for Stabilization with Mulch Only. soil stockpiles, steep slopes and roadway embankments) will receive temporary seeding in combinatio with straw mulch or a suitable equivalent, and a mulch anchor, in accordance with State Standards.

A sub-base course will be applied immediately following rough grading and installation of nprovements to stabilize streets, roads, driveways, and parking areas. In areas where no utilities are present, the sub-base shall be installed within fifteen (15) days of the preliminary grading.

8 The Standard for Stabilized Construction Access requires the installation of a pad of clean crushed stone at points where traffic will be accessing the construction site. After interior roadways are paved, ndividual lots require a stabilized construction access consisting of one inch to two inch (1'' - 2'') stone for a minimum length of ten feet (10') equal to the lot entrance width. All other access points shall be

9. All soil washed, dropped, spilled, or tracked outside the limit of disturbance or onto public right-of-ways will be removed immediately

D. Permanent vegetation is to be seeded or sodded on all exposed areas within ten (10) days after accomplished, any soil that will not provide a suitable environment to support adequate vegetative ground cover shall be removed or treated in such a way that it will permanently adjust the soil ditions and render it suitable for vegetative ground cover. If the removal or treatment of the soil will

not provide suitable conditions, non-vegetative means of permanent ground stabilization will have to be 12. In accordance with the Standard for Management of High Acid Producing Soils, any soil having a pH of 4 or less or containing iron sulfides shall be ultimately placed or buried with limestone applied at the rate of 10 tons/acre, (or 450 lbs/1,000 sq ft of surface area) and covered with a minimum of 12" of

settled soil with a pH of 5 or more, or 24" where trees or shrubs are to be planted. 13. Conduit Outlet Protection must be installed at all required outfalls prior to the drainage system becoming operational.

4. Unfiltered dewatering is not permitted. Necessary precautions must be taken during all lewatering operations to minimize sediment transfer. Any dewatering methods used must be in accordance with the Standard for Dewatering.

15. Should the control of dust at the site be necessary, the site will be sprinkled until the surface is wet, temporary vegetative cover shall be established or mulch shall be applied as required by the

. Stockpile and staging locations established in the field shall be placed within the limit of disturbance according to the certified plan. Staging and stockpiles not located within the limit of disturbance will require certification of a revised Soil Erosion and Sediment Control Plan. Certification of new Soil Erosion and Sediment Control Plan may be required for these activities if an area greater than 5.000 square feet is disturbed.

17. All soil stockpiles are to be temporarily stabilized in accordance with Soil Erosion and Sediment Control note #6. 18. The property owner shall be responsible for any erosion or sedimentation that may occur below stormwater outfalls or offsite as a result of construction of the project.

Freehold Soil Conservation Distric 4000 Kozloski Road, Freehold, NJ 07728-5033 phone: (732) 683-8500 fax: (732) 683-9140 email: info@freeholdscd.org

USE EXISTING PAVED DRIVEWAY FOR CONSTRUCTION VEHICLE ACCESS - CONTRACTOR IS RESPONSIBLE FOR PREVENTING SEDIMENT FROM EXITING THE SITE SWEEP DAILY AND AS NECESSARY

PORTIONS OF EX. PAVEMENT TO BE REMOVED, FINAL GRADE AREA AND PERMANENTLY STABILIZE IMMEDIATELY AFTER

046.0065 DRAWN: DSA SHEET 6 OF 6

ESLIE A. WALKER III. PE SOIL EROSION AND SEDIMENT CONTROL PLAN - SHEET 1 OF 1 PROFESSIONAL ENGINEER NEW JERSEY LICENSE NUMBER: 24GE04729700

REV. DESCRIPTION DATE B SOIL EROSION AND SEDIMEN CONTROL PLAN & DETAILS

GRAPHIC SCALE 1" = 20"

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SITE PLAN

PREPARED FOR: MIXED USE

LOTS 15-17, 18.05, 40.02 & 44 IN BLOCK 118 20 HIGHLAND AVENUE

> SITUATED IN: **BOROUGH OF METUCHEN** MIDDLESEX COUNTY, NEW JERSEY 46-65 DATE: 10/18/23 SCALE: 1" = 20'