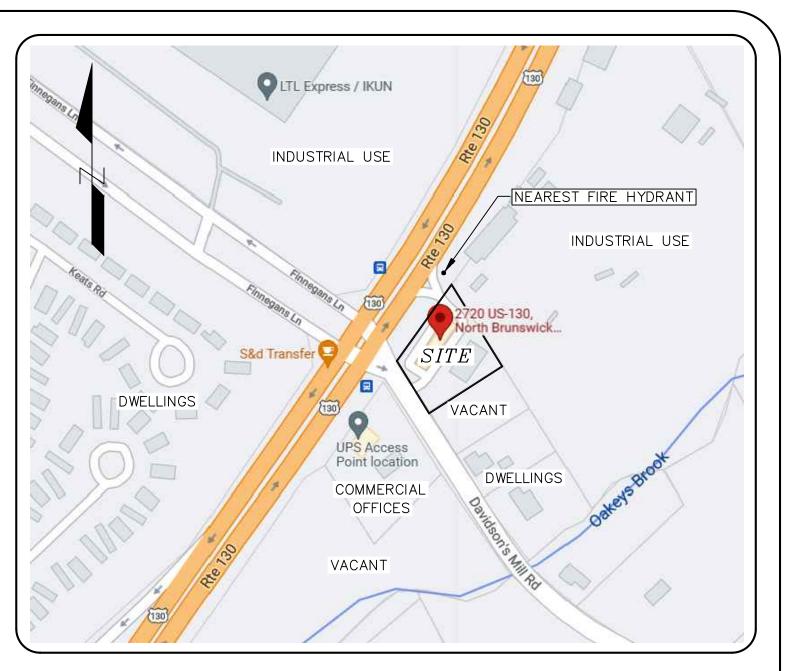


# PRELIMINARY & FINAL MAJOR SITE PLAN 2720 U.S. HIGHWAY 130 BLOCK 224, LOT 1 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY, NEW JERSEY



## TAX MAP SHEETS No's. 59 & 60

SCALE: 1" = 300' ±

#### BUILDING SIGNAGE REQUIREMENTS (CH. 205-68.10.A.(1)) FOR RESTAURANT TENANTS UNDER 25,000 S.F.

	BUIL	DING DIMENSIONS: 79.42' L x 28.4	47 W x 18' H	
	SIGN TYPE	FORMULA	MAX. PERMITTED	PROPOSED
Г	TYPE 'A' FASCIA WALL SIGN	1.5 S.F. PER LINEAL FT. OF TENANT FRONTAGE	75 S.F. FOR TENANT PRIMARY SIGNAGE	BELL LOGO WITH LETTERING ON TOWER, 2 SIDES 31.5 S.F. EA. (2 TOTAL).
_	TYPE 'B' MARQUEE CANOPY SIGN	3 S.F. PER LINEAL FT. OF MARQUEE OR CANOPY	0.75 S.F. PER LINEAL FT. FOR	20 S.F. LOGO AND LETTERING ON REAR WALL.
PERMITTED PRIMARY SIGNS	TYPE 'C' FEATURE SIGN	1.5 S.F. PER LINEAL FT. OF TENANT FRONTAGE	SECONDARY SIGNAGE	BELL LOGO ONLY ABOVE ENTRANCE 13.5 S.F. (1 TOTAL).
	TYPE 'E1' AWNING SIGN PRIMARY ID	1.5 S.F. PER LINEAL FT. OF TENANT FRONTAGE	75 S.F.	NONE
	TYPE 'D' PROJECTING BLADE	1 BLADE PER TENANT FRONTAGE	10 S.F.	NONE
	TYPE 'E2' AWNING SIGN SECONDARY ID	UP TO 25% OF THE SURFACE AREA OF EACH AWNING	20 S.F./AWNING	NONE
	TYPE 'F' PLAQUE OR MEDALLION	1 PER MAIN ENTRY	4 S.F.	NONE
	TYPE 'G' WINDOW/DOOR SIGN	15% OF GLAZING AREA	10 S.F.	TO COMPLY
	TYPE 'H' CHANGEABLE SIGN (POSTER DISPLAY)	_	60 S.F.	TO COMPLY
	TYPE 'J' ADDITIONAL SIGNS	1 PER UMBRELLA	1 PER TABLE	TO COMPLY

Total maximum allowable signage per tenant less than 25,000 square feet is not to exceed 1.5 square feet per lineal foot of tenant frontage for primary identification signage and 0.75 square foot per lineal foot of tenant frontage for secondary identification signage. Primary identification signage is not to exceed a total of 225 square feet. Secondary identification signage is not to exceed 100 square feet. Maximum letter/logo height is three feet unless otherwise approved. [1.5 S.F. PER LINEAL FT. ALONG BUILDING FRONTAGE IS 119.1 S.F. THEREFORE THE MAXIMUM PERMITTED IS 75 S.F. FOR THE SECONDARY FRONTAGE, 0.75 S.F. PER LINEAL FT. IS 21.4 S.F.]

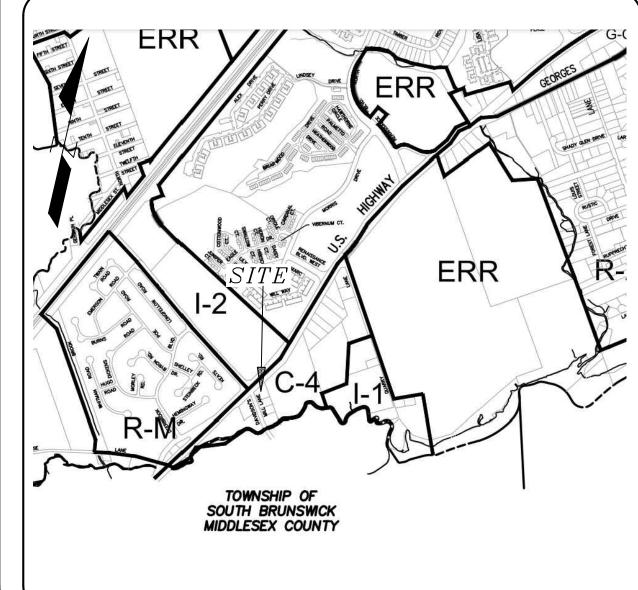
Allowable sign types quantities:

Primary identification signage (A, B, C, E1). Tenants under 25,000 square feet in corner locations or with frontage on two principal streets or parking areas may be permitted to have a total of any three of the A, B or E1 sign types. [SIGNS ARE PROPOSED ON THREE SIDES OF THE BUILDING FOR A TOTAL OF FOUR LOCATIONS ON THE BUILDING.]

Secondary identification signage (D, E2, F, G, H). All tenants may be allowed to use a total of three of the D, E2, F, G, H sign

ZONING MAP

SCALE:  $1'' = 1,300' \pm$ 



#### FREESTANDING SIGNAGE REQUIREMENTS (CH. 205-102)

		,
	REQUIREMENT	PROPOSED
MINIMUM SETBACK TO LOT LINE	20 FT	20 FT
MAXIMUM HEIGHT	20 FT	20 FT
MAXIMUM SIGN AREA (COMMERCIAL USE < 10,000 S.F.)	40 S.F.	75 S.F.

APPLICATION NO.	APPROVED
Y THE TOWNSHIP OF	NORTH BRUNSWICK
LANNING BOARD AS A	A MAJOR SITE
PLAN ON	
DATE	
BOARD CHAIRMAN	
OAKD CHAIKWAK	

BOARD ENGINEER

#### C-4 NON-RESTRICTED COMMERCIAL DISTRICT ZONE DEVELOPMENT STANDARDS (CH. 205-68)

	REQUIRED	<u>EXISTING</u>	<u>PROPOSED</u>	variance req.
LOT REQUIREMENTS				
MINIMUM LOT AREA (CORNER)	30,000 S.F.	30,776 S.F.	30,776 S.F.	NO
MINIMUM LOT WIDTH (CORNER)	200 FT	200 FT	200 FT	NO
MINIMUM LOT DEPTH	100 FT	166.7 FT	166.7 FT	NO
WINNING EST BEI TH	100 1 1	100.7 11	100.7 11	INO
BUILDING SETBACKS				
FRONT YARD (ROUTE 130)	75 FT	104.4 FT	82.90 FT	NO
FRONT YARD (DAVIDSONS MILL ROAD)	60 FT	85.1 FT	61.00 FT	NO
SIDE YARD (ONE/BOTH)	10/20 FT	11.0/22.4 FT	35.00/75.16 FT	NO
REAR YARD	35 FT	N/A	N/A	_
BUILDING COVERAGE				
MAXIMUM PERMITTED	40%	9.5%	7.3%	NO
MAXIMOM TERMITIED	<del>+</del> 078	(2,920 S.F.)	(2,246 S.F.)	110
LOT COVERAGE				
MAXIMUM PERMITTED	80%	69.5%	72.0%	NO
HEIGHT LIMITATIONS		(21,380 S.F.)	(22,170 S.F.)	
MAX. BLDG. HEIGHT	40 FT	15.5 FT	23.0 FT	NO
WITH. BEBG. HEIGHT	2 STORIES	1 STORY	1 STORY	140
DRIVEWAYS				
MINIMUM WIDTH	25 FT	14.1/15.0 FT	14.1/15.0 FT	*
MAXIMUM WIDTH	35 FT	15.0 FT	15.0 FT	NO
SETBACK TO SIDE LINE	10 FT	22.3/43.2 FT	22.3/57.5 FT	NO
DISTANCE TO INTERSECTION	100 FT	94.8 FT	94.8 FT	*
NUMBER PERMITTED PER 150' FRONTAGE	1 DRIVEWAY	1 EXISTING	1 PROPOSED	NO
PARKING SETBACKS				
SETBACK TO RIGHT-OF-WAY	10 FT	3.4 FT +	10.0 FT	NO

THE PROPOSED USE IS A PERMITTED USE IN THE C-4 ZONE DISTRICT AS PER CH. 205-68.4.A.(2) \* EXISTING NON-CONFORMITY (TO REMAIN) + EXISTING NON-CONFORMITY (TO BE REMOVED)

#### NET INCREASE IN COVERAGE IS 790 S.F. LOADING / UNLOADING NOTE

A PORTION OF THE LOT IS SITUATED WITHIN 300 FT OF A RESIDENTIAL USE (LOT 3). AS PER CHAPTER 205—68.G., THE APPLICATION IS NOT SUBJECT TO THE RESTRICTIONS NOTED SINCE THE UNLOADING WILL OCCUR IN A FRONT YARD AREA.

#### INDEX OF SHEETS

SHEET NO. DESCRIPTION		DATE	LAST REVISED
1	COVER SHEET	01-24-22	03-14-22
2	EXISTING CONDITIONS PLAN	01-24-22	_
3	SITE LAYOUT PLAN	01-24-22	_
4	GRADING & UTILITY PLAN	01-24-22	_
5	LANDSCAPING PLAN	01-24-22	_
6	LIGHTING PLAN	01-24-22	_
7	SOIL EROSION & SEDIMENT CONTROL PLAN	01-24-22	_
8	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	01-24-22	_
9	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	01-24-22	_
10	CONSTRUCTION DETAILS	01-24-22	_
11	TRASH ENCLOSURE DETAILS	01-24-22	_
12	SITE SIGNAGE DETAILS	01-24-22	_
13	SITE SIGNAGE DETAILS	01-24-22	-
14	DRIVE-THRU DETAILS	01-24-22	-
15	PUBLIC SIDEWALK CURB RAMP DETAILS	01-24-22	-

#### GENERAL NOTES

- 1. SITE IS KNOWN AS BLOCK 224, LOT 1 AS DEPICTED ON SHEET 60 OF THE TOWNSHIP OF NORTH BRUNSWICK TAX MAPS. TOTAL LOT AREA IS 30,776 S.F.
- OCEAN PETROLEUM INC. c/o PETRO MRKTN GRP. 2900 TELESTAR COURT

2:30 AM (DRIVE-THRU).

PURPOSE IS INTENDED OR IMPLIED.

YUM & CHILL NORTH BRUNSWICK TB LLC 163 WASHINGTON VALLEY ROAD, SUITE 104 WARREN, NJ 07059

FALLS CHURCH, VA 22042

TEL: (732) 230-7571

- 3. OUTBOUND & TOPOGRAPHIC SURVEY INFORMATION OBTAINED FROM A PLAN ENTITLED, "LOCATION & TOPOGRAPHIC SURVEY, 199 N.J.S.H. ROUTE 9, TAX BLOCK 18.01 LOT 1.03 TOWNSHIP OF MANALAPAN, MONMOUTH COUNTY, NEW JERSEY", PREPARED BY DAVID A. STIRES ASSOCIATES, LLC, DATED MARCH 30,
- 4. HORIZONTAL CONTROL BASED ON NAD '83. VERTICAL DATUM BASED ON NAVD
- 5. THERE ARE NO FRESHWATER WETLANDS OR WETLANDS BUFFERS LOCATED ON
- 6. THE SITE IS NOT LOCATED WITHIN A FEMA FLOOD HAZARD AREA.
- 7. THE PROPERTY IS LOCATED WITHIN THE C-4 "NON-RESTRICTED COMMERCIAL DISTRICT ZONE". 8. THE PROPERTY IS OCCUPIED BY AN EXISTING SERVICE STATION USE. SAID USE WILL BE REMOVED. THE APPLICANT PROPOSES TO CONSTRUCT A

FREESTANDING FAST-FOOD RESTAURANT WITH DRIVE-THRU. THE HOURS OF

OPERATION WILL BE DAILY 7:00 AM TO 11:00 PM (LOBBY) AND 7:00 AM TO

- 9. DO NOT SCALE DRAWINGS WITH RESPECT TO THE LOCATION OF SURROUNDING XISTING FEATURES. ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC., ARE SCHEMATIC ONLY EXCEPT WHERE DIMENSIONS ARE SHOWN THERETO.
- 10. THIS SET OF PLANS HAS BEEN PREPARED FOR THE APPLICANT NAMED HEREON FOR THE PURPOSE OF MUNICIPAL AND REGULATORY AGENCY REVIEW AND APPROVAL. THIS SET OF PLANS SHALL NOT BE UTILIZED AS CONSTRUCTION PLANS UNTIL ALL REQUIRED APPROVALS HAVE BEEN OBTAINED. NO OTHER

#### PARKING REQUIREMENTS (CH. 205-68.9.)

REQUIREMENT: TEN (10) SPACES PER 1,000 S.F. PROPOSED G.S.F.: 2,246 S.F. REQUIRED PARKING: 22.4 SPACES PROPOSED PARKING: 22 STANDARD SPACES NOTE: AS PER CHAPTER 205-32, EACH EVCS SPACE

THE PURPOSES OF ZONING COMPLIANCE. NUMBER OF EVCS SPACES PROPOSED: 2 SPACES EQUIVALENT PARKING: 4 SPACES

SHALL COUNT AS TWO REQUIRED PARKING SPACES FOR

TOTAL PROPOSED PARKING: 22 + 4 = 26 SPACES

#### KEY MAP

SCALE: 1" = 200' ±

- 11. REFER TO ARCHITECTURAL PLANS PREPARED BY ZELTA DESIGN FOR INTERIOR AND EXTERIOR BUILDING CONSTRUCTION.
- 12. CONSTRUCTION OF SITE IMPROVEMENTS AND BUILDINGS SHALL BE IN COMPLIANCE WITH THE APPLICABLE BUILDING CODES, FEDERAL AND STATE BARRIER FREE AND A.D.A. REQUIREMENTS, TOWNSHIP DESIGN STANDARDS & DETAILS, AND NOISE
- 13. ALL TRAFFIC CONTROL SIGNS SHALL CONFORM TO THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
- 14. SOLID WASTE PICKUP SHALL BE BY PRIVATE HAULER. THE APPLICANT SHALL BE RESPONSIBLE FOR RECYCLING AS PER N.J.S.A. 13:1E-99.11 ET SEQ.
- 15. THE BUILDING SHALL BE SERVED BY PUBLIC WATER AND PUBLIC SEWER CONNECTIONS.
- 16. THE CONTRACTOR SHALL NOTIFY THE UNDERSIGNED PROFESSIONAL IMMEDIATELY IF SITE CONDITIONS OR TOPOGRAPHY DIFFER MATERIALLY FROM THOSE PRESENTED HEREON. THE UNDERSIGNED PROFESSIONAL SHALL BE GRANTED ACCESS TO REVIEW SAID CONDITION, AND/OR RENDER THE DESIGN SHOWN HEREON TO THE APPROPRIATE MUNICIPAL, COUNTY OR STATE OFFICIAL'S AND/OR UNDERSIGNED PROFESSIONAL SATISFACTION.
- 17. STRUCTURAL / GEOTECHNICAL ENGINEER TO PROVIDE PLANS AND CALCULATIONS FOR ALL STRUCTURES AND FOUNDATIONS AS SHOWN ON THIS PLAN. THIS PLAN DOES NOT INCLUDE BUILDING CALCULATIONS FITHER STRUCTURAL OR GEOTECHNICAL AND THE UNDERSIGNED ASSUMES NO RESPONSIBILITY FOR SAME.
- 18. THE OWNER IS RESPONSIBLE FOR SITE SAFETY. THE OWNER, OR HIS REPRESENTATIVE. IS TO DESIGNATE AN INDIVIDUAL RESPONSIBLE FOR CONSTRUCTION SITE SAFETY DURING THE COURSE OF SITE IMPROVEMENTS PURSUANT TO N.J.A.C. 5:23-2.21(E) OF THE N.J. UNIFORM CONSTRUCTION CODE AND CFR 1926.32(F) (OSHA COMPETENT PERSON).
- 19. UPON ISSUANCE OF CONSTRUCTION DOCUMENTS, IT IS EXPLICITLY UNDERSTOOD THAT THE ENGINEER IS NOT RESPONSIBLE FOR THE PROSECUTION OF THE WORK. THE MEANS AND METHODS OF CONSTRUCTION, PROTECTION OF ADJACENT STRUCTURES OR PROPERTY, AND IS NOT TO BE HELD RESPONSIBLE FOR ANY DAMAGE WHATSOEVER TO ANY PROPERTY, INCLUDING OFFSITE LANDS, ASSOCIATED WITH CONSTRUCTION OF THE PROJECT.
- 20. THESE PLANS DEPICT VARIOUS IMPROVEMENTS TO BE LOCATED ON THE PROPERTY IN QUESTION. IT IS THE DEVELOPER'S RESPONSIBILITY TO ENSURE THAT SAID IMPROVEMENTS ARE STAKED OUT IN THE CORRECT LOCATIONS BOTH HORIZONTALLY AND VERTICALLY, BY RETAINING A NEW JERSEY LICENSED LAND SURVEYOR. THE ENGINEER SHALL NOT BEAR ANY RESPONSIBILITY OR LIABILITY FOR THE CONSTRUCTION OF ANY PROPOSED IMPROVEMENTS, SPECIFICALLY IF BUILT IN LOCATIONS OTHER THAN THOSE DEPICTED, OR AT ELEVATIONS THAT DIFFER FROM THE PLAN.
- 21. AT COMPLETION OF CONSTRUCTION, THE SITE CONTRACTOR SHALL SUBMIT AS—BUILT PLANS TO THE TOWNSHIP ENGINEER FOR REVIEW.
- 22. THE CONTRACTOR SHALL CONTACT THE ENGINEER PRIOR TO CONSTRUCTION TO VERIFY THAT THE PLANS THEY HAVE ARE THE MOST CURRENT PLANS.

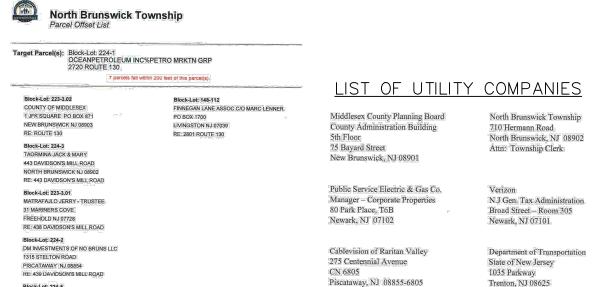
# UTILITY NOTES

N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GE04452400

- HAS BEEN GATHERED FROM NUMEROUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION AND REQUEST A MARKOUT BY CONTACTING N.J. ONE-CALL AT (800) 272-1000. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.
- 2. ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND.

# PROPERTY OWNERS WITHIN 200 FT

Block-Lot: 148-113



Attn: Margurite Prenderville

South Plainfield, NJ 07080

Trenton, NJ 08625 Construction Department Mr. Tim Allen Texas Eastern Transmission Corp. Right of Way 525 Fritztown Road

Sinking Spring, PA 19608

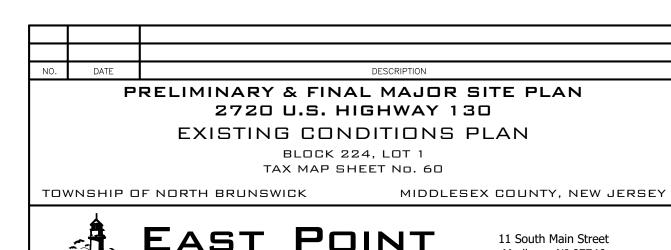
REVISED ZONING TABLE, PARKING CALCULATIONS PRELIMINARY & FINAL MAJOR SITE PLAN 2720 U.S. HIGHWAY 130 COVER SHEET BLOCK 224, LOT 1 TAX MAP SHEET No. 60 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY, NEW JERSEY 11 South Main Street Marlboro, NJ 07746 <u>ENGINEERI</u>NG, LLC Tel: 732.577.0180 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GA28169800 21-472 MARC S. LEBER

SHEET NO. 1 OF 15



#### **DEMOLITION NOTES**

- 1. CLEARING SITE SHALL INCLUDE, BUT IS NOT LIMITED TO, THE REMOVAL OF ALL INDICATED STRUCTURES, FOUNDATIONS, DEBRIS, RUBBLE, FENCES, TREES, STUMPS, EXISTING UTILITIES, UNSUITABLE MATERIALS, PAVEMENT, CONCRETE, AND SIGNAGE.
- 2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DISPOSAL OF ALL MATERIALS EXCAVATED OF WHATEVER NATURE AT HIS OWN EXPENSE. THE MUNICIPALITY IS NOT RESPONSIBLE FOR PROVIDING A DISPOSAL SITE. MATERIALS MUST BE DISPOSED OF IN ACCORDANCE WITH N.J.D.E.P. AND LOCAL
- 3. EXISTING ONSITE SUITABLE SOIL SHALL BE EXCAVATED, TRANSPORTED, SPREAD, GRADED, AND COMPACTED AS INDICATED BY THE PROPOSED GRADES. ALL EARTHWORK OPERATIONS INVOLVING ONSITE SOILS SHALL BE COMPLETED PRIOR TO IMPORTING ANY OFFSITE MATERIALS.
- 4. ANY UNSUITABLE MATERIAL FOUND ON SITE DURING DEMOLITION SHALL BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH N.J.D.E.P. AND LOCAL REGULATIONS.
- 5. NO TOPSOIL IS TO BE REMOVED FROM THE PROJECT SITE.
- 6. PRIOR TO COMMENCING DEMOLITION, THE CONTRACTOR SHALL SECURE THE APPROPRIATE PERMITS FROM THE MUNICIPALITY. IN ORDER TO APPLY FOR A DEMOLITION PERMIT, UTILITY DISCONNECTS MUST BE COORDINATED WITH THE UTILITY COMPANIES INDICATED ON THE COVER SHEET. CONFIRMATION OF THE DISCONNECTS SHALL BE PROVIDED TO THE BUILDING DEPARTMENT.
- 7. IF APPROVED BY THE MUNICIPAL ENGINEER, EXISTING CONCRETE MAY BE STORED ON SITE AND RECYCLED FOR USE AS COMPACTED FILL MATERIAL.
- 8. ALL SOIL EROSION & SEDIMENT CONTROL DEVICES MUST BE IN PLACE AND NOTICE PROVIDED TO THE SOIL CONSERVATION DISTRICT 72 HOURS PRIOR TO
- 9. A UTILITY MARKOUT MUST BE OBTAINED PRIOR TO DEMOLITION BY CONTACTING NEW JERSEY ONE-CALL AT 800-272-1000.
- 10. THE CONTRACTOR SHALL FAMILIARIZE HIMSELF WITH THE SITE AND THE EXISTING CONDITIONS PRIOR TO BEGINNING CONSTRUCTION. A PRE-CONSTRUCTION MEETING SHALL BE HELD NO LESS THAN 48 HOURS PRIOR TO WORK COMMENCING AND ALL UTILITY COMPANIES SHALL BE NOTIFIED.
- 11. DUMPSTERS USED FOR THE STORAGE OF CONSTRUCTION DEBRIS ARE NOT TO BE LEFT UNCOVERED OVERNIGHT.



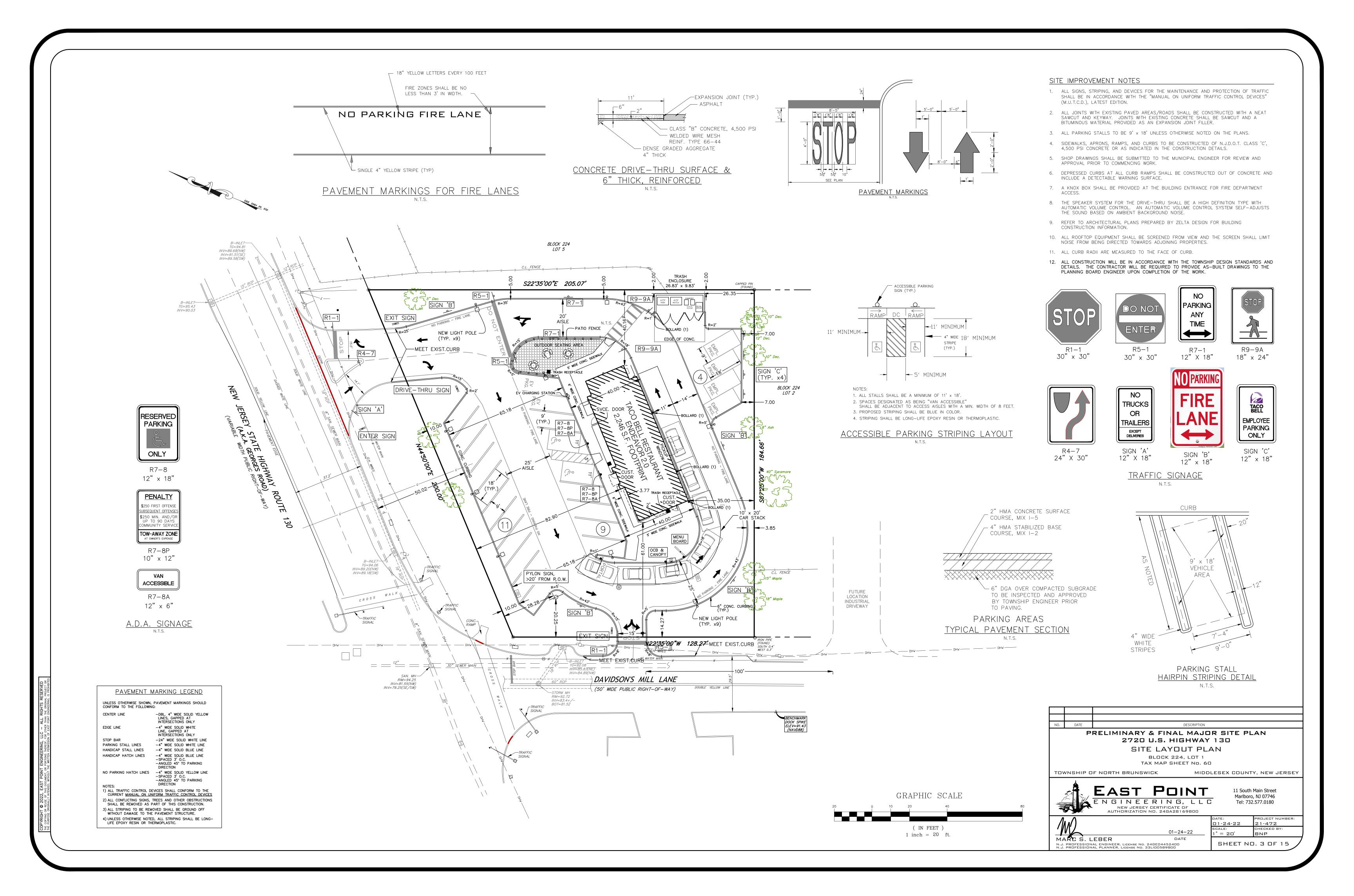


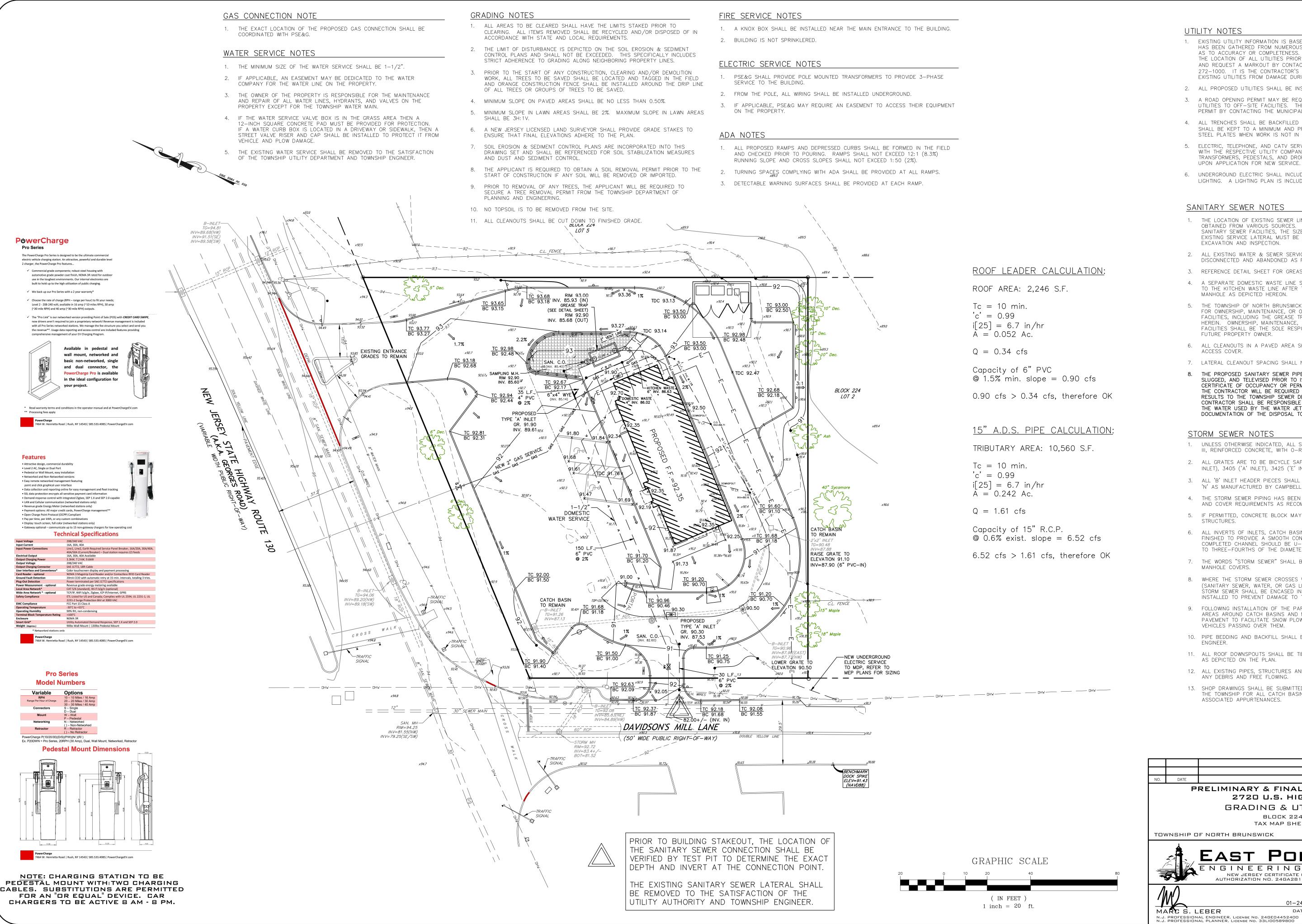
Marlboro, NJ 07746 Tel: 732.577.0180

21-472

DATE

SHEET NO. 2 OF 15





#### UTILITY NOTES

- 1. EXISTING UTILITY INFORMATION IS BASED ON INFORMATION OF RECORD AND HAS BEEN GATHERED FROM NUMEROUS SOURCES AND IS NOT GUARANTEED AS TO ACCURACY OR COMPLETENESS. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE START OF CONSTRUCTION AND REQUEST A MARKOUT BY CONTACTING N.J. ONE-CALL AT (800) 272-1000. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROTECT ALL EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION.
- 2. ALL PROPOSED UTILITIES SHALL BE INSTALLED UNDERGROUND.
- 3. A ROAD OPENING PERMIT MAY BE REQUIRED TO CONNECT CERTAIN UTILITIES TO OFF-SITE FACILITIES. THE CONTRACTOR SHALL OBTAIN THIS PERMIT BY CONTACTING THE MUNICIPAL OR COUNTY ROAD DEPARTMENT.
- 4. ALL TRENCHES SHALL BE BACKFILLED WITHOUT DELAY. OPEN TRENCHES SHALL BE KEPT TO A MINIMUM AND PROTECTED AND/OR COVERED WITH STEEL PLATES WHEN WORK IS NOT IN PROGRESS.
- 5. ELECTRIC, TELEPHONE, AND CATV SERVICE LAYOUT MUST BE COORDINATED WITH THE RESPECTIVE UTILITY COMPANY. THE LOCATIONS OF TRENCHES, TRANSFORMERS, PEDESTALS, AND DROP CONNECTIONS WILL BE FINALIZED UPON APPLICATION FOR NEW SERVICE.
- 6. UNDERGROUND ELECTRIC SHALL INCLUDE PROVISIONS FOR PARKING LOT LIGHTING. A LIGHTING PLAN IS INCLUDED (SHEET 6).

#### SANITARY SEWER NOTES

- 1. THE LOCATION OF EXISTING SEWER LINES DEPICTED HEREON WERE OBTAINED FROM VARIOUS SOURCES. PRIOR TO CONSTRUCTION OF SANITARY SEWER FACILITIES, THE SIZE, LOCATION, AND CONDITION OF THE EXISTING SERVICE LATERAL MUST BE VERIFIED IN THE FIELD BY EXCAVATION AND INSPECTION.
- 2. ALL EXISTING WATER & SEWER SERVICE LATERALS SHALL BE DISCONNECTED AND ABANDONED AS REQUIRED BY THE UTILITY COMPANY.
- 3. REFERENCE DETAIL SHEET FOR GREASE TRAP INFORMATION.
- 4. A SEPARATE DOMESTIC WASTE LINE SHALL BE PROVIDED AND CONNECTED
- TO THE KITCHEN WASTE LINE AFTER THE GREASE TRAP MONITORING MANHOLE AS DEPICTED HEREON. 5. THE TOWNSHIP OF NORTH BRUNSWICK SHALL HAVE NO RESPONSIBILITY FOR OWNERSHIP, MAINTENANCE, OR OPERATION OF THE SANITARY SEWER
- HEREIN. OWNERSHIP, MAINTENANCE, AND OPERATION OF THE SANITARY FACILITIES SHALL BE THE SOLE RESPONSIBILITY OF THE CURRENT OR FUTURE PROPERTY OWNER.

FACILITIES, INCLUDING THE GREASE TRAP AND LATERALS, AS PROPOSED

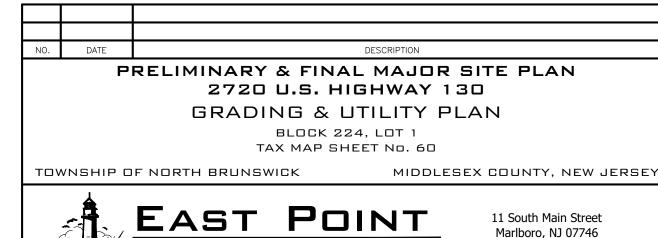
- 6. ALL CLEANOUTS IN A PAVED AREA SHALL HAVE A MONUMENT BOX WITH ACCESS COVER.
- 7. LATERAL CLEANOUT SPACING SHALL NOT EXCEED 75 FEET.
- 8. THE PROPOSED SANITARY SEWER PIPES SHALL BE WATER JET CLEANED, SLUGGED, AND TELEVISED PRIOR TO ISSUING EITHER A TEMPORARY CERTIFICATE OF OCCUPANCY OR PERMANENT CERTIFICATE OF OCCUPANCY. THE CONTRACTOR WILL BE REQUIRED TO SUBMIT A COPY OF THE VIDEO RESULTS TO THE TOWNSHIP SEWER DEPARTMENT. IN ADDITION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND DISPOSAL OF THE WATER USED BY THE WATER JET CLEANING AND SUBMITTING DOCUMENTATION OF THE DISPOSAL TO THE TOWNSHIP SEWER DEPARTMENT.

#### STORM SEWER NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL STORM SEWER PIPE SHALL BE CLASS III, REINFORCED CONCRETE, WITH O-RING GASKETS.
- 2. ALL GRATES ARE TO BE BICYCLE SAFE CAMPBELL FOUNDRY NO. 2618 ('B' INLET), 3405 ('A' INLET), 3425 ('E' INLET), OR EQUIVALENT.

'N' AS MANUFACTURED BY CAMPBELL FOUNDRY, OR EQUIVALENT.

- 3. ALL 'B' INLET HEADER PIECES SHALL BE ECO-FRIENDLY TYPE 'J' OR TYPE
- 4. THE STORM SEWER PIPING HAS BEEN DESIGNED TO MEET MINIMUM SLOPE AND COVER REQUIREMENTS AS RECOMMENDED BY THE MANUFACTURER.
- 5. IF PERMITTED, CONCRETE BLOCK MAY BE USED IN LIEU OF PRECAST STRUCTURES.
- 6. ALL INVERTS OF INLETS, CATCH BASINS, AND MANHOLES SHALL BE FINISHED TO PROVIDE A SMOOTH CONTINUATION OF THE PIPE. TH COMPLETED CHANNEL SHOULD BE U-SHAPED AND A HEIGHT EQUIVALENT TO THREE-FOURTHS OF THE DIAMETER OF THE PIPE.
- 7. THE WORDS "STORM SEWER" SHALL BE CAST INTEGRALLY INTO ALL MANHOLE COVERS.
- 8. WHERE THE STORM SEWER CROSSES WITHIN 18" OF ANOTHER UTILITY (SANITARY SEWER, WATER, OR GAS LINES), THE UTILITY ABOVE THE STORM SEWER SHALL BE ENCASED IN CONCRETE OR SUPPORT BLOCKS INSTALLED TO PREVENT DAMAGE TO THE PIPES.
- 9. FOLLOWING INSTALLATION OF THE PARKING LOT BASE COURSE, THE AREAS AROUND CATCH BASINS AND MANHOLES SHALL BE BUILT-UP WITH PAVEMENT TO FACILITATE SNOW PLOWING AND TO PREVENT DAMAGE TO VEHICLES PASSING OVER THEM.
- 10. PIPE BEDDING AND BACKFILL SHALL BE APPROVED BY THE MUNICIPAL
- 11. ALL ROOF DOWNSPOUTS SHALL BE TIED INTO THE STORMWATER SYSTEM AS DEPICTED ON THE PLAN.
- 12. ALL EXISTING PIPES, STRUCTURES AND CURB CUTS MUST BE CLEARED OF ANY DEBRIS AND FREE FLOWING.
- 13. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE TOWNSHIP FOR ALL CATCH BASINS, CASTINGS, PIPING, AND ASSOCIATED APPURTENANCES.





Tel: 732.577.0180 21-472 1-24-22 MARC S. LEBER DATE

SHEET NO. 4 OF 15

2. ALL PLANT MATERIAL SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMEN OR THE PLANT MATERIAL WILL BE UNACCEPTABLE. ALL PLANT MATERIAL SHALL BE TRUE TO SPECIES, VARIETY, SIZE AND BE CERTIFIED DISEASE AND INSECT FREE.

3. NO PLANT SUBSTITUTIONS SHALL BE PERMITTED WITH REGARDS TO SIZE, SPECIES, VARIETY, ETC. WITHOUT WRITTEN PERMISSION OF THE THE UNDERSIGNED OR TOWNSHIP OFFICIALS. WRITTEN PROOF OF PLANT MATERIAL UNAVAILABILITY MUST BE DOCUMENTED.

THE LOCATION OF ALL PLANT MATERIAL INDICATED ON THE LANDSCAPE PLANS IS APPROXIMATE. THE FINAL LOCATION OF ALL PLANT MATERIAL AND PLANTING BED LINES SHALL BE DETERMINED IN THE FIELD UNDER THE DIRECTION OF THE LANDSCAPE ARCHITECT. NO SHADE TREE, STREET TREE, ORNAMENTAL FLOWERING TREE OR EVERGREEN TREE SHALL BE PLANTED CLOSER THAN 5' FROM ANY SIDEWALK, DRIVEWAY, CURB OR UTILITY LOCATION, OR WITHIN 10' OF A SEPTIC FIELD, UNLESS SPECIFICALLY DIMENSIONED ON THE LANDSCAPE PLAN.

5. ALL STREET TREES AND SHADE TREES PLANTED NEAR PEDESTRIAN OR VEHICULAR ACCESS SHOULD NOT BE BRANCHED LOWER THAN 7'-0" ABOVE GRADE. ALL PLANT MATERIAL LOCATED WITHIN ANY SIGHT TRIANGLE EASEMENTS SHALL NOT EXCEED A MATURE HEIGHT OF 30" ABOVE THE ELEVATION OF THE ADJACENT CURB. ALL STREET TREES PLANTED IN ANY SIGHT TRIANGLE EASEMENTS SHALL BE PRUNED AS MENTIONED ABOVE.

6. THE PLANTING PLAN SHALL TAKE PRECEDENCE OVER THE PLANT SCHEDULE SHOULD ANY PLANT QUANTITY DISCREPANCIES OCCUR.

7. ALL PLANT MATERIAL SHALL BE PROPERLY GUYED, STAKED, WRAPPED AND PLANTED IN CONFORMANCE WITH THE TYPICAL PLANTING DETAILS. GUY WIRES SHALL BE ATTACHED TO THE TREE AT A HEIGHT OF TWO—THIRDS THE HEIGHT OF THE TREE AND SHOULD BE LOCATED AT POINTS SO NOT TO SPLIT THE TRUNKS OF MULTI—STEMMED TREES. UNLESS OTHERWISE NOTED, PROVIDE THREE TREE STAKES PER TREE. INSTALL ALL PLANT MATERIAL ON UNDISTURBED GRADE. PROVIDE BURLAP WRAPPING WITH A 50% OVERLAP. CUT AND REMOVE BURLAP FROM TOP ONE—THIRD OF THE ROOT BALL.

8. PROVIDE PLANTING PITS AS INDICATED ON THE PLANTING DETAILS. BACKFILL PLANTING PITS WITH ONE PART EACH OF TOPSOIL, PEAT MOSS AND PARENT MATERIAL. IF WET SOIL CONDITIONS EXIST THEN PLANTING PITS SHALL BE BE EXCAVATED AN ADDITIONAL 12" AND FILLED WITH SAND.

9. ALL PLANT MATERIAL SHALL BEAR THE SAME RELATION TO FINISHED GRADE AS IT BORE TO EXISTING

10. NEWLY INSTALLED PLANT MATERIAL SHALL BE WATERED AT THE TIME OF INSTALLATION. REGULAR WATERING SHALL BE PROVIDED TO ENSURE THE ESTABLISHMENT, GROWTH AND SURVIVAL OF ALL

11. ALL PLANT MATERIAL SHALL BE GUARANTEED FOR TWO (2) YEARS AFTER THE DATE OF FINAL ACCEPTANCE BY THE MUNICIPALITY.

12. THE LANDSCAPE CONTRACTOR SHALL PROVIDE A MINIMUM 4" LAYER OF TOPSOIL IN ALL LAWN AREAS AND A MINIMUM OF 12" OF TOPSOIL IN ALL PLANTING AREAS. A FULL SOIL ANALYSIS SHALL BE CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL AMENDMENT REQUIRED.

13. ALL DISTURBED LAWN AREAS SHALL BE STABILIZED WITH EITHER SOD OR SEED AS INDICATED ON THE LANDSCAPE PLANS. SOD SHALL CONSIST OF A NEW JERSEY CERTIFIED MIXTURE OR AN APPROVED EQUAL. SEED MIXTURE SHALL BE AS LISTED IN THE SEEDING SCHEDULE. ALL DISTURBED LAWN AREAS SHALL BE TOPSOILED, LIMED, FERTILIZED AND FINE GRADED PRIOR TO LAWN INSTALLATION.

14. ALL PLANTING BEDS SHALL RECEIVE LANDCAPE ROCK OR RIVER STONE. THE USE OF SHREDDED HARDWOOD BARK OR MULCH IS PROHIBITED.

15. ALL EXISTING TREES AND SHRUBS TO BE PRESERVED ON SITE SHALL BE PROTECTED AGAINST CONSTRUCTION DAMAGE BY SNOW FENCING. ALL FENCING SHALL BE PLACED OUTSIDE THE INDIVIDUAL TREE CANOPY. ALL TREES TO REMAIN SHALL BE IDENTIFIED IN THE FIELD PRIOR TO COMMENCEMENT OF CONSTRUCTION, GRADING OR CLEARING. ALL EXISTING VEGETATION BEING PRESERVED AND LOCATED AT THE EDGE OF THE NEW TREELINE SHALL BE PRUNED AND TRIMMED TO REMOVE ALL DEAD, DISEASED, OR DAMAGED BRANCHES.

16. AN IRRIGATION SYSTEM IS PROPOSED.

17. SHADE & STREET TREES SHOULD BE A MINIMUM OF 3"-3.5" CALIPER AND 12'-14' IN HEIGHT.

18. ORNAMENTAL TREES SHOULD BE 8' TO 10' IN HEIGHT.

19. SHRUBS SHOULD BE 24" TO 36" IN HEIGHT.

20. ANY NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM THE ROOTBALLS AT THE TIME OF INSTALLATION.

21. GUY WIRES AND STAKES WILL ONLY BE UTILILIZED IF CONDITIONS MERIT. IF UTILIZED, SHOULD BE REMOVED BY THE DEVELOPER AT THE END OF THE GROWTH PERIOD.

22. THE CENTRAL LEADER SHOULD NOT BE CUT OR REMOVED FROM THE DECIDUOUS TREES.

23. ALL SHRUB AND TREE PLANTING SHALL BE PERFORMED IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK - ANSI Z60.1-2004.

24. LANDSCAPING SHALL HAVE A TWO (2) YEAR GUARANTEE.

25. ROCKS SHALL NOT BE PLACED WITHIN 6" OF THE ROOT COLLAR. THE MINIMUM DIAMETER OF THE SCARIFIED SUB-GRADE SHALL BE 5 TIMES THE ROOT BALL DIAMETER. ALL TWINE, WIRE, ROPE AND BURLAP FROM THE TOP \( \frac{2}{3} \) OF THE ROOT BALL SHALL BE REMOVED.

26. MYCOR TREE SAVER SHALL BE MIXED IN THE BACKFILL WHEN PLANTING TREES AND SHRUBS. IN ADDITION, HEALTHY START MACRO TABS 12-8-8 SHALL BE PLACED IN THE UPPER 4" OF THE BACKFILL AROUND TREES AND SHRUBS. THE CONTRACTOR SHALL FOLLOW THE MANUFACTURER'S INSTRUCTIONS FOR USE WITH THESE PRODUCTS.

27. ALL LAWN AREAS SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL.

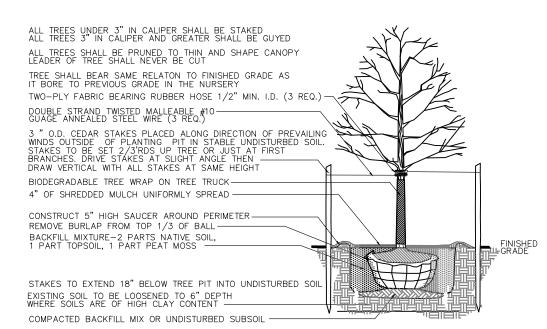
28. VEGETATIVE COVER SHALL BE IN ACCORDANCE WITH THE STANDARDS FOR SOIL EROSION & SEDIMENT CONTROL IN NEW JERSEY AND APPROVED BY THE FREEHOLD SOIL CONSERVATION DISTRICT.

29. ALL AREAS WHERE NATURAL VEGETATION AND/OR SPECIMEN TREES ARE TO REMAIN SHALL BE PROTECTED BY THE ERECTION OF FENCING, AND NO DISTURBANCE SHALL OCCUR PRIOR TO INSPECTION BY THE TOWNSHIP ENGINEER AND THE ISSUANCE OF WRITTEN AUTHORIZATION TO PROCEED WITH CONSTRUCTION. THESE PROTECTIVE MEASURES SHALL NOT BE ALTERED OR REMOVED WITHOUT THE PROPER APPROVAL OF THE TOWNSHIP ENGINEER.

30. TOPSOIL IN LANDSCAPE AREAS SHALL HAVE A MINIMUM DEPTH OF TWO (2) FEET FOR SHRUBBERY AND FOUR (4) FEET FOR TREES.

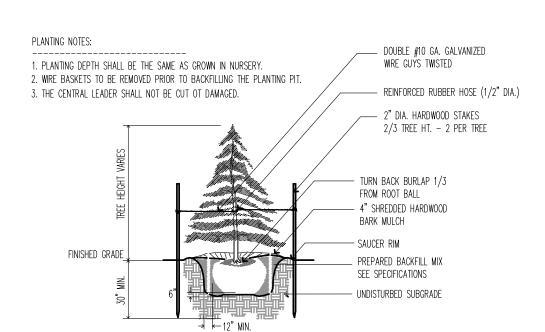
SCHEDULE OF PLANTING MATERIALS

SYM	QTY	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS
DECIDUC	US TREE	S			
LS	5	LIQUIDAMBAR STYRACIFLUA	SWEETGUM	2.5"-3" CAL. 12'-15' HT.	В&В
ZS	3	ZELKOVA SERRATA	JAPANESE ZELKOVA	2.5"-3" CAL. 12'-15' HT.	В&В
EVERGRE	EEN TREE	ZS .			
РМ	2	PSEUDOTSUGA MENZIEII	DOUGLAS FIR	5'-6' HT	В&В
YL	14	CUPRESSUS X LEYLANDII	LEYLAND CYPRESS	5'-6' HT	B&B
ORNAME	NTAL TR	EES			
MS	3	MAGNOLIA STELLATA	STAR MAGNOLIA	5'-6' HT	B&B, MULTIST
SHRUBS					
IC	33	ILEX CRENATA 'HELLERI'	DWARF JAPANESE HOLLY	36" HT	# 3 CAN
JV	3	JUNIPERUS VIRGINIANA 'SKYROCKET'	SKYROCKET JUNIPER	4'-5' HT	# 5 CAN
PF	13	POTENTILLA FRUITICOSA 'GOLDFINGER'	BUSH CINQUEFOIL	15-18" HT	# 3 CAN
SB	4	SPIRAEA x BUMALDA 'ANTHONY WATERER'	ANTHONY WATERER SPIRAEA	15-18" HT	# 3 CAN
YF	22	YUCCA FILAMENTOSA	ADAM'S NEEDLE	15-18" HT	# 3 CAN
ORNAME	:NTAL GR	ASSES			
FG	22	FESTUCA GLAUCA 'ELIJAH BLUE'	ELIJAH BLUE FESCUE	12-15" HT	# 2 CAN
MG	6	MISCANTHUS SINENSIS 'GRACILIMUS'	CHINESE MAIDENGRASS	24-36" HT	# 3 CAN
PV	5	PANICUM VIRGATUM	SWITCHGRASS	15-18" HT	# 3 CAN



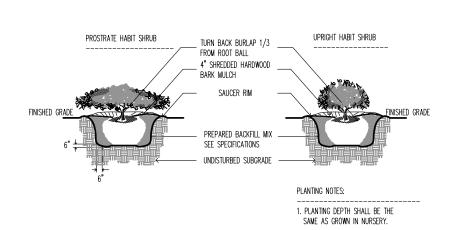
DECIDUOUS TREE PLANTING DETAIL

NOTE: ALL WIRE BASKETS SHALL BE REMOVED FROM THE TREE BALL AFTER SETTLING INTO THE PLANTING PIT.

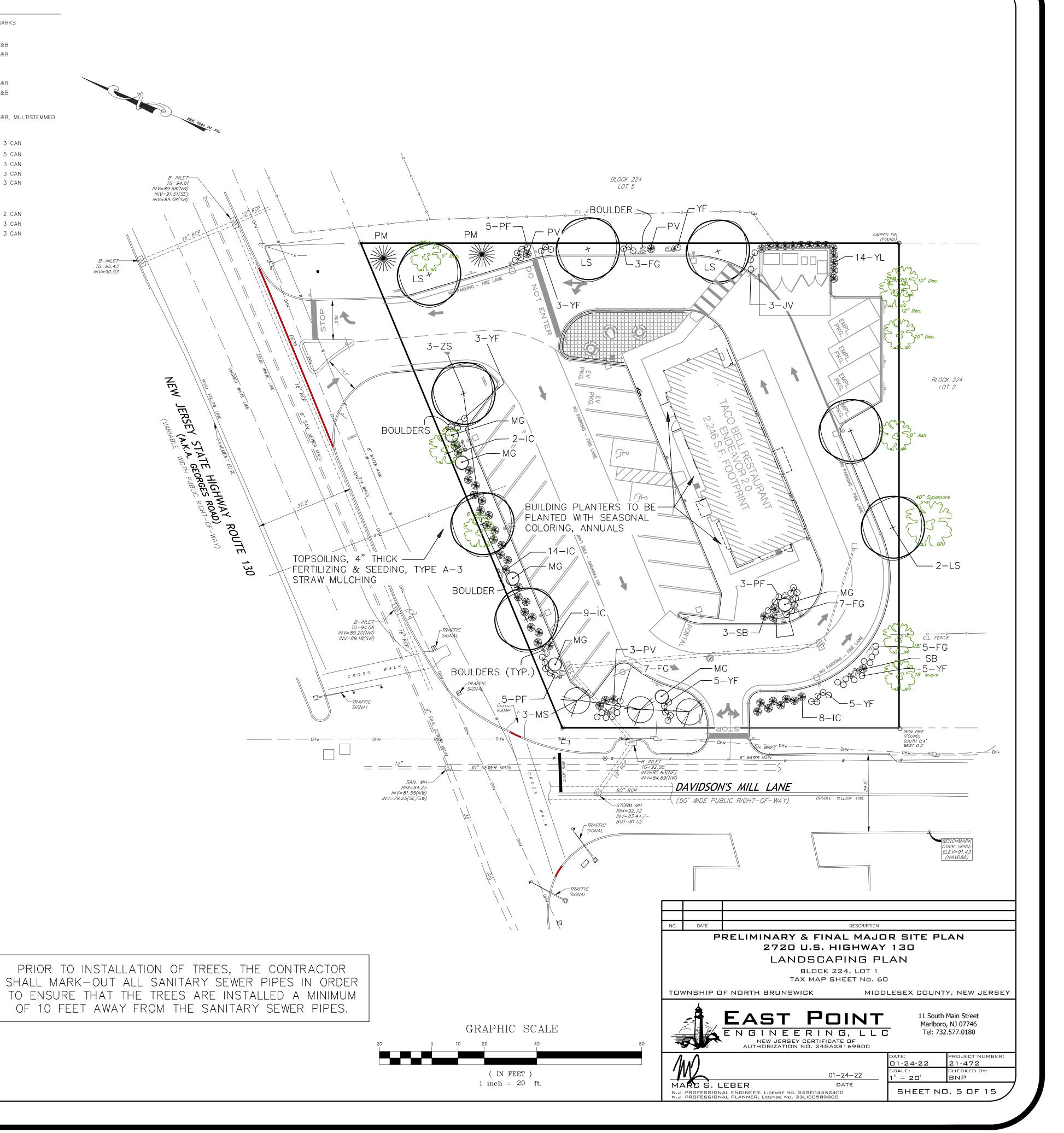


CONIFEROUS TREE PLANTING DETAIL
N.T.S.

NOTE: ALL WIRE BASKETS SHALL BE REMOVED FROM THE TREE BALL AFTER SETTLING INTO THE PLANTING PIT.



SHRUB PLANTING DETAIL
N.T.S.



Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
-	Fc	N.A.	N.A.	N.A.	N.A.	N.A.
DRIVE THRU SURFACE	Fc	1.88	2.9	1.0	1.88	2.90
PARKING LOT SURFACE	Fc	2.76	3.9	0.6	4.60	6.50

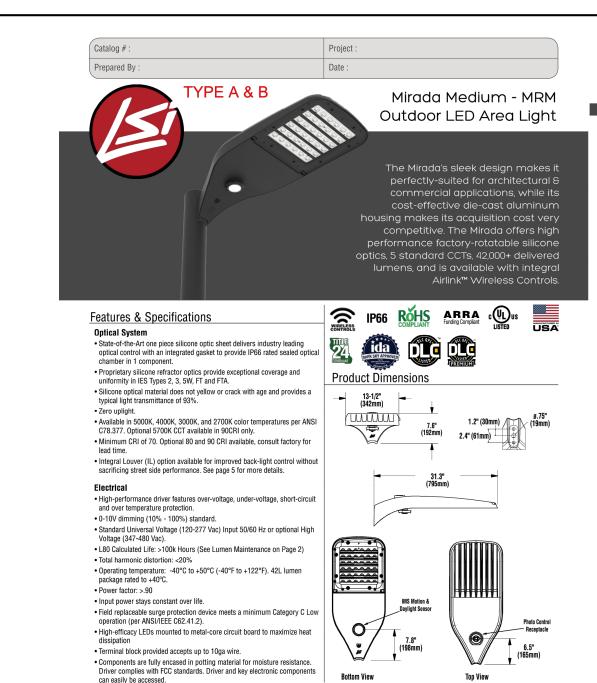
#### LIGHTING NOTES

- 1. SITE LIGHTING LAYOUT AND DESIGN IS DEPICTED ON THE LIGHTING PLAN.
- 2. ALL SITE LIGHTING SHALL RECEIVE UNDERGROUND ELECTRICAL SERVICE. THE ELECTRICIAN SHALL BE RESPONSIBLE FOR CIRCUITRY.
- A TIME CLOCK TO CONTROL THE SITE LIGHTING SHALL BE PROVIDED FOR ALL SITE LIGHTING. THE NECESSARY CONTROLS AND WIRING SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 4. HOURS OF THE PROPOSED SITE LIGHTING SHALL BE ONE-HALF HOUR BEFORE SUNSET TO ONE-HALF HOUR AFTER SUNRISE. LIGHTING MAY BE WIRED IN SECTIONS WITH SOME SECTIONS TURNING OFF AFTER MIDNIGHT TO CONSERVE ENERGY. ESSENTIAL SECTIONS DESIGNATED SECURITY LIGHTING SHALL NOT TURN OFF UNTIL ONE-HALF HOUR AFTER SUNRISE.
- 5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE POLE FOUNDATIONS COMPLETE WITH CONDUITS FOR POWER, GROUNDING, AND ANCHOR BOLTS.
- BE INSTALLED ON CONCRETE BASES THAT EXTEND 30" ABOVE THE FINISHED GRADE OF PAVEMENT. THE SITE CONTRACTOR SHALL BE RESPONSIBLE TO PROVIDE THE COMPLETE DESIGN OF THESE BASES AS SIGNED AND SEALED BY A NEW JERSEY LICENSED ENGINEER.

6. ALL POLES THAT ARE NOT BEHIND CURBS OR WITHIN A CURBED ISLAND SHALL

- 7. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL LIGHTING FIXTURES, POLES, FOUNDATIONS, AND LAMPS.
- 8. THE ELECTRICAL CONTRACTOR SHALL FURNISH AND INSTALL THE REQUIRED BRANCH CIRCUIT WIRING AND CONNECT THE SITE LIGHTING FIXTURES TO THE PROPER CIRCUITS AFTER THEY HAVE BEEN INSTALLED.

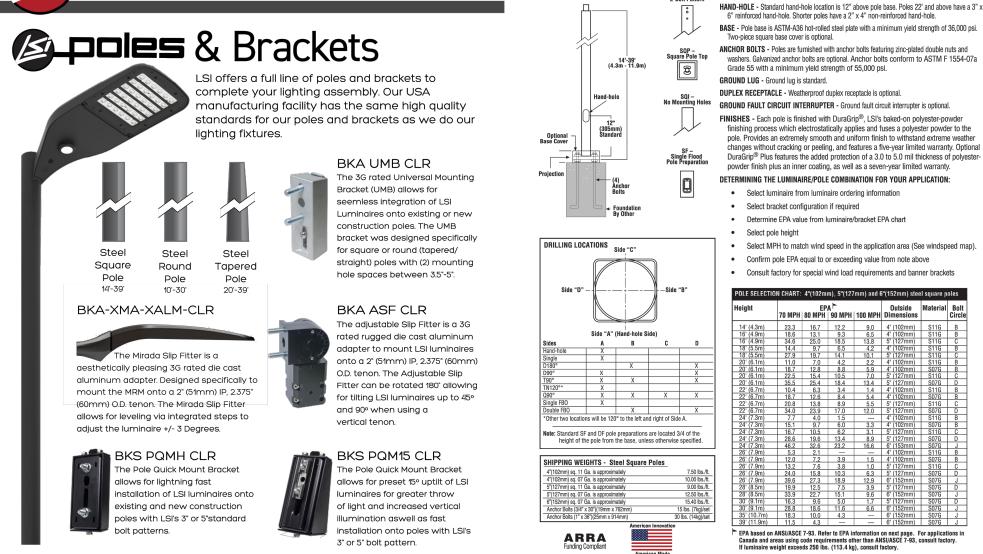
- 10. THE ELECTRICAL CONTRACTOR MUST COORDINATE THE INSTALLATION OF WIRING
- ELECTRICAL CONTRACTOR.
- ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA).
- 14. POLES AND LUMINAIRES SHALL BE INSTALLED PER MANUFACTURER'S
- 15. ALL CONDUIT SHALL BE 2" DIAMETER, SCHEDULE 40 P.V.C. WITH A MINIMUM



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Mirada Medium - MRM Outdoor LED Area Light



Features & Specifications (Cont.)

Designed to mount to square or round poles.

. Shipping weight: 30 lbs in carton.

**Wireless Controls System** 

Stand-Alone Controls

(See drawing on page 1)

. LSI LED Fixtures carry a 5-year warranty.

Listed to UL 1598 and UL 8750.

Suitable For wet Locations.

STEEL SQUARE POLES

DIMENSIONS

RoHS Compliant.

3G rated for ANSI C136.31 high vibration applications

 Rugged die-cast aluminum housing contains factory prewired driver and optical unit. Cast aluminum wiring access door located underneath.

Luminaire is proudly manufactured in the U.S.of U.S. and imported parts. IP66 rated luminaire protects integral components from harsh

• Fixtures are finished with LSI's DuraGrip® polyester powder coat finishing process. The DuraGrip finish withstands extreme weather changes without

To make this fixture AirLink ready, simply order one of the following options:
a. The integrated <u>Wireless Lighting Controller</u>: ALSC or ALSCH (see ordering guide) as the controls option, or

b. Integrated Wireless Controller option (above) with integrated motion

option; and either the <u>5-Pin</u> or <u>7-Pin Twist Lock Controller</u>: ALSC UNV TL5 or ALSC UNV TL7 as an accessory

c. The 7-Pin Photoelectric Control Receptacle: CR7P as the controls

To see how the components of AirLink system work together, reference the diagram in the controls section of this specsheet. For more information on

our AirLink products, visit our website: <a href="https://www.lsi-airlink.com/airlink-synapse/">www.lsi-airlink.com/airlink-synapse/</a>

The integral passive infrared motion sensor (IMS) activates switching of

• The 7-pin ANSI C136.41-2013 photocontrol receptacle option (CR7P) is

• The Button Type Photocells (PCI) are capable of switching luminaires ON/

A single fastener secures the hinged door, underneath the housing and provides quick & easy access to the electrical compartment for installing.

• Utilizes LSI's traditional 3" drill pattern for easy fastening of LSI products.

product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified.

Project Name \_\_

TYPE A POLE

American Recovery and Reinvestment Act Funding Compliant.

 IDA compliant; with 3000K color temperature selection. Title 24 Compliant; see local ordinance for qualification information

. IP66 rated Luminaire. IP66 rated optical chamber.

• 3G rated for ANSI C136.31 high vibration applications

luminaire light levels (see the controls section for more details).

OFF in response to the amount of available daylight

sensor: ALSCS (ordering guide for mounting heights) or



Performance ELECTRICAL DATA (AMPS)\*

 Lumens
 Watts
 120V
 208V
 240V
 277V
 347V
 480V

 7L
 53
 0.4A
 0.3A
 0.2A
 0.2A
 0.2A
 0.2A
 0.1A

30L 247 2.1A 1.2A 1.0A 0.9A 0.7A 0.5 36L 317 2.6A 1.5A 1.3A 1.1A 0.9A 0.7c

RECOMMENDED LUMEN MAINTENANCE1(24-42L)

RECOMMENDED LUMEN MAINTENANCE1(7-18L)

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POLE SHAFT - Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield

\_\_\_\_ Fixture Type \_\_\_\_\_\_

strength of 50,000 psi. On Tenon Mount steel poles, tenon is 2-3/8" O.D. high-strength pipe. Tenon is 4-3/4" in length. Straight poles are 4", 5", and 6" square.

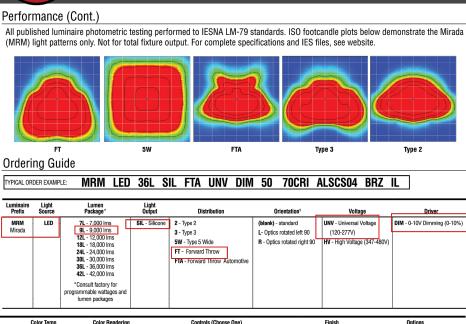
42L 390 3.2A 1.9A 1.6A 1.4A 1.1A 0.8A
\*Electrical data at 25C (77F). Actual wattage may differ by +/-10%

 Ambient
 Initial²
 25 hr²
 50 hr²
 75 hr³
 100 hr³

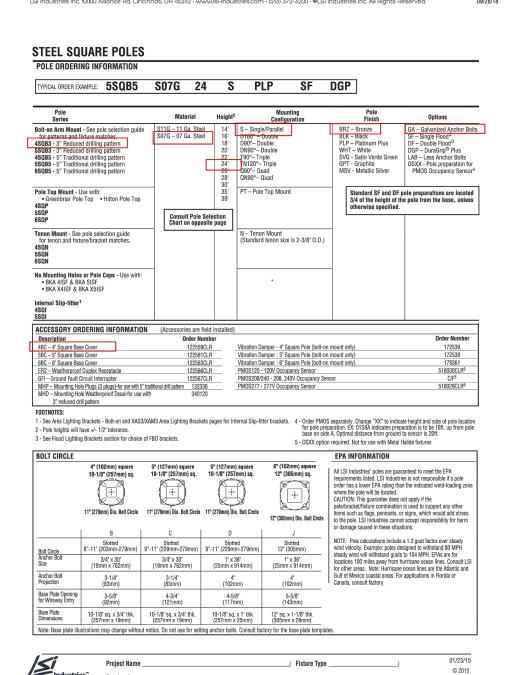
 0-50 C
 100%
 96%
 92%
 88%
 84%

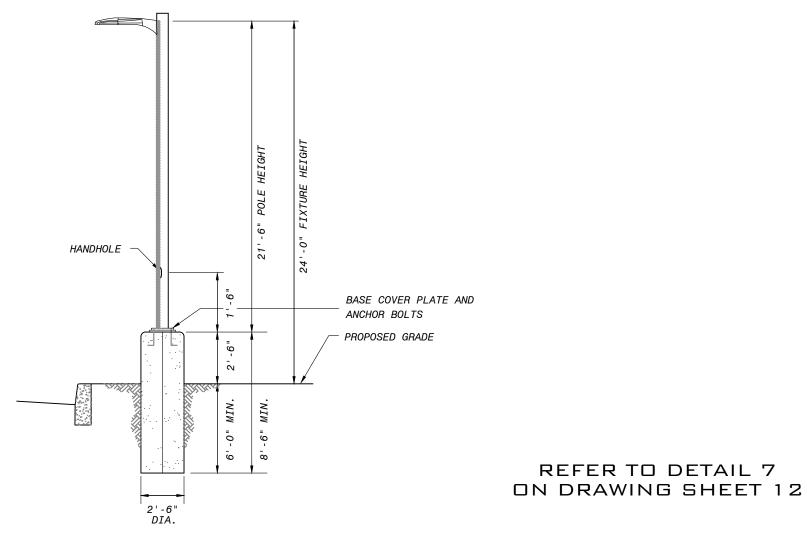
2 - IL 4692 46 B0-U0-G1

Mirada Medium - MRM Outdoor LED Area Light



57 - 5,700 CCT<sup>2,14</sup> 50 - 5,000 CCT 40 - 4,000 CCT 30 - 3,000 CCT<sup>2</sup> 27 - 2,700 CCT<sup>2</sup> IL - Integral Louver HSS1 GPT - Graphite AMB - Phosphor Converted Amber<sup>2</sup> PLP - Platinum Plus ALSCHOUT - AITLINK Syrtapse
Control System Host / Satelite with 8-12' Motion Sens
ALSCS02 - AirLink Syrapse
Control System with 12-20' Motion Sensor<sup>4</sup> TYPE A ONLY Control System with 12-20' Motion Sensor<sup>4</sup>
ALSCH802 - Affulin Synapse
Control System Host / Satelite with 12-20' Motion Sensor <sup>4,8</sup>
ALSCH404 - Afful in Synapse
ALSCH404 - Afful in Synapse
ALSCH504 - Afful in Synapse
ALSCH505 - Afful in Synapse
ALSCH505 - Afful in Synapse
ALSCH506 Stand-Alone Controls **Button Type Photocells** LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsi-industries.com • (513) 372-3200 • ©LSI Industries Inc. All Rights Reserved.

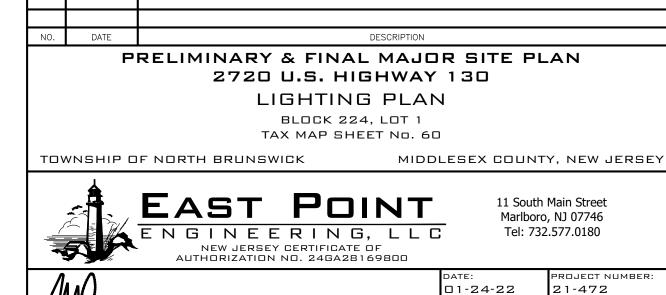




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LIGHT POLE AND FIXTURE DETAIL

REFER TO DETAIL 7



1-24-22 MARC S. LEBER DATE SHEET NO. 6 OF 15 N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GEO4452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800

NOT TO SCALE

9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE GROUND RODS AND MAKE CONNECTION TO THE GROUND STUD. THE GROUND STUD SHOULD BE LOCATED INSIDE THE SHAFT AND ACCESSIBLE VIA A HANDHOLE.

IN THE POLES UP TO THE LIGHTING FIXTURES.

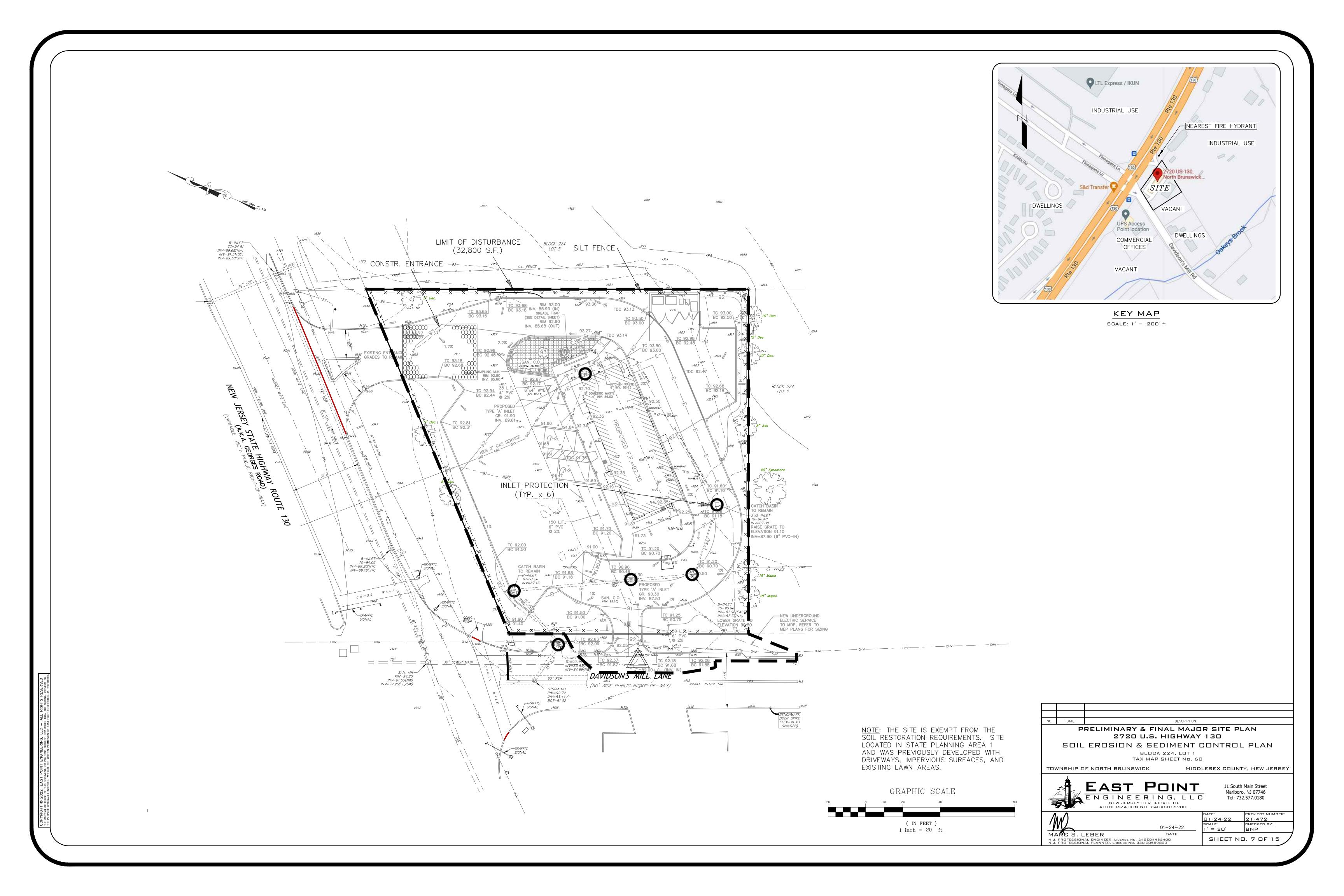
11. THE NUMBER AND SIZE OF THE POWER CONDUITS SHALL BE PROVIDED BY THE

12. ALL SITE LIGHTING SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY, THE ELECTRIC UTILITY, AND THE RECOMMENDATIONS OF THE

13. SITE LIGHTING SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S DETAILS

RECOMMENDATIONS.

16. ALL SWEEPS SHALL HAVE A MINIMUM RADIUS OF 24". NO ELBOWS SHALL BE



PROVISIONS FOR STABILIZATION AND SITE WORK.

2. 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.

3. 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.

4. N.J.S.A. 4: 24-39 ET. SEQ. REQUIRES THAT NO CERTIFICATE 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 LOT-BY-LOT OR SECTION-BY-SECTION BASIS, PROVIDED THAT THE PROJECT OR PORTION THEREOF IS IN SATISFACTORY COMPLIANCE WITH THE SEQUENCE OF DEVELOPMENT AND TEMPORARY MEASURES FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN IMPLEMENTED, INCLUDING

5. ANY DISTURBED AREAS THAT WILL BE LEFT EXPOSED FOR 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 21/2 TONS PER ACRE, ACCORDING TO STATE STANDARD FOR STABILIZATION WITH MULCH ONLY.

6. IMMEDIATELY FOLLOWING INITIAL DISTURBANCE OR ROUGH GRADING, ALL CRITICAL AREAS SUBJECT TO EROSION (I.E. STEEP SLOPES AND ROADWAY EMBANKMENTS) WILL RECEIVE TEMPORARY SEEDING IN COMBINATION WITH STRAW MULCH OR A SUITABLE EQUIVALENT, AND A MULCH ANCHOR, IN ACCORDANCE WITH STATE STANDARDS.

7. A SUB-BASE COURSE WILL BE APPLIED IMMEDIATELY FOLLOWING ROUGH GRADING AND INSTALLATION OF IMPROVEMENTS 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 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, INDIVIDUAL LOTS REQUIRE A STABILIZED CONSTRUCTION 4. FERTILIZER - REFER TO SHEET 9B. ENTRANCE 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

9. ALL SOIL WASHED, DROPPED, SPILLED, OR TRACKED OUTSIDE THE LIMIT OF DISTURBANCE OR ONTO THE PUBLIC RIGHT-OF-WAYS WILL BE REMOVED IMMEDIATELY.

10. PERMANENT VEGETATION IS TO BE SEEDED OR SODDED ON ALL EXPOSED AREAS WITHIN TEN (10) DAYS AFTER FINAL GRADING.

11. AT THE TIME THE SITE PREPARATION FOR PERMANENT VEGETATIVE STABILIZATION IS GOING TO BE 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 CONDITIONS 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/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.

14. UNFILTERED DEWATERING IS NOT PERMITTED. NECESSARY PRECAUTIONS MUST BE TAKEN DURING ALL DEWATERING 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 STANDARD FOR DUST CONTROL.

16. 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 A NEW SOIL EROSION AND SEDIMENT CONTROL PLAN MAY BE REQUIRED FOR THESE ACTIVITIES IF AN AREA GREATER THAN 5,000 SQUARE

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

SEEDING SCHEDULE - ZONE 6B

SITE AND SEEDBED PREPARATION: TO BE PERFORMED IN ACCORDANCE WITH CHAPTERS 4-1, 7-1 AND 8-1 OF THE JULY 2017 STANDARDS FOR SOIL EROSION & SEDIMENT CONTROL IN NEW JERSEY.

TEMPORARY GRASS SEEDING SHALL CONSIST OF SPRING OATS APPLIED AT A RATE OF 2.0 LBS. PER 1,000 S.F. OPTIMUM SEEDING DATES ARE BETWEEN MARCH 1 AND MAY 15 OR AUGUST 15 AND OCTOBER 1.

AN ALTERNATIVE TEMPORARY GRASS SEEDING SHALL CONSIST OF WINTER CEREAL RYE APPLIED AT A RATE OF 2.8 LBS. PER 1,000 S.F. OPTIMUM SEEDING DATES ARE BETWEEN AUGUST 1 AND NOVEMBER 15.

TEMPORARY SEEDING SHALL BE MAINTAINED UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED WITH PERMANENT SEEDING. IF ANY SERIOUS EROSION PROBLEM OCCURS, THE ERODED AREAS SHALL BE REPAIRED AND STABILIZED WITH A MULCH AS INDICATED IN NOTE 6.

PERMANENT SEEDING SHALL CONSIST OF THE FOLLOWING MIXTURE AS APPROVED BY THE FREEHOLD SOIL CONSERVATION DISTRICT:

> USDA PLANT HARDINESS ZONE 6b, TABLE 4-3 ACCEPTABLE SEEDING DATES ARE BETWEEN MARCH 1 AND APRIL 30

ACCEPTABLE SEEDING DATES ARE BETWEEN MAY 1 AND AUGUST 14 (IF IRRIGATION PRESENT) OPTIMUM SEEDING DATES ARE BETWEEN AUGUST 15 AND OCTOBER 15

MIX DETAILS 58% HARD FESCUE (135 LBS/ACRE) 19% CHEWINGS FESCUE (45 LBS/ACRE) 19% STRONG CREEPING RED FESCUE (45 LBS/ACRE)

4% PERENNIAL RYE GRASS (10 LBS/ACRE)

\*APPLY AT A SEEDING RATE OF 230 LBS/ACRE OR 5.25 LBS/1000 S.F.

3. PERMANENT SEEDING TO BE APPLIED BY HYDROSEEDING AT A RATE OF 160 LBS. PER ACRE, SLOPED AREAS TO BE COVERED WITH MULCH AS INDICATED IN NOTE 6.

5. IF THE TIME OF YEAR PREVENTS THE ESTABLISHMENT OF TEMPORARY OR PERMANENT SEEDING, EXPOSED AREA TO BE STABILIZED WITH MULCH AS INDICATED IN NOTE 6. 6. MULCH TO CONSIST OF SMALL GRAIN STRAW OR SALT HAY ANCHORED WITH A WOOD

AND FIBER MULCH BINDER OR AN APPROVED EQUAL. 7. ALL SEEDED AREAS SHALL BE MULCHED IN ACCORDANCE WITH THE MULCH AND

MULCH ANCHORING SPECIFICATIONS ON THIS SHEET. 8. REMOVE FROM THE SURFACE ALL STONES TWO INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, PIECES OF CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

10. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT SOIL COMPACTED, THE AREA MUST BE RETILLED AND FIRMED AS ABOVE.

Standards for Soil Erosion and Sediment Control in New Jersey

Topsoiling entails the distribution of suitable quality soil on areas to be vegetated.

To improve the soil medium for plant establishment and maintenance.

Water Quality Enhancement

STANDARD FOR TOPSOILING

Growth and establishment of a vigorous vegetative cover is facilitated by topsoil, preventing soil loss by wind and rain offsite and into streams and other stormwater conveyances.

Methods and Materials

Where Applicable

Topsoil shall be used where soils are to be disturbed and will be revegetated.

Materials

Topsoil should be friable<sup>1</sup>, loamy<sup>2</sup>, 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

TOP OF CURB-

**SECTION** 

1. INLET PROTECTION SHALL SAFELY FILTER OUT SEDIMENT

FLOWS UP TO AND INCLUDING THE 25 YEAR DESIGN

FROM THE 1 YEAR, 24-HOUR DESIGN STORM. THE STORM SEWER SYSTEM SHALL SAFELY CONVEY ALL

Field exploration should be made to determine whether quantity and or quality of surface soil justifies

B. 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.

Friable means easily crumbles in the fingers, as defined in most soils texts. Loamy means texture groups consisting of coarse loamy sands, sandy loam, fine and very fine sandy loam, loam, silt loam, clay loam, sandy clay loam and silty clay loam textures and having less than 35% coarse fragments (particles less than 2mm in size ) as defined in the Glossary of Soil Science Terms, 1996, Soil Science Society of America.

1-1/2" TO 2-1/2" CLEAN STONE

AROUND ENTIRE PERIMETER

WIRE PROTECTION

TO GRATE (TYP.)

PROVIDE WEIR FOR FLOODING RELIEF

1" DIAMETER PERFORATIONS -

2"x6" LUMBER OR 3/4"-

Return to TOC

Standards for Soil Erosion and Sediment Control in New Jersey

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

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.

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

D. 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.

Applying Topsoil

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, 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).

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.

SEED IMMEDIATELY

AFTER STOCKPILING

DETAIL

N.T.S.

-SILT FENCE (SEE DETAIL)

Return to TOC

## STABILIZED CONSTRUCTION ENTRANCE N.T.S. CONSTRUCTION SCHEDULE AND PROCEDURE FOR

- PER PLAN -

- FULL WIDTH OF CARTWAY

LFILTER FABRIC

PLAN VIEW

└─6" OF STONE (SEE NOTE 2)

AS SHOWN ON THE SOIL EROSION AND SEDIMENT CONTROL PLAN.

<u>PROFILE</u>

1. PLACE STABILIZED CONSTRUCTION ENTRANCE AT LOCATION(S)

2. STONE SIZE SHALL BE ASTM C-33, SIZE NO.2 OR 3, CRUSHED

4. THE WIDTH AT THE EXIST. PAVEMENT SHALL NOT BE LESS

TO TRAP SEDIMENT.

Percent Slope of Roadway

0 to 2%

2 to 5%

>5%

As prescribed by local ordinance or other governing authority.

3. THE THICKNESS OF THE STAB. CONST. ENT. SHALL NOT BE LESS

THAN THE FULL WIDTH OF POINTS OF INGRESS AND EGRESS.

WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO

THE R.O.W./PAVEMENT. THIS REQUIRES PERIODIC TOP DRESSING

WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS

DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURE USED

Table 29-1: Lengths of Construction Exits on Sloping Roadbeds

Coarse Grained Soils

50 ft

Length of Stone Required

Entire surface stabilized with FABC base course1

Fine Grained Soils

100 ft

200 ft

5. THE STAB. CONST. ENT. SHALL BE MAINTAINED IN A CONDITION

6. ALL SEDIMENT SPILLED, DROPPED, WASHED, OR TRACKED ONTO

THE PUBLIC ROADWAY MUST BE REMOVED IMMEDIATELY.

—R.O.W.—

PROVIDE APPROPRIATE TRANSITION BETWEEN

GROUND ~

EXIST. GROUND

# IMPLEMENTATION OF SOIL EROSION AND SEDIMENT CONTROL MEASURES

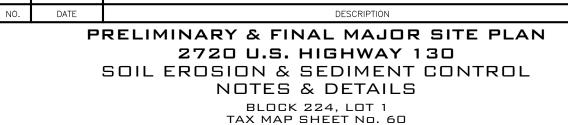
1. INSTALL SILT FENCE, TREE PROTECTION, AND CONSTRUCTION ENTRANCE. 2 DAYS 2. DEMOLISH EXISTING IMPROVEMENTS, CLEAR SITE. 1 MONTH 3. STRIP AND STORE TOPSOIL IN STOCKPILE AND STABILIZE STOCKPILE 1 DAY 4. CLEAR AND ESTABLISH ROUGH GRADES AS NECESSARY TO CONSTRUCT 2-3 DAYS BUILDING ADDITION. 5. CONSTRUCT DRAINAGE. 1-2 DAYS 6. CONSTRUCT UTILITIES AND CURBS. 1-2 WEEKS 7. CONSTRUCT BUILDING FOUNDATION, BUILDING. 4-6 MONTHS 8. INSTALL SITE LIGHTING, WALKWAYS. 2 WEEKS 9. PAVE PARKING AREAS. 1-2 DAYS 10. INSTALL LANDSCAPING 2-3 DAYS 11. CONSTRUCT FINE GRADING TO FINISHED GRADES AND 1-2 DAYS ESTABLISH PERMANENT VEGETATIVE COVER ON LOT. 12. REMOVE SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN 1 DAY

DUST CONTROL NOTES

TO PREVENT BLOWING AND THE MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, CONSTRUCTION ACTIVITIES, AND TO REDUCE ON-SITE AND OFF-SITE DAMAGE AND HEALTH HAZARDS, DUST CONTROL MEASURES SHALL BE ENACTED ON THE PROJECT SITE.

DURING CONSTUCTION. THE CONTRACTOR WILL BE REQUIRED TO PROVIDE REMEDIATION TO CONTROL PARTICLES AND DUST THAT WILL ENTER INTO THE AIR DURING THE REMOVAL OFF THE ON-SITE STRUCTURES. THESE PROCEDURES MAY INVOLVE COATING THE DEBRIS WITH WATER OR ANOTHER SPRAY-ON ADHESIVE.

NOTE: IN THAT N.J.S.A. 4:24-39 et seq. REQUIRES THAT NO CERTIFICATE OF OCCUPANCY BE ISSUED BEFORE THE PROVISIONS OF THE CERTIFIED PLAN FOR SOIL EROSION AND SEDIMENT CONTROL HAVE BEEN COMPLIED WITH FOR PERMANENT MEASURES, ALL SITE WORK WILL HAVE TO BE COMPLETED PRIOR TO THE DISTRICT ISSUING A REPORT OF COMPLIANCE FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY BY THE MUNICIPALITY



11 South Main Street Marlboro, NJ 07746 <u>ENGINEERI</u>NG, LLC Tel: 732.577.0180



TOWNSHIP OF NORTH BRUNSWICK

ADEQUATELY STABILIZED.

01-24-22 DATE

1-24-22

RNP SHEET NO. 8 OF 15

21-472

MIDDLESEX COUNTY, NEW JERSEY

MULCH AND MULCH ANCHORING SPECIFICATIONS (rev. 2017) Stabilizing exposed soils with non-vegetative materials exposed for periods longer than 14 days.

Methods and Materials 1. 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

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. 2. Protective Materials

done in accordance with

Standards for Land Grading

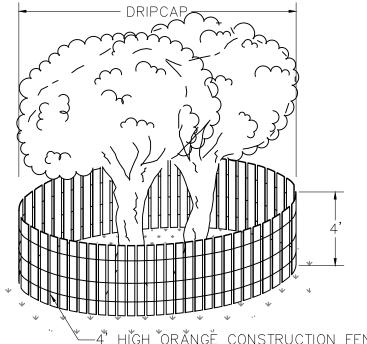
A. Unrotted small—grain straw, at 2.0 to 2.5 tons per acre, is spread uniformly at 90 to 115 pounds per 1,000 square feet and anchored with a mulch anchoring tool, liquid mulch binders, or netting tie down. Other suitable materials may be used if approved by the Soil Conservation District. The approved rates above have been met when the mulch covers the ground completely upon visual inspection, i.e. the soil cannot be seen below the mulch.

B. Synthetic or organic soil stabilizers may be used under suitable conditions and in quantities as recommended by the manufacturer.

C. Wood-fiber or paper-fiber mulch at the rate of 1,500 pounds per acre (or according to the manufacturer's requirements) may be applied by a hydroseeder.

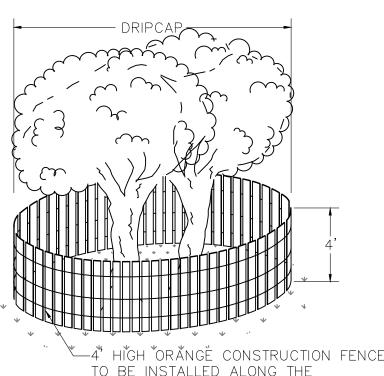
D. Mulch netting, such as paper jute, excelsior, cotton, or plastic, may

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.



TO BE INSTALLED ALONG THE DRIP CAP OF TREE CLUSTERS TO BE PROTECTED.

N.T.S.



-4' HIGH ORANGE CONSTRUCTION FENCE

Fence posts shall be spaced 8 feet center-to-center or closer. They shall extend at least 2 feet into the ground and extend at least 2 feet above ground (Manual Fig. 23—2). Posts shall be constructed of hardwood with a

minimum diameter thickness of 1 ½ inches.

POST WITH METAL FASTENERS-AND REINFORCEMENT BETWEEN

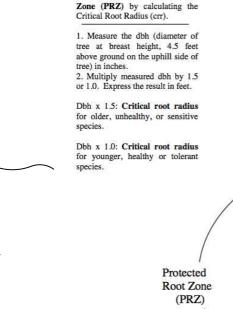
A geotextile fabric, recommended for such use by the manufacturer, shall be buried at least 6 inches deep in the ground. The fabric shall extend at least 2 feet above the ground. The fabric must be securely fastened to the posts using a system consisting of metal fasteners (nails or staples) and a high strength reinforcement material (nylon webbing, grommets, washers etc.) placed between the fastener and the geotextile fabric. The fastening system shall resist tearing away from the post. The fabric shall incorporate a drawstring in the top portion of the fence for added strength.

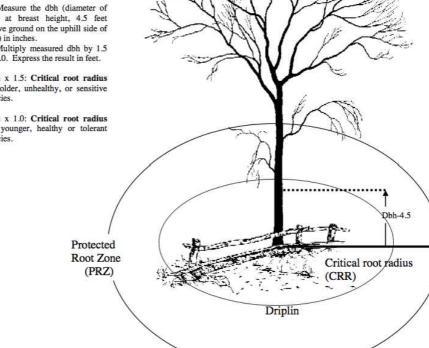
ROOT PROTECTION DURING CONSTRUCTION GUIDE

<u>SILT FENCE DETAII</u> N.T.S.

EXTERIOR PLYWOOD INLET FRAME-2. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY THROUGHOUT CONSTRUCTION AND AFTER ALL STORM └HINGE OR CORNER BRACE (TYP.) EVENTS. ACCUMULATED SILT SHALL BE REMOVED FROM NOTE: SILT TO BE REMOVED FROM AROUND INLET PERIODICALLY THROUGHOUT CONSTRUCTION 3. FOR TYPE "A" AND "E" INLETS, PROVIDE SECOND WEIR PANEL ALONG FOURTH EDGE. INLET PROTECTION DETAIL N.T.S. STEEL OR 2" x 2" OAK FENCE POSTS (SPACING 8'-0" C.TO C.)

Estimate a tree's Protected Root 8' MAX. CENTER TO CENTER DRAWSTRING RUNNING THROUGH FABRIC ALONG TOP OF FENCE





1. Protecting Trees from Construction Damage- A Homeowners Guide, Gary R. Johnson, University Of Minnesota Extension Service, Saint Paul, MN,

be used.

Standards for Soil Erosion and Sediment Control in New Jersey

#### TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

Establishment of temporary vegetative cover on soils exposed for periods of two to 6 months which are not being graded, not under active construction or not scheduled for permanent seeding within 60 days.

To temporarily stabilize the soil and reduce damage from wind and water erosion until permanent stabilization is accomplished.

#### Water Quality Enhancement

Provides temporary protection against the impacts of wind and rain, slows the over land movement of stormwater runoff, increases infiltration and retains soil and nutrients on site, protecting streams or other stormwater conveyances.

### Where Applicable

On exposed soils that have the potential for causing off-site environmental damage.

#### Methods and Materials

#### 1. 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
- 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.).

#### 2. 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.
- 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

Standards for Soil Erosion and Sediment Control in New Jersey

- be on the general contour. Continue tillage until a reasonable uniform seedbed is prepared.
- C. Inspect seedbed just before seeding. If traffic has left the soil compacted, the area must be retilled in accordance with the above. 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.

#### A. Select seed from recommendations in Table 7-2.

Standards for Soil Erosion and Sediment Control in New Jersey

specific requirements.

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 is prepared.

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

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.

seeded area and mowed once.

determined by germination testing results.

is not required for cool season grasses.

seedbed reparation. See Standard for Management of High Acid-Producing Soils for

Seeding rates specified are required when a report of compliance is requested prior

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

Warm-season mixtures are grasses and legumes which maximize growth at high

rates for warm-season grasses shall be the amount of Pure Live Seed (PLS) as

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

3. Cool-season mixtures are grasses and legumes which maximize growth at

Conventional Seeding is performed by applying seed uniformly by hand, cyclone (centrifugal)

seedings, seed shall be incorporated into the soil within 24 hours of seedbed preparation to a depth

seeder, drop seeder, drill or cultipacker seeder. Except for drilled, hydroseeded or cultipacked

of 1/4 to 1/2 inch, by raking or dragging. Depth of seed placement may be 1/4 inch deeper on

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

Hydroseeding is a broadcast seeding method usually involving a truck, or trailer-mounted tank,

mix onto the prepared seedbed. Mulch shall not be included in the tank with seed. Short-

with an agitation system and hydraulic pump for mixing seed, water and fertilizer and spraying the

fibered 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

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

temperatures, generally 85° F and above. See Table 4-3 mixtures 1 to 7. Planting

to actual establishment of permanent vegetation. Up to 50% reduction in rates may

#### **TABLE 7-2**

TEMPORARY VEGETATIVE STABILIZATION GRASSES, SEEDING RATES, DATES AND DEPTH.

	SEEDIN	SEEDING RATE (pounds)		OPTIMUM SEEDING DATE  Based on Plant Hardiness  Zone 3		OPTIMUM SEED DEPTH <sup>4</sup> (inches)
SEED SELECTIONS	(pou					
	Per Acre	Per 1000 Sq. Ft.	ZONE 5b, 6s	ZONE 6b	ZONE 7a, b	
	COOL	SEASON	GRASSE	S		
1. Perennial ryegrass	100	1.0	3/15- 6/1 8/1- 9/15	3/1- 5/15 8/15- 10/1	2/15- 5/1 8/15- 10/15	0.5
2. Spring oats	86	2.0	3/15- 6/1 8/1- 9/15	3/1- 5/15 8/15- 10/1	2/15- 5/1 8/15- 10/15	1.0
3. Winter Barley	96	2.2	8/1- 9/15	8/15- 10/1	8/15- 10/15	1.0
4. Annual ryegrass	100	1.0	3/15- 6/1 8/1- 9/15	3/15- 6/1 8/1- 9/15	2/15- 5/1 8/15- 10/15	0.5
5. Winter Cereal Rye	112	2.8	8/1 - 11/1	8/1 - 11/15	8/1 - 12/15	1.0
	WARN	A SEASO	N GRASSE	S		
6. Pearl millet	20	0.5	6/1-8/1	5/15- 8/15	5/1-9/1	1.0

Standards for Soil Erosion and Sediment Control in New Jersey

Millet (German or Hungarian) 30 0.7 6/1-8/1 5/15-

- 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.) 4 Twice the depth for sandy soils
- Conventional Seeding. Apply 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, 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
- 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 seed germination and growth. Hydroseeding may be used for areas too steep for conventional equipment to traverse or too obstructed with rocks, stumps, etc.
- 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 maximized.

#### 4. Mulching

- Mulching is required on all seeding. Mulch will insure 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.
- A. Straw or Hay. Unnrotted small grain straw, hay free of seeds, applied at the rate of 1-1/2 to 2 tons per acre (70 to 90 pounds per 1,000 square feet), except that where a crimper is used instead of a liquid mulch-binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch chopper-blowers must not grind the mulch. Hay mulch is not recommended for establishing fine turf or lawns due to the presence of weed seed.

Application. Spread mulch uniformly by hand or mechanically so that approximately 95% of the soil surface will be covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 square feet sections and distribute 70 to 90 pounds within each section.

Anchoring shall 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.

- 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 cris-cross and a square pattern. Secure twine around each peg with
- Mulch Nettings. Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed.

Standards for Soil Erosion and Sediment Control in New Jersey

a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance

Crimper (mulch anchoring tool). A tractor-drawn implement, somewhat like a disc harrow, especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil so as to anchor

it and leave part standing upright. This technique is limited to areas traversable by a tractor, which must

operate on the contour of slopes. Straw mulch rate must be 3 tons per acre. No tackifying or adhesive

#### b. Use one of the following:

4. Liquid Mulch-Binders. – May be used to anchor hay or straw mulch.

- (1) Organic and Vegetable Based Binders Naturally occurring, powder based, hydrophilic materials when mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turfgrass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.
- (2) Synthetic Binders High polymer synthetic emulsion, miscible with water when diluted and following application to mulch, drying and curing shall no longer be soluble or dispersible in water. It shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.
- Note: All names give above are registered trade names. This does not constitute a commendation of these products to the exclusion of other products.
- B. Wood-fiber or paper-fiber mulch. Shall be made from wood, plant fibers or paper containing no growth or germination inhibiting materials, used at the rate of 1,500 ponds per acre (or as recommended by the project manufacturer) and may be applied by a hydroseeder. This mulch shall not be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding periods in spring and fall.
- Pelletized mulch. Compressed and extruded paper and/or wood fiber product, which may contain co-polymers, tackifiers, fertilizers and coloring agents. The dry pellets, when applied to a seeded area and watered, forma mulch mat. Pelletized mulch shall be applies in accordance with the manufacturers recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60-75 lbs./1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has bee found to be beneficial for use on small lawn or renovation areas, seeded areas where weed-seed free mulch is desired or on sites where straw mulch and tackifier agent are not practical or desirable.

Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.

# STANDARDS FOR PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

Standards for Soil Erosion and Sediment Control in New Jersey

#### PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION **Definition**

Establishment of permanent vegetative cover on exposed soils where perennial vegetation is needed for long-term

# To permanently stabilize the soil, ensuring conservation of soil and water, and to enhance the environment.

Water Quality Enhancement Slows the over-land movement of stormwater runoff, increases infiltration and retains soil and nutrients on site,

#### protecting streams or other stormwater conveyances. Where Applicable

On exposed soils that have a potential for causing off-site environmental damage.

# Methods and Materials

#### 1. <u>Site Preparation</u>

- 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.
- Immediately prior to seeding and topsoil application, the subsoil shall be evaluated for compaction in accordance with the Standard for Land Grading.
- 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 Topsoiling.
- Install needed erosion control practices or facilities such as diversions, grade-stabilization structures, channel stabilization measures, sediment basins, and waterways.

## 2. <u>Seedbed Preparation</u>

- 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 the 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

Return to TOC

reduced seed germination and growth.

Standards for Soil Erosion and Sediment Control in New Jersey be deemed compliance with this mulching requirement.

Straw or Hay. Unrotted small grain straw, hay free of seeds, to be applied at the rate of 1-1/2 to 2 tons per acre (70 to 90 pounds per 1,000 square feet), except that where a crimper is used instead of a liquid mulch-binder (tackifying or adhesive agent), the rate of application is 3 tons per acre. Mulch chopper-blowers must not grind the mulch. Hay mulch is not recommended for

establishing fine turf or lawns due to the presence of weed seed.

Application - Spread mulch uniformly by hand or mechanically so that at least 85% of the soil surface is covered. For uniform distribution of hand-spread mulch, divide area into approximately 1,000 square feet sections and distribute 70 to 90 pounds within each section

Anchoring shall 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

- 1. 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 around each peg with two or more round turns.
- 2. Mulch Nettings Staple paper, jute, cotton, or plastic nettings to the soil surface. Use a degradable netting in areas to be mowed.
- 3. Crimper (mulch anchoring coulter tool) A tractor-drawn implement, somewhat like a disc harrow, especially designed to push or cut some of the broadcast long fiber mulch 3 to 4 inches into the soil so as to anchor it and leave part standing upright. This technique is limited to areas traversable 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.
- 4. Liquid Mulch-Binders May be used to anchor salt hay, hay or straw mulch.
- a. Applications should be heavier at edges where wind may catch the mulch, in valleys, and at crests of banks. The remainder of the area should be uniform in appearance.
- b. Use one of the following:
- (1) Organic and Vegetable Based Binders Naturally occurring, powder-based, hydrophilic materials when mixed with water formulates a gel and when applied to mulch under satisfactory curing conditions will form membraned networks of insoluble polymers. The vegetable gel shall be physiologically harmless and not result in a phytotoxic effect or impede growth of turf grass. Use at rates and weather conditions as recommended by the manufacturer to anchor mulch materials. Many new products are available, some of which may need further evaluation for use in this state.
- (2) Synthetic Binders High polymer synthetic emulsion, miscible with water when diluted and, following application of mulch, drying and curing, shall no longer be soluble or dispersible in water. Binder shall be applied at rates recommended by the manufacturer and remain tacky until germination of grass.
- Note: All names given above are registered trade names. This does not constitute a ecommendation of these products to the exclusion of other products.
- B. Wood-fiber or paper-fiber mulch shall be made from wood, plant fibers or paper containing no

Standards for Soil Erosion and Sediment Control in New Jersey growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as commended by the product manufacturer) and may be applied by a hydroseeder. Mulch shallnot be mixed in the tank with seed. Use is limited to flatter slopes and during optimum seeding

- Pelletized mulch compressed and extruded paper and/or wood fiber product, which may contain co-polymers, tackifiers, fertilizers, and coloring agents. The dry pellets, when applied to a seeded area and watered, form a mulch mat. Pelletized mulch shall be applied in accordance with the manufacturer's recommendations. Mulch may be applied by hand or mechanical spreader at the rate of 60-75 lbs/1,000 square feet and activated with 0.2 to 0.4 inches of water. This material has been found to be beneficial for use on small lawn or renovation areas, seeded areas where weedseed free mulch is desired, or on sites where straw mulch and tackifier agent are not practical or desirable. Applying the full 0.2 to 0.4 inches of water after spreading pelletized mulch on the seed bed is extremely important for sufficient activation and expansion of the mulch to provide soil coverage.
- 5. Irrigation (where feasible)

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.

Establishing Permanent Vegetative Stabilization

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 <u>Report of Compliance</u> 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.

> DESCRIPTION PRELIMINARY & FINAL MAJOR SITE PLAN 2720 U.S. HIGHWAY 130 SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS

BLOCK 224, LOT 1 TAX MAP SHEET No. 60 TOWNSHIP OF NORTH BRUNSWICK MIDDLESEX COUNTY, NEW JERSEY



01-24-22 MARC S. LEBER

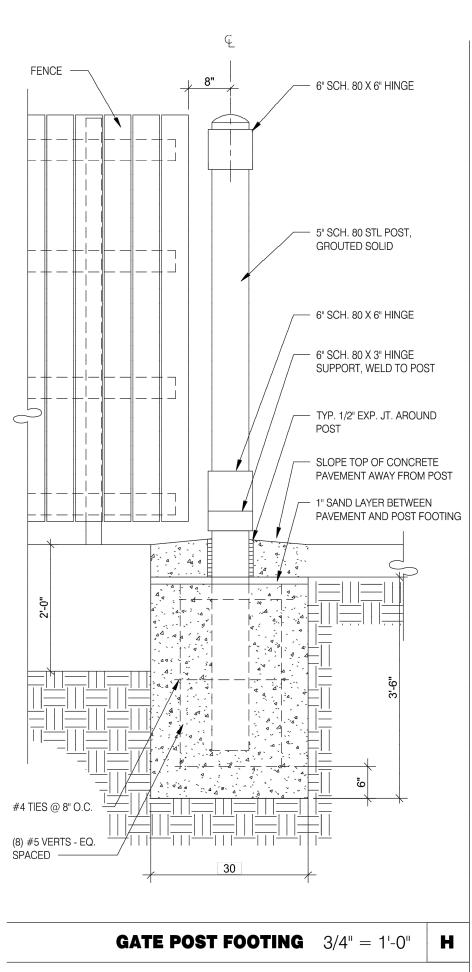
21-472 RNP

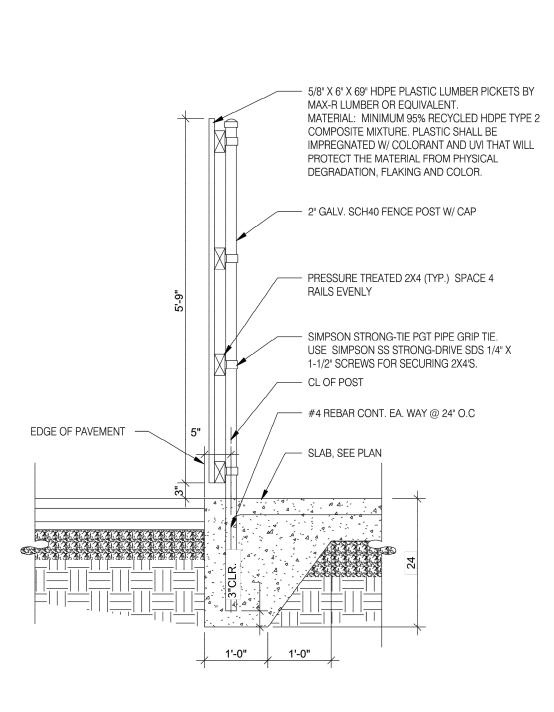
Return to TOC

11 South Main Street Marlboro, NJ 07746 Tel: 732.577.0180

N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GE04452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800

SHEET NO. 9 OF 15





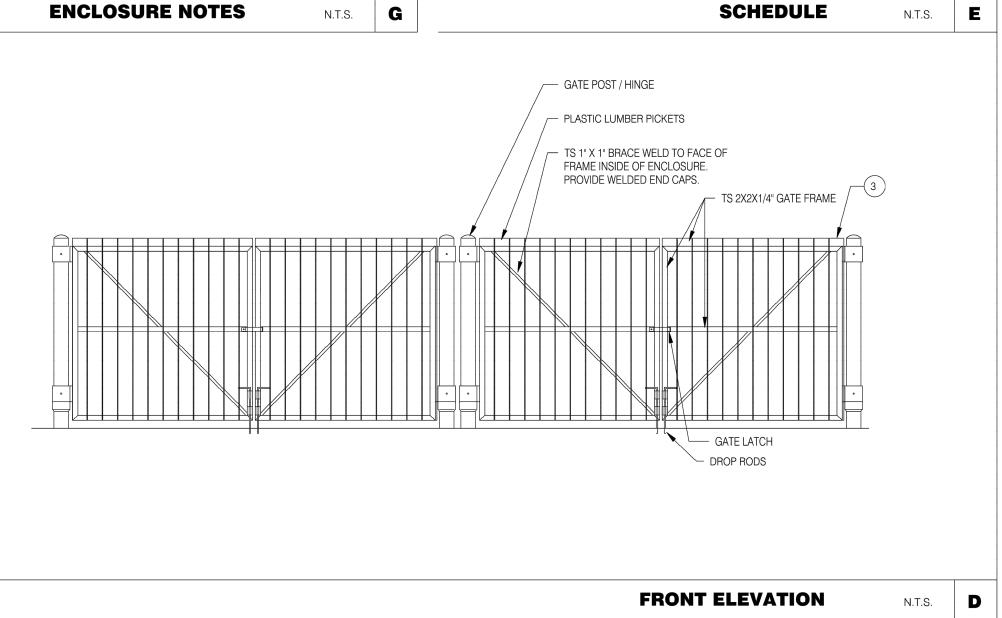
	GATE POST FOOTING	3/4" = 1'-0"	
GATE HARDWARE: GALVANIZED.	: ALL HARDWARE AND ACCESSORIES SHALL B	E HEAVY	

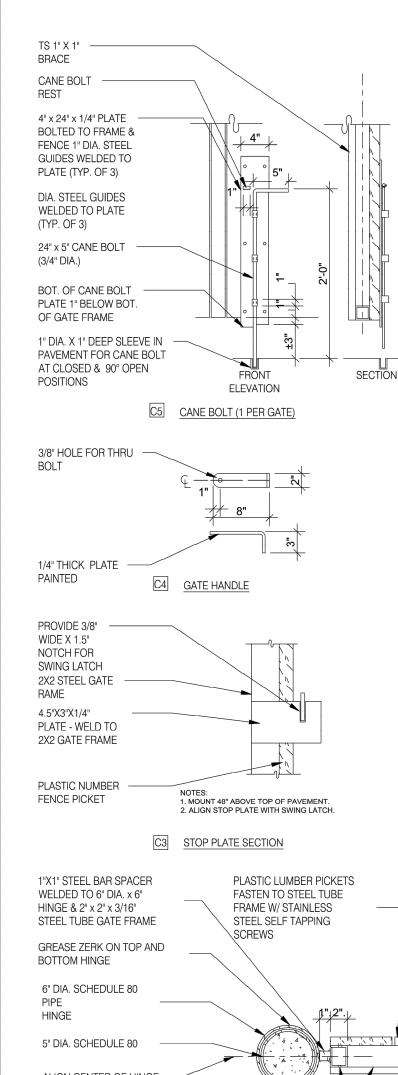
GATE STOP: MUSHROOM TYPE OR FLUSH PLATE WITH ANCHORS SET IN CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.

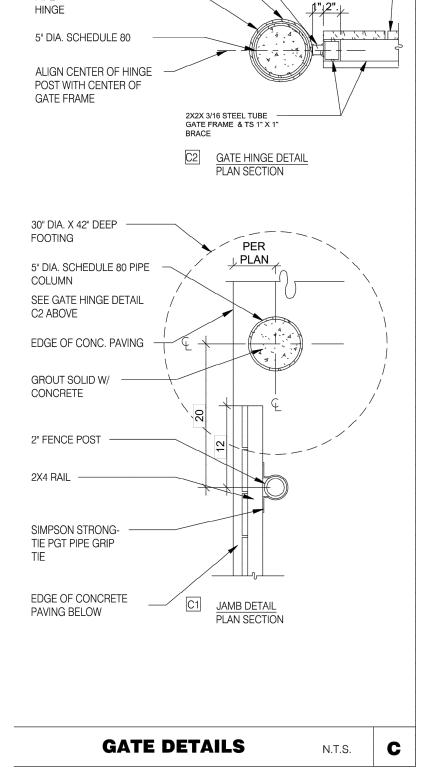
GATE NOTES: (4) EQUAL WIDE x 6-0" HIGH MTL. GATES, TYPE 'B' 1 1/2" DECKING, 22GA. W/ T.S. 1 X1 1875 BAR CROSS BRACING WELD AND GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT ALL STEEL COMPONENTS.

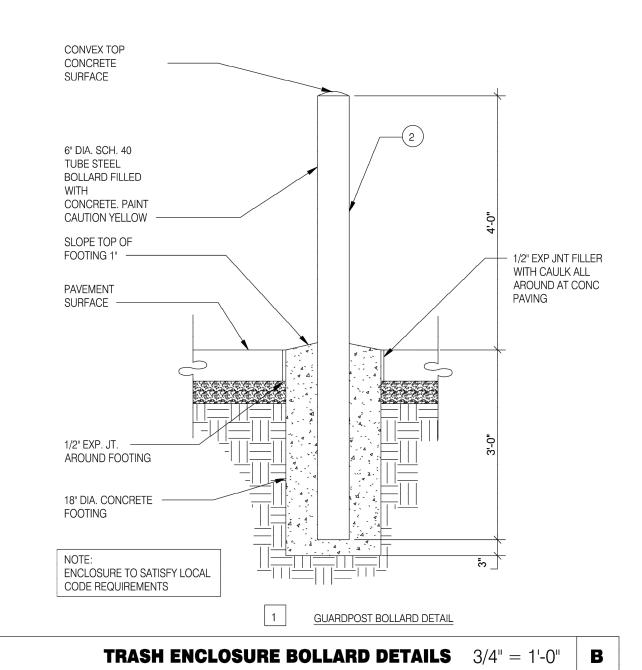
SYMBOL	AREA	MANUFACTURER	COLOR
1	GATE FRAME COLOR	SHERWIN WILLIAMS	SW 7055 ENDURING BRONZE
2	PIPE BOLLARDS	SHERWIN WILLIAMS	CAUTION YELLOW
3	HDPE LUMBER	MAX. R	LIGHT BROWN TEXTURE

**FENCE SECTION** 3/4" = 1'-0" **F** 

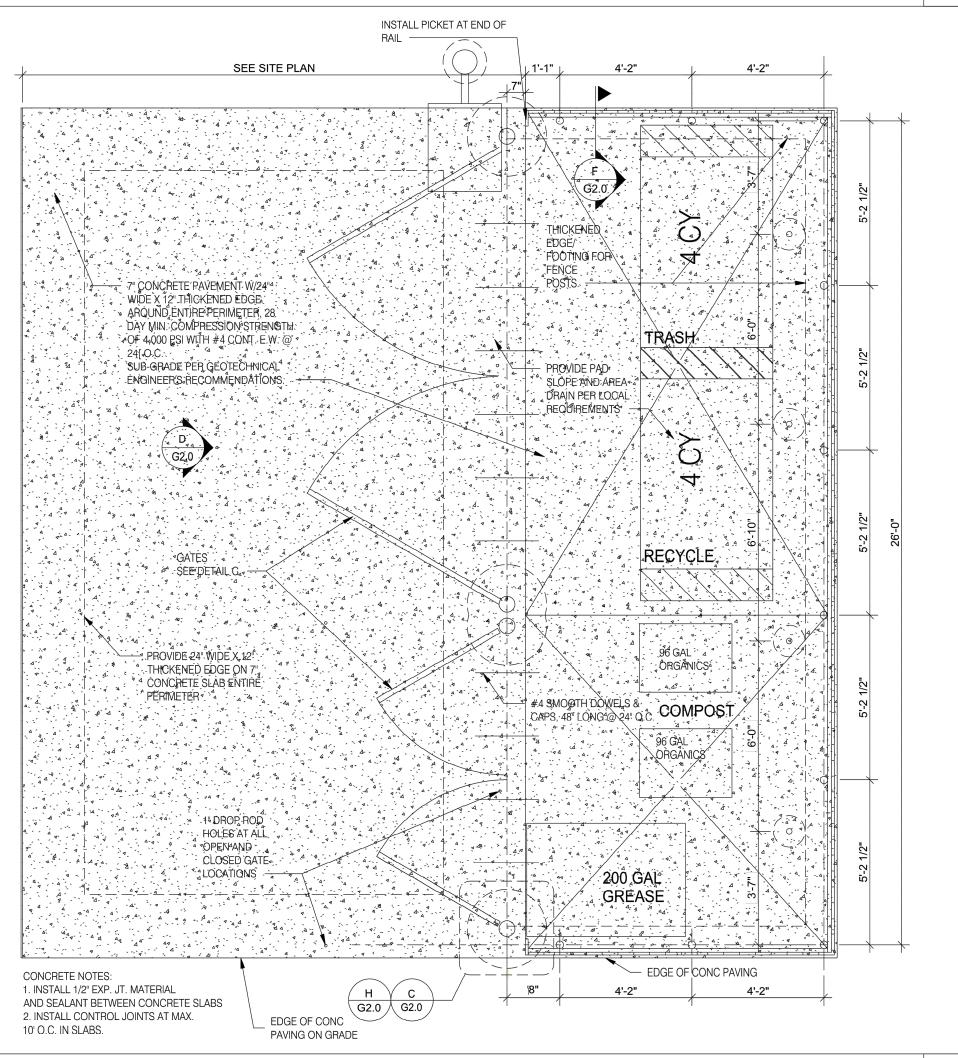


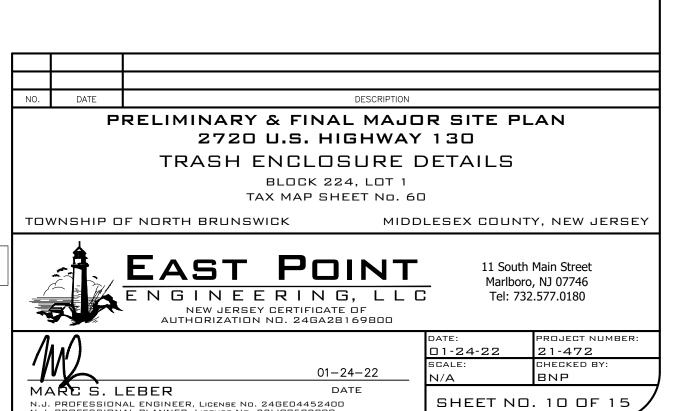




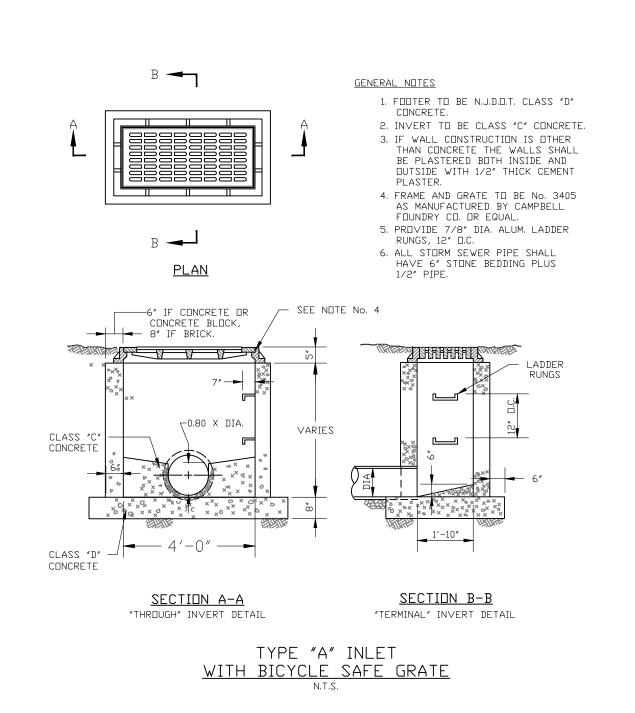


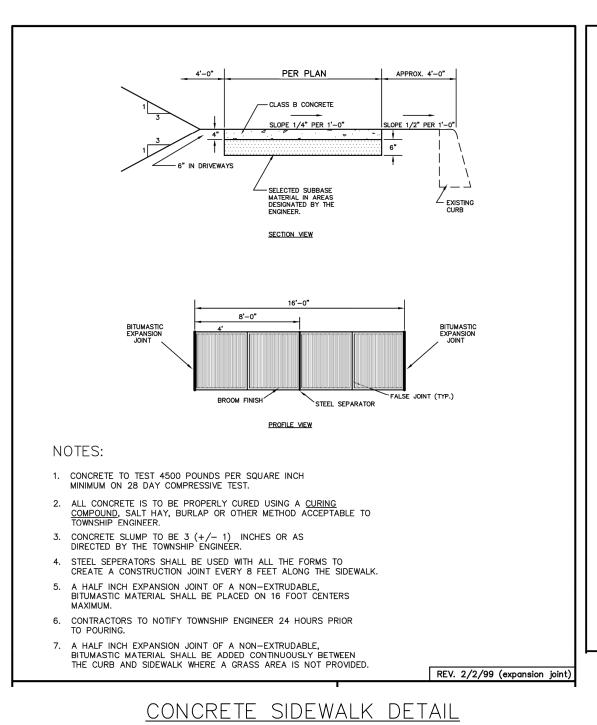
**TRASH LAYOUT** 3/8" = 1'-0" **A** 





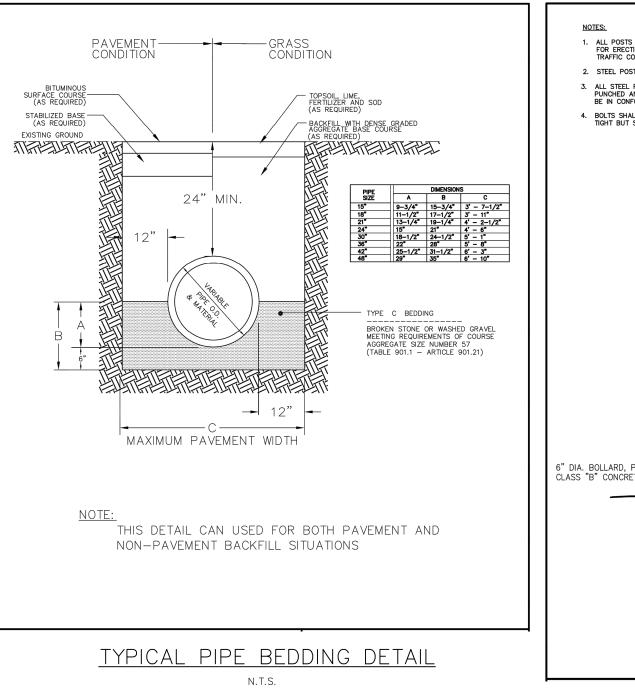
N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GEO4452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33L100589800

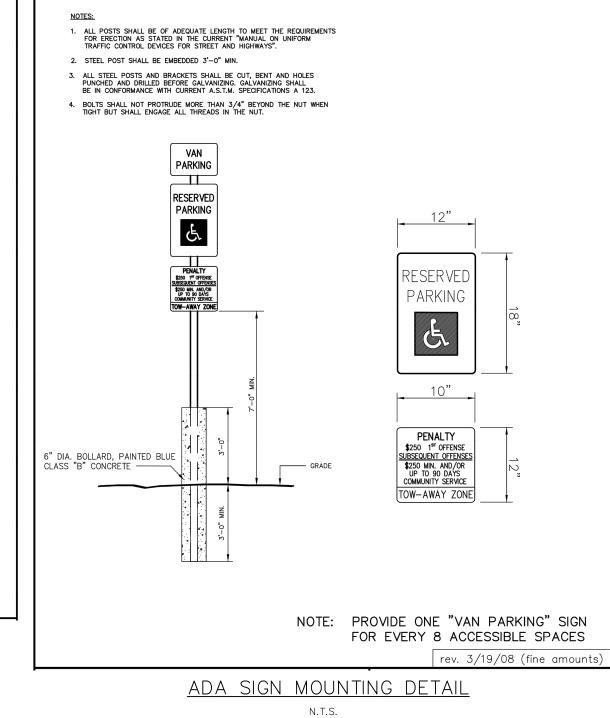




N.T.S.

**Product Information** 





ALL POSTS SHALL BE OF ADEQUATE LENGTH TO MEET THE REQUIREMENTS FOR ERECTION AS STATED IN THE CURRENT "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES FOR STREET AND HIGHWAYS". PERMANENT SIGN SUPPORTS SHALL NOT BE INSTALLED ON SLOPES GREATER THAN 10:1, UNLESS BEHIND A TRAFFIC BARRIER, AND THE SLOPE SHALL EXTEND A MINIMUM OF 3"-0" BEYOND THE OUTSIDE EDGE OF SIGN (SEE GRADING DETAIL FOR SLOPE TREATMENT). TWO PIECE STEEL POST SHALL BE EMBEDDED 3'-8" MIN. ONE PIECE STEEL POST SHALL BE EMBEDDED 3'-6" MAX. 9. EXTRUDED ALUMINUM SIGN PANELS ARE NOT PERMITTED FOR USE WITH U-POST SIGN SUPPORTS. 3RACKETS SHALL BE CUT, BENT AND HOLES 3EFORE GALVANIZING. GALVANIZING SHALL TH CURRENT A.S.T.M. SPECIFICATIONS A 123. U-POST SIGN SUPPORTS SHALL NOT BE PLACED IN FRONT OF GUIDE RAIL AND THE POSTS MUST NOT STRADDLE GUIDE RAIL. 11. TO EXTEND THE HEIGHT OF A SIGN POST, A MAXIMUM OF ONE SPLICE MAY BE MADE AND MUST BE A MINIMUM OF 9 FEET FROM THE GROUNDLINE TO CENTER LINE OF SPLICE. R 2 PIECE STEEL U-POST IN CONFORMANCE L DETERMINE POST TYPE AND NUMBER AS RUDE MORE THAN 3/4" BEYOND THE NUT WHEN  $\approx$  ALL THREADS IN THE NUT. CLEARANCE REQUIREMENTS FOR SIGNS ARE: NT TO BOTTOM OF SIGN AS PER OF THE "MANUAL ON UNIFORM TRAFFIC FOR STREETS AND HIGHWAYS." **GROUN** 30TTOM OF SIGN SHALL BE 7 FEET MINIMUM. ' INSTALLATIONS, THE MINIMUM DISTANCE FROM THE TOP OF SIGN MUST BE 9 FEET. SINGLE POST 30" X 30" OR SMALLER TWIN POST

SIGN MOUNTING DETAIL N.T.S.

1/2" RAD — - HOT POURED RUBBER ASPHALT JOINT SEALER - PAVEMENT SURFACE 1.—1⁴/4" <sup>\_</sup> WIDTH OF JOINT FILLER STRIP EQUAL TO THE THICKNESS OF THE PAVEMENT LESS 1/2' . . 4 . . . 4 . . 1/2" PREFORMED BITUMINOUS JOINT FILLER, BITUMINOUS TYPE, CONFORMING TO A.S.S.H.T.O. SPEC'S M-33. TO BE INSTALLED BETWEEN CURB CURB MATERIAL N.J.D.O.T. CLASS "B

AND NON-BITUMINOUS PAVEMENT ON BASE COURSE

TRANSVERSE JOINTS 1/2" WIDE SHALL BE INSTALLED IN THE CURB 20'-0" APART AND SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED FIBER JOINT FILLER COMPLYING WITH THE REQUIREMENTS OF A.A.S.H.T.O. SPEC. M-213, RECESSED 1/4" IN FROM FRONT FACE AND TOP OF CURB.

CONCRETE VERTICAL CURB N.T.S.

CONCRETE (AIR-ENTRAINED)

4,500 PSI

55"x1" 32" H Weight: Material: Powder Coated Steel Box Pattern Full Panel Features: \*\*Assembly Requred\*\* \*Panel Only Post Sold Separately\*

MF5047

**Powder Coating Options** 

- Standard Color Palette

TYPICAL GREASE TRAP & SAMPLING MANHOLE DETAIL PATIO FENCE PANEL

8" HOLE WITH JO" OPENING SECTION SLAB TOP -6" CLEANOUT WITH MONUMENT / MANHOLE FRAME AND COVER (ROUND BOX LABELED "SEWER" (SEE DETAIL) FLANGE) CAMPBELL MODEL NO. 1011B LABELED "SANITARY SEWER" AS REQUIRED -- MANHOLE FRAME AND COVER (SQUARE FLANGE) CAMPBELL MODEL NO. 1057D. LABELED "SANITARY SEWER" EXTERIOR COAT-EXTERIOR TO RECEIVE
SHOP OR FIELD COATING
OF COAL TAR PITCH (TYP.) 6"DIA. @ 2% MIN. DISCHARGE TO E.B.S.A GRAVITY SEWER (AS REQUIRED) BENCH AND CHANNEL CONCRETE FILL **SECTION** FRAME & COVER 1. ALL CASTINGS TO HAVE: A. 3 NON-PENETRATING PICK HOLES. B. 2 GALVANIZED STEEL DROP LIFTING ONSTRUCTION NOTES

I. PRECAST CONCRETE GREASE INTERCEPTOR SECTIONS TO BE IN ACCORDANCE WITH ASTM DESIGNATION C-478 AS MANUFACTURED BY GARDEN STATE PRECAST.

2. RUBBER GASKET SEAL TO BE INSTALLED AT JOINT SECTIONS OF STRUCTURE IN ACCORDANCE WITH A.S.T.M. DESIGNATION C-443, C-990, OR APPROVED EQUAL.

3. CONTRACTOR SHALL PROVIDE SHOP DRAWINGS FOR REVIEW AND APPOVAL BY THE EAST BRUNSWICK SEWERAGE AUTHORITY PRIOR TO CONSTRUCTION.

4. PRECAST CONCRETE SAMPLING STRUCTURE TO BE IN ACCORDANCE WITH A.S.T.M. DESIGNATION C-913 AS MANUFACTURED BY GARDEN STATE PRECAST OR APPROVED EQUAL. HANDLES.
C. 1200—SERIES PATTERN TYPE.
D. AS MANUFACTURED BY CAMPBELL FOUNDRY OR EQUAL.

> and ACI 318-16-4.5.2 3. Tank complies with all requirements of NJDEP Chapter 199 7:9A-8.2

NOTE: REFER TO DETAIL

OUTDOOR FIXTURE DETAILS

NOTES:
1. OUTDOOR BENCH MODEL #TF312512, MISTY GRAY

3. DRIVE-THRU TRASH RECEPTACLE MODEL #TF1021,

4. PATIO TRASH RECEPTACLE MODEL #TF1015, MISTY GRAY FINISH, QTY. 1

2. OUTDOOR BENCH ADA MODEL #TF312812, MISTY GRAY

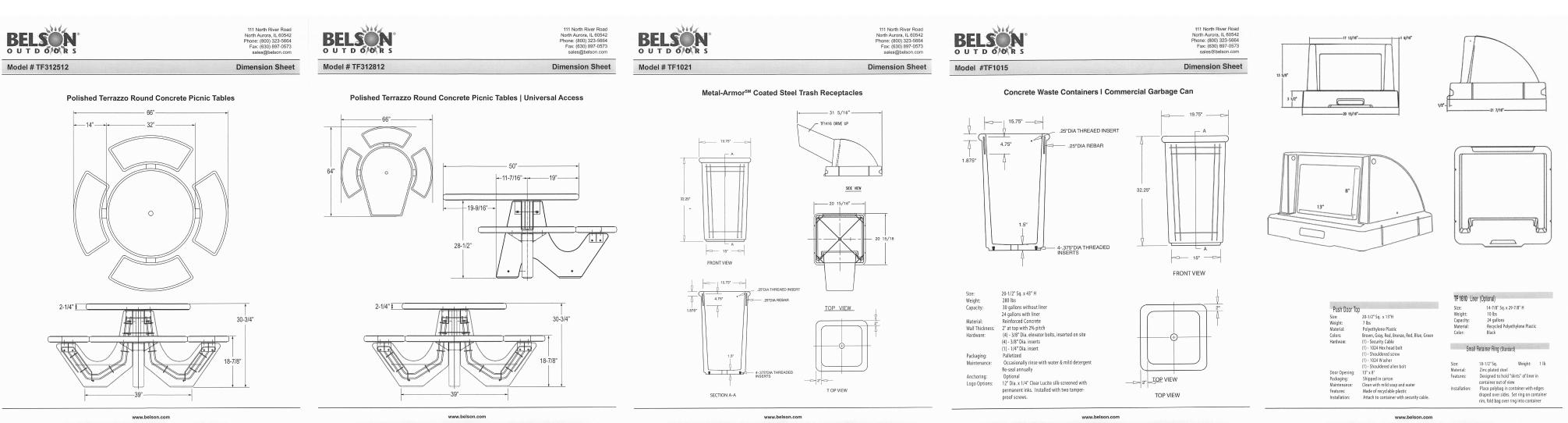
FINISH, QTY. 2

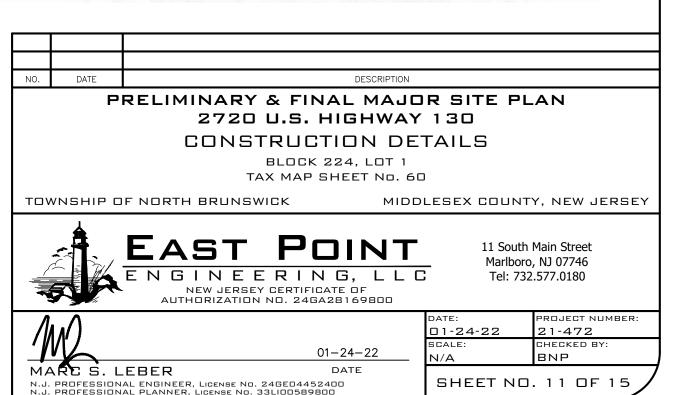
FINISH, QTY. 1

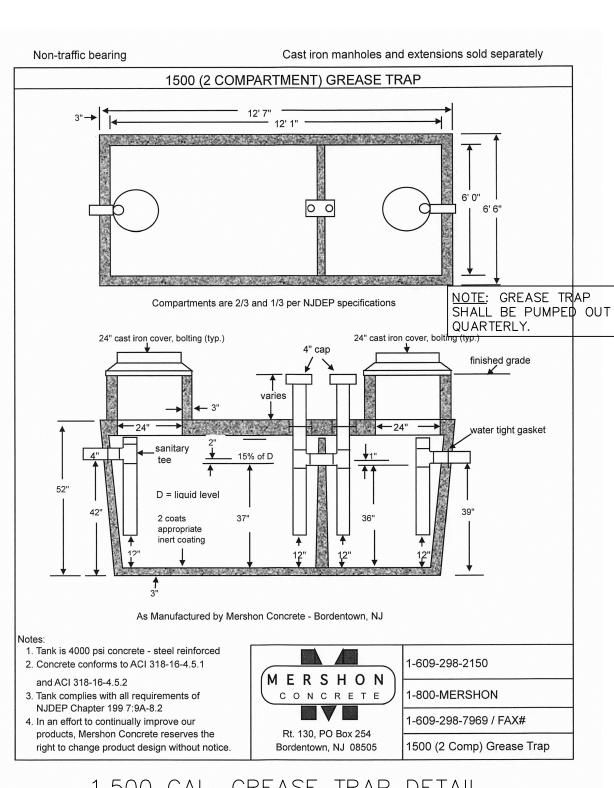
MISTY GRAY FINISH, QTY. 1

#TF1015, MISTY GRAY FINISH, QTY. 1

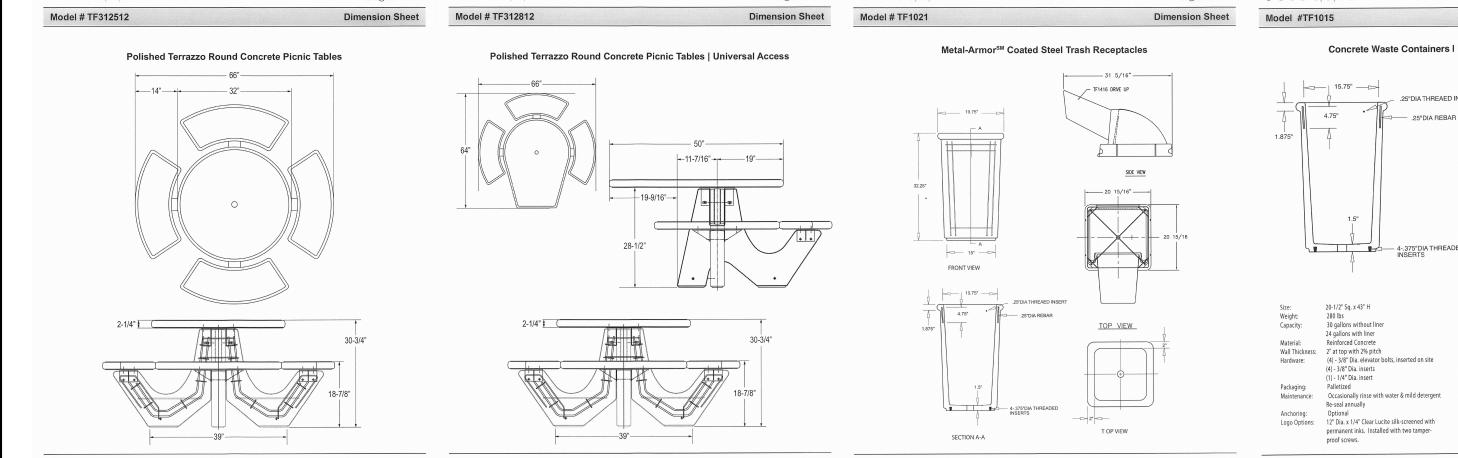
(THIS SHEET) FOR ACTUAL GREASE TRAP SIZING.







1,500 GAL. GREASE TRAP DETAIL



5. OUTSIDE MAIN ENTRANCE TRASH RECEPTACLE MODEL

