PRELIMINARY & FINAL MAJOR SITE PLAN 292 N.J.S.H. ROUTE 206 "TACO BELL" BLOCK 6800, LOT 5 TOWNSHIP OF MOUNT OLIVE MORRIS COUNTY, NEW JERSEY

C-2 COMMERCIAL ZONE DISTRICT <u>REQUIRED</u> **EXISTING**

VARIANCE REQ.

LOT REQUIREMENTS MINIMUM LOT AREA 2 ACRES 29,966 S.F. + 29,966 S.F. + 200 FT 200 FT 200 FT 200 FT 200 FT 200 FT 250 FT 150 FT + 150 FT + PRINCIPAL BUILDING SETBACKS FRONT YARD (BUILDING) 90 FT 54.5 FT + 83.96 FT FRONT YARD (PAVED AREAS) 15 FT 21.5 FT 15.96 FT SIDE YARD 60 FT 65.85/60.00 FT NO 36.0/36.6 FT -REAR YARD 50 FT 65.4 FT 34.50 FT YES ACCESSORY STRUCTURE SETBACKS FRONT YARD 118.7 FT 115.67 FT OTHER LOT LINE 20 FT 48.8/23.1 FT 7.52 FT YES DISTANCE TO PRINCIPAL BUILDING 20 FT 38.1 FT 47.25 FT NO BUILDING COVERAGE 20% 10.9% (3,265 S.F.) MAXIMUM PERMITTED (2,240 S.F.)

LOT COVERAGE MAXIMUM PERMITTED 64.2% (19,244 S.F.) (19,244 S.F.) HEIGHT LIMITATIONS MAX. BLDG. HEIGHT 15 FT ± 25.00 FT

NOTE: EXISTING SETBACKS AND BUILDING COVERAGE INCLUDE CANOPY, EXISTING FAR INCLUDES OFFICE ONLY

PROPERTY OWNERS WITHIN 200 FT

101 PARAGON DR

ZONING MAP

SCALE: $1'' = 2,500' \pm$

MONTVALE, N.J. 07645

TAX MAP INSET

SHEET No.'s 61 & 68

PARCELS WITHIN RANGE OF TARGETED PROPERTIES:							
PAMS_PIN	Acres	Property Location	Owners Name	Mailing Address			
1427_6100_2	18.9580	293 ROUTE 206	WASA PROPERTIES SUTTON PLAZA LLC	3512 QUENTIN RD, STE 204 BROOKLYN, NY 11234			
1427_6100_2.1	0.9480	289 ROUTE 206	HADES NEW JERSEY LLC	23-58 STEINWAY ST ASTORIA, NY 11105			
1427_6100_3	0.9952	295 ROUTE 206	CYZNER, IRV CYZNER PROPERTIES INC	192 ROUTE 22 WEST GREEN BROOK, NJ 08812			
1427_6100_4	0.8609	1 DEERFIELD PL	MT OLIVE ASSOCIATES LLC BANK OF AM.	101 N TRYON ST NC10010381 CHARLOTTE, NC 28255			
1427_6800_2	1.8753	286 ROUTE 206	RIAD DEVELOPMENT COMPANY, LLC	188 BERKLEY AVE BELLE MEAD, NJ 08502			
1427_6800_5	0.6841	292 ROUTE 206	WHEATLEY ENTRPRISES, C/O LUKOIL,LLC	302 HARPER DR, SUITE 303 MOORESTOWN, NJ 080574701			
1427_6800_6	0.4993	294 ROUTE 206	C/O ECOVA INC-MS1937	PO BOX 2440 SPOKANE, WA 99210			

BENJAMIN MOORE & CO.

UTILITY OWNERS

Hackettstown Municipal Utilities Authority Hackettstown, NJ 07840 R. Albanese New Jersey Natural Gas 1415 Wyckoff Road Wall, NJ 07719

Bruce Reynolds Columbia Gas Transmission Cor 1470 Poorhouse Road Downingtown, PA 19335-342

Mt Olive Township, Water & Sewer Department

204 Flanders-Drakestown Ro Mt Olive, NJ 07828 N.J. Department of Transportation 1035 Parkway Dr CN 600

Public Service Electric & Gas Company

Manager - Corporate Properties

New Jersey - American Water Co. Inc. Cherry Hill, New Jersey 08034 Applied Wastewater Management 2 Clerico Lane

Hillsborough, NJ 08844

HESTER TOWNSHIP

feet, inclusive of structural base or pylon structure

ONE (1) PYLON SIGN LOCATED 25 FT FROM THE R.O.W. LINE TOTAL AREA OF 75 S.F. OVERALL HEIGHT OF 25 FT. [VARIANCE REQUESTED]

PYLON SIGN REQUIREMENTS (CH. 550-95.B.)

service stations and public garages, located within the C-1, C-2, C-LI and OR Zone Districts, may have one freestanding sign with

a sign area not to exceed 90 square feet. Any freestanding sign

The maximum height of a freestanding sign shall not exceed 15

shall be located a minimum distance of 10 feet from the

FACADE SIGNAGE REQUIREMENTS (CH. 550-95.B.)

SEC. (2)(b) Each business located within the C-1, C-2, C-LI, OR, CR-3, PB, PC-2 and AR Zone Districts may have one or more wall signs, provided that the aggregate total of these signs does not exceed 5% of the area of that portion of the face of the building or buildings used in such business at the location in question, the face being the front side of the place of business facing the street and any facade facing the off-street parking lot for the place of business and the area to include the window and door area, provided that all signs shall advertise only the business carried on or the products made or sold on the premises, or both.

1 SIGN ON EAST FACING WALL (wall area 1,420 S.F.) SIGN AREA = ~ 13 S.F. (0.9%) 1 SIGN ON WEST FACING WALL (wall area 1,440 S.F.) SIGN AREA = ~ 31 S.F. (2.2%)

1 SIGN ON NORTH FACING WALL (wall area 663 S.F.) SIGN AREA = \sim 31 S.F. (4.7%) 1 SIGN ON SOUTH FACING WALL (wall area 630 S.F.)

SIGN AREA = \sim 18 S.F. (2.9%) [COMPLIES]

PARKING REQUIREMENTS (CH. 550-56.J.)

REQUIREMENT: ONE (1) SPACE PER 3 SEATS PROPOSED SEATS: 26 SEATS (8.7 REQ'D) PLUS 1 SPACE PER 30 S.F. NOT USED FOR DINING PROPOSED S.F. NOT USED FOR DINING: 1,200 S.F. (40 REQ'D) TOTAL REQUIRED PARKING: 8.7 + 40 = 48.7 (49 SPACES) [17 SPACES PROVIDED, VARIANCE REQUESTED]

C-2 ZONE FAST-FOOD RESTAURANTS - CONDITIONAL USE STANDARDS (CH. 550-103.A.(3)(b)[2]

SHOPPING CENTER REQUIREMENTS FOR FAST-FOOD USES

FLOOR AREA RATIO

	REQUIRED	PROPOSED	VARIANCE REC
REQUIREMENT			
MINIMUM LOT AREA	2 ACRES	29,966 S.F.	+
DISTANCE TO SIMILAR USE	> 2,500 FT	100 FT	YES
PRINCIPAL BUILDING SETBACK TO RESIDENTIAL ZONE	150 FT	N/A	NO
ACCESSORY STRUCTURE SETBACK TO RESIDENTIAL ZONE	25 FT	N/A	NO
DRIVE-THRU WINDOW FACING A RESIDENTIAL ZONE	NOT PERMITTED	COMPLIES	NO
LIGHT FIXTURE MAXIMUM HEIGHT	18 FT	25 FT	YES
BUFFER STANDARDS (CH. 550-36)			
Buffer areas shall require site plan approval and are required along all lot and street lines separating residential uses from arterial and collector streets or separating a nonresidential use from either a residential use or residential zoning district line and along all street lines where loading and storage areas can be seen from the street.	N/A	N/A	NO
MAXIMUM PERMITTED LOT COVERAGE	65%	64.0%	NO
MINIMUM LOT WIDTH ALONG THE STATE HIGHWAY	200 FT	200 FT	NO
PARKING AREA SETBACK, FRONT LOT LINE	15 FT	15.96 FT	NO
PARKING AREA SETBACK, SIDE LOT LINE	15 FT	5.00 FT	YES
PARKING AREA SETBACK, REAR LOT LINE	15 FT	11.00 FT	YES
OFF-STREET PARKING			
FAST-FOOD RESTAURANT * 1 PER 3 SEATS	9 SPACES	9 SPACES	NO
PLUS 1/30 S.F.	40 SPACES	8 SPACES	YES
NJDOT DECELERATION LANES PROVIDED	REQUIRED	EXISTING	NO
BUILDING AESTHETICS, COMPATIBLE WITH AREA	REQUIRED	COMPLIES	NO
FAST-FOOD USE ACROSS HIGHWAY FROM RESIDENTIAL USE	PROHIBITED	N/A	NO
			<u></u>

+ EXISTING NON-CONFORMITY * 1 SPACE PER 30 S.F. APPLIES TO THE REMAINING AREA OF THE BUILDING NOT USED FOR PATRON SEATING (REFER TO PARKING CALCULATION, THIS SHEET)

<u>ARCHITECTURAL BUILDING ELEVATIONS</u>

GENERAL NOTES

1. SITE IS KNOWN AS BLOCK 6800, LOT 5 AS DEPICTED ON SHEET 68 OF THE TOWNSHIP OF MOUNT OLIVE TAX MAPS. TOTAL LOT AREA IS 29,966 S.F.

WHEATLEY ENTERPRISES 505 FIFTH AVENUE, #9H NEW YORK, NY 10017

163 WASHINGTON VALLEY ROAD, SUITE 104 WARREN, NJ 07059 TEL: (732) 230-7571

- 3. OUTBOUND & TOPOGRAPHIC SURVEY INFORMATION OBTAINED FROM A PLAN ENTITLED, "LOCATION & TOPOGRAPHIC SURVEY, 292 N.J.S.H. ROUTE 206, TAX BLOCK 6800, LOT 5, TOWNSHIP OF MOUNT OLIVE, MORRIS COUNTY, NEW JERSEY", PREPARED BY DAVID A. STIRES ASSOCIATES, LLC, DATED NOVEMBER 4. HORIZONTAL CONTROL BASED ON DEED NORTH. VERTICAL DATUM BASED ON
- 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-2 COMMERCIAL ZONE DISTRIC
- 8. THE PROPERTY IS OCCUPIED BY AN EXISTING SERVICE (GAS) STATION. SAID USE WILL BE REMOVED. THE APPLICANT PROPOSES TO CONSTRUCT A FREESTANDING TACO BELL RESTAURANT WITH DRIVE-THRU. THE HOURS OF OPERATION PROPOSED ARE DAILY 7:00 AM TO 11:00 PM (LOBBY) AND 7:00 AM TO 2:30 AM (DRIVE-THRU).
- 9. DO NOT SCALE DRAWINGS WITH RESPECT TO THE LOCATION OF SURROUNDING EXISTING FEATURES. ADJACENT AND SURROUNDING PHYSICAL CONDITIONS, BUILDINGS, STRUCTURES, ETC., ARE SCHEMATIC ONLY EXCEPT WHERE
- 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 PURPOSE IS INTENDED OR IMPLIED.

INDEX OF SHEETS

SHEET NO.	DESCRIPTION	DATE	LAST REVISED
1	COVER SHEET	12-02-22	_
2	EXISTING CONDITIONS / DEMOLITION PLAN	12-02-22	_
3	SITE LAYOUT PLAN / NJDOT PERMIT PLAN	12-02-22	_
4	GRADING & UTILITY PLAN	12-02-22	_
5	LANDSCAPING PLAN	12-02-22	_
6	LIGHTING PLAN	12-02-22	-
7	SOIL EROSION & SEDIMENT CONTROL PLAN	12-02-22	_
8	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	12-02-22	-
9	SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS	12-02-22	_
10	TRASH ENCLOSURE DETAILS	12-02-22	_
11	CONSTRUCTION DETAILS	12-02-22	_
12	CONSTRUCTION DETAILS	12-02-22	-
13	SITE SIGNAGE DETAILS	12-02-22	_
14	SITE SIGNAGE DETAILS	12-02-22	-
15	DRIVE-THRU ORDER STATION DETAILS	12-02-22	-
16	PUBLIC SIDEWALK CURB RAMP DETAILS	12-02-22	_

KEY MAP

Google

Mr. Tire Auto Service Centers

SCALE: 1" = 200 ±

FIRE HYDRANT

- 11. REFER TO ARCHITECTURAL PLANS PREPARED BY ZELTA DESIGN, PROJECT ARCHITECT, 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

S Bank of America (with Drive-thru ATM)

Cindy's Petsitti

- 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 NEW PUBLIC WATER AND PUBLIC SEWER
- 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 EITHER 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
- 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 MUNICIPAL ENGINEER.

WITH CONSTRUCTION OF THE PROJECT.

22. PRIOR TO ORDERING ANY MATERIALS OR COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTACT THE ENGINEER TO VERIFY THAT THE CONSTRUCTION DOCUMENTS ARE THE MOST CURRENT VERSION OF THE

SIGNATURE BLOCKS

APPLICATION NO. _____APPROVED BY THE TOWNSHIP OF MOUNT OLIVE LAND USE BOARD AS A MAJOR SITE

BOARD ENGINEER

477 5 6 6 6 6 5 6 6 5 7 6

NOT APPLICABLE

Know what's **below**.

NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GA28169800

PRELIMINARY & FINAL MAJOR SITE PLAN 292 N.J.S.H. ROUTE 206 - TACO BELL RESTAURANT COVER SHEET BLOCK 6800, LOT 5 TAX MAP SHEET No. 68

TOWNSHIP OF MOUNT OLIVE

ENGINEERING, LLC

11 South Main Street Marlboro, NJ 07746 Tel: 732.577.0180

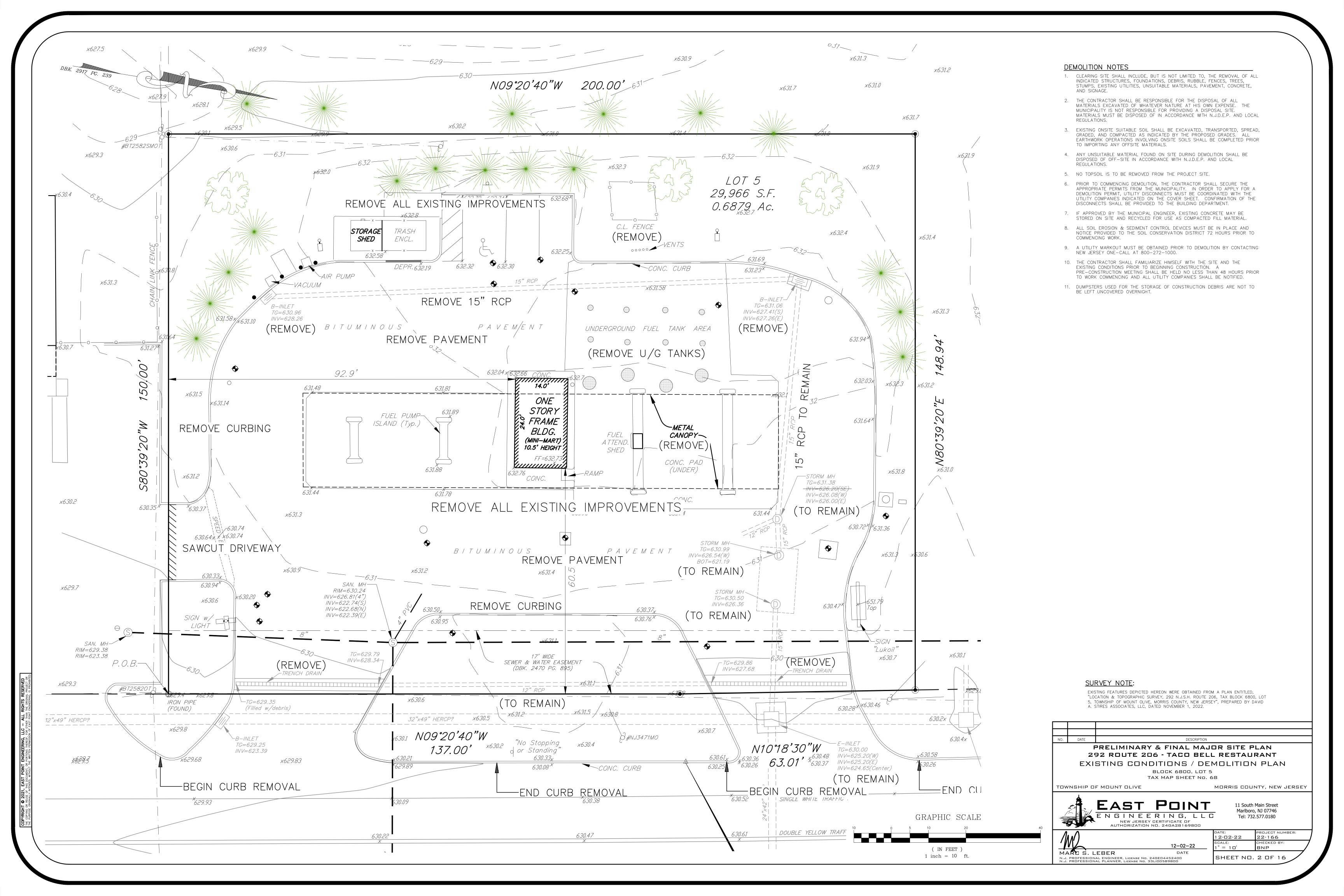
MARC S. LEBER

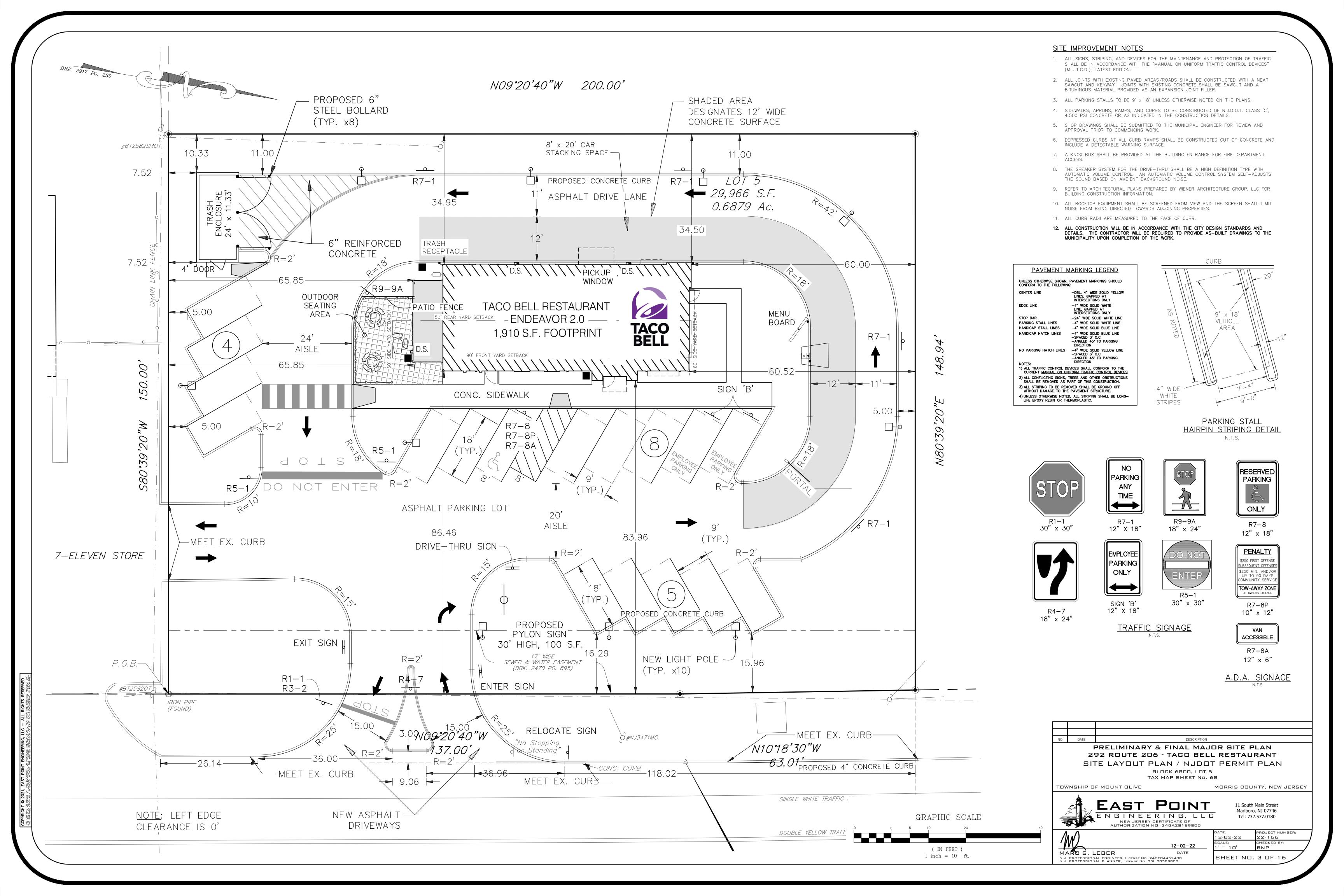
2-02-22

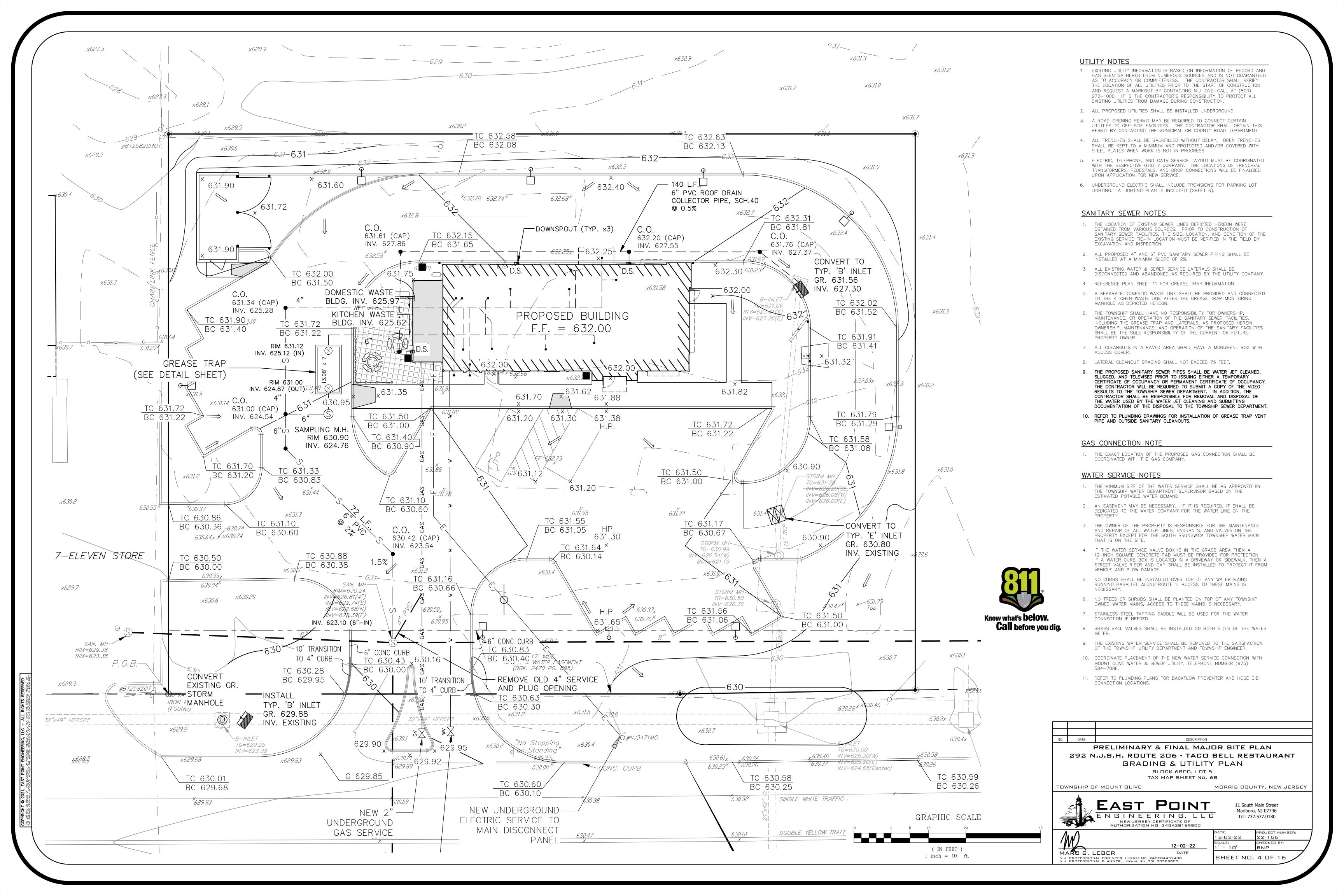
MORRIS COUNTY, NEW JERSEY

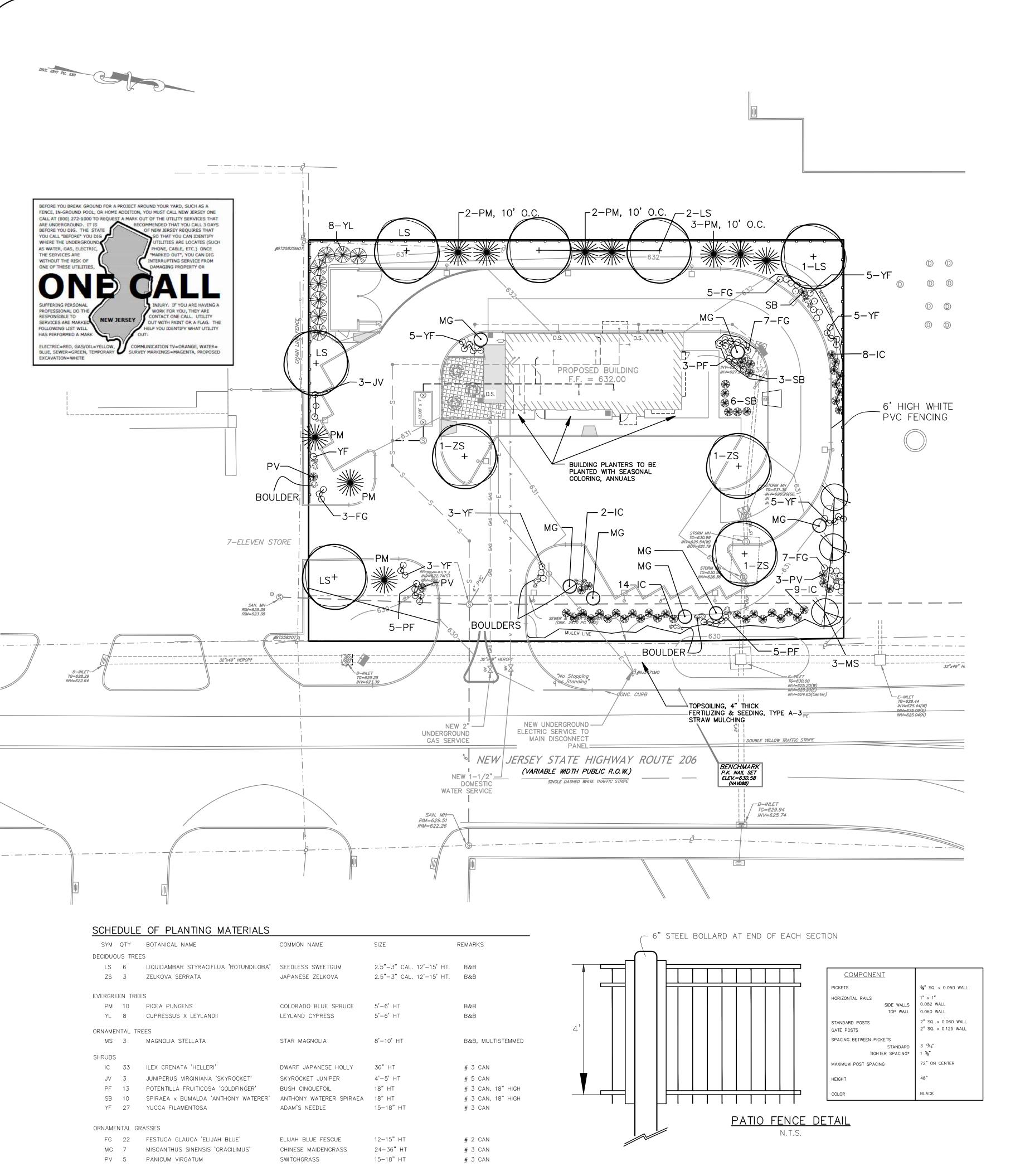
23.8900 | 306 ROUTE 206

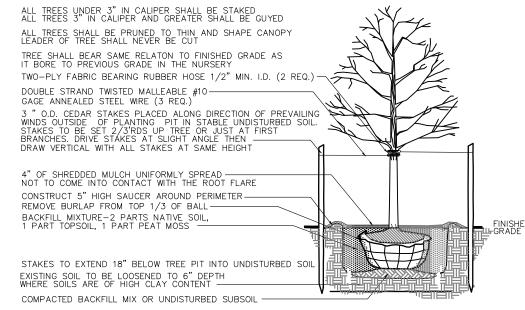
12-02-22 SHEET NO. 1 OF 16 N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GEO4452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800





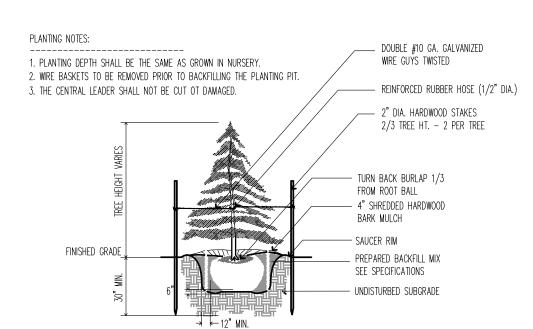






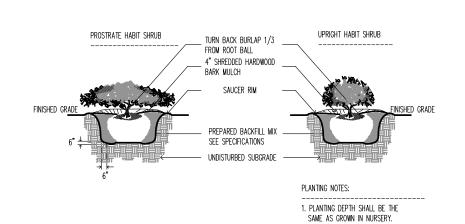
DECIDUOUS TREE PLANTING DETAIL

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

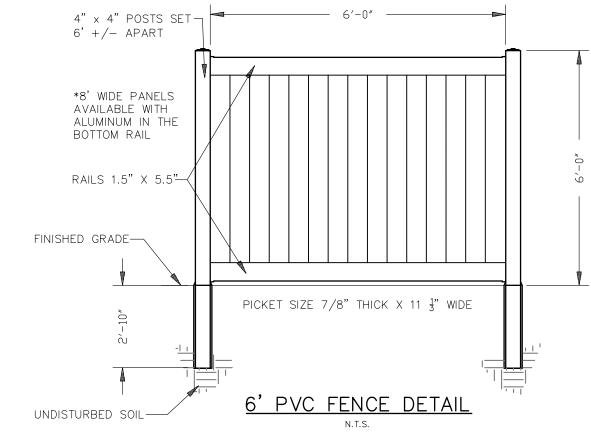


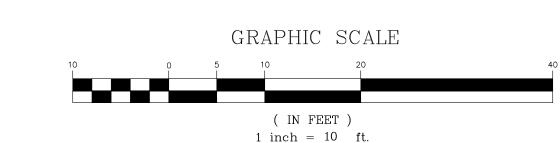
CONIFEROUS TREE PLANTING DETAIL

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



SHRUB PLANTING DETAIL N.T.S.





PLANTING NOTES

- 1. THIS PLAN SHALL BE USED FOR LANDSCAPE PLANTING PURPOSES ONLY. EXAMINE ALL ENGINEERING DRAWINGS AND FIELD CONDITIONS FOR SPECIFIC LOCATIONS OF UTILITIES, STRUCTURES, ETC. AND NOTIFY THE UNDERSIGNED IN REFERENCE TO ANY DISCREPENCIES OR LOCATION CONFLICTS PRIOR TO PLANTING INSTALLATION.
- 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.
- 4. 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
- 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.

CONDUCTED AFTER CONSTRUCTION AND PRIOR TO PLANTING TO DETERMINE THE EXTENT OF SOIL

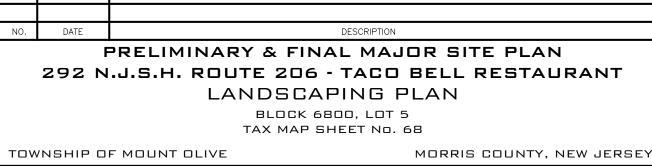
14. ALL PLANTING BEDS SHALL RECEIVE LANDCAPE ROCK OR RIVER STONE. THE USE OF SHREDDED HARDWOOD BARK OR MULCH IS PROHIBITED.

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 2.5"-3" CALIPER AND 12'-15' IN HEIGHT.
- 18. ORNAMENTAL TREES SHOULD BE 8' TO 10' IN HEIGHT.
- 19. SHRUBS SHOULD BE 18" IN HEIGHT UNLESS OTHERWISE NOTED IN THE SCHEDULE.
- 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 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.
- 31. FOUR SEASON FOUNDATION PLANTINGS SHALL BE PROVIDED, AND ACCENTED WITH SHRUBS, PERENNIALS, AND ORNAMENTAL GRASSES.

PRIOR TO INSTALLATION OF TREES, THE CONTRACTOR SHALL MARK-OUT ALL SANITARY SEWER PIPES IN ORDER TO ENSURE THAT THE TREES ARE INSTALLED A MINIMUM OF 10 FEET AWAY FROM THE SANITARY SEWER PIPES.

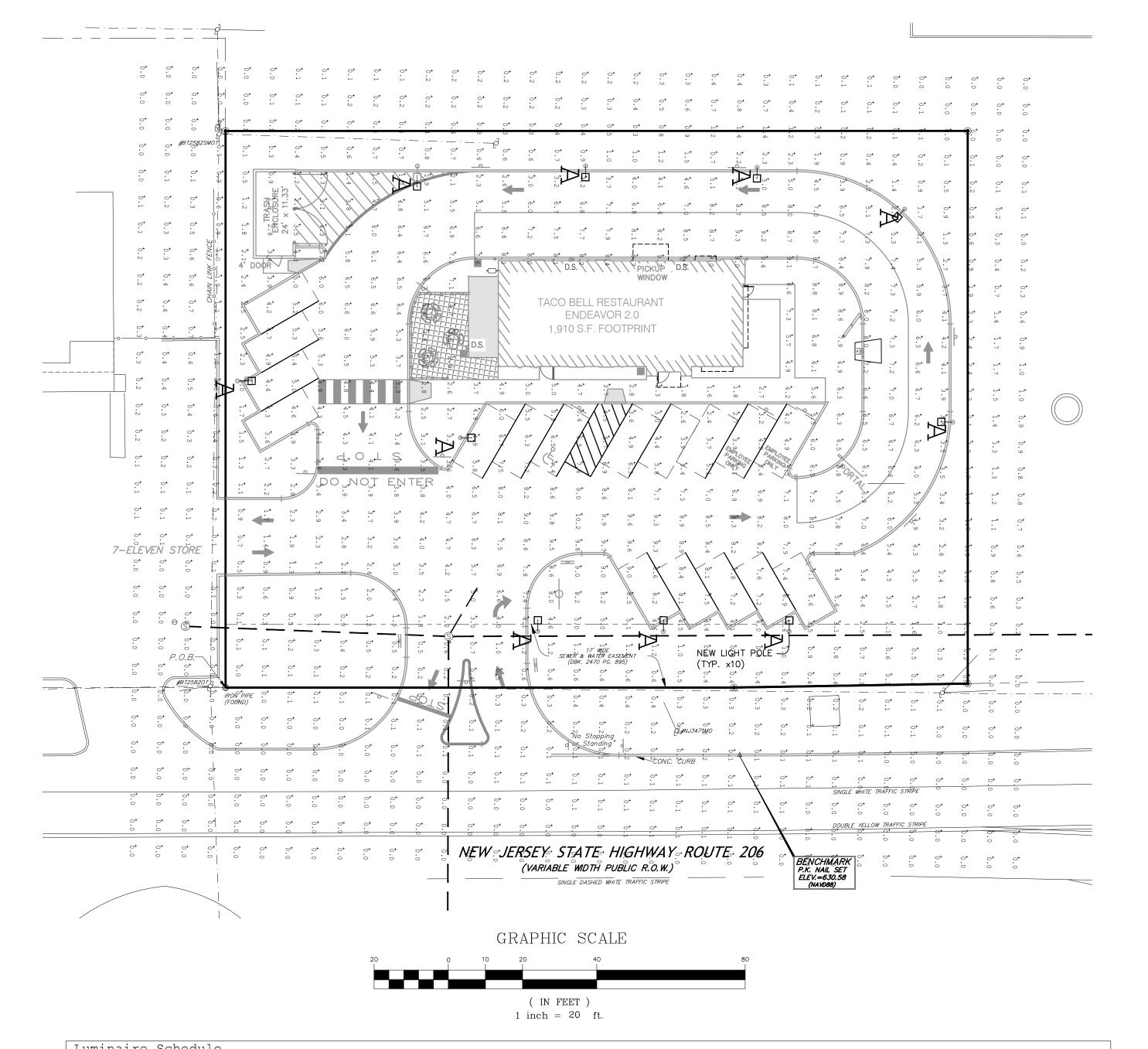


11 South Main Street Marlboro, NJ 07746 ENGINEERING, LLC NEW JERSEY CERTIFICATE OF

Tel: 732.577.0180 AUTHORIZATION NO. 24GA28169800 2-02-22

12-02-22 MARC S. LEBER N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GEO4452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800

22-166 SHEET NO. 5 OF 16



Luminarre Sci.	leaure									
Symbol	Qty	Label	Arrangement	Description						
— <u>-</u> -	10	A	SINGLE	MRM-LED-24L-SIL	-FT-40-70CRI	-IL WITH RE	AR HOUSING SH	IIELD MOUNTED AT	25 '	
	•									
Calculatio	n Sur	mmary								
T 1 7				TT ' 1	7\	Ν/	n / '	- /!		/= = !

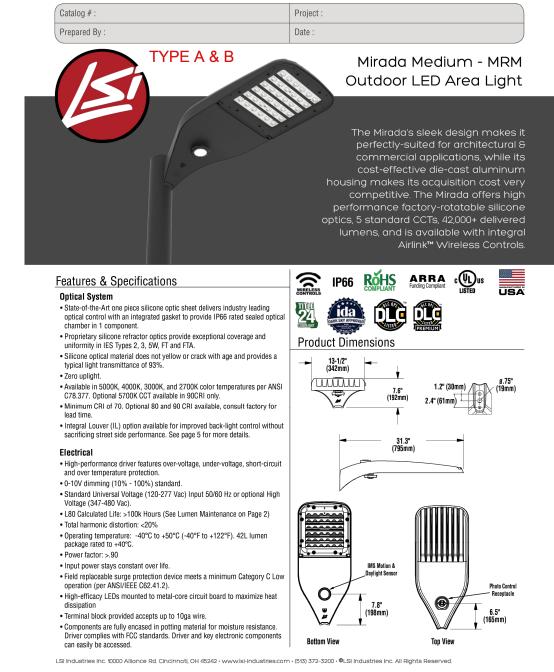
Calculation Summary						
Label	Units	Avg	Max	Min	Avg/Min	Max/Min
-	Fc	N.A.	N.A.	N.A.	N.A.	N.A.
DRIVE THRU SURFACE	Fc	6.83	9.4	3.0	2.28	3.13
PARKING LOT SURFACE	Fc	5.88	10.2	1.5	3.92	6.80

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.
- 3. 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 SHALL DIM TO 50% AFTER THE RESTAURANT CLOSES.
- 5. THE ELECTRICAL CONTRACTOR SHALL PROVIDE POLE FOUNDATIONS COMPLETE WITH CONDUITS FOR POWER, GROUNDING, AND ANCHOR BOLTS.
- 6. ALL POLES THAT ARE NOT BEHIND CURBS OR WITHIN A CURBED ISLAND SHALL 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.
- 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.

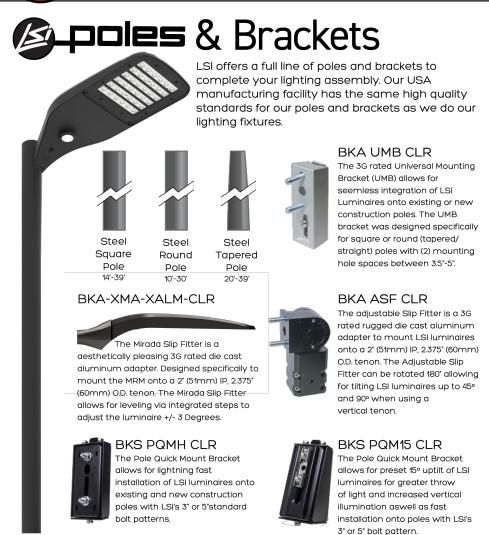
- 9. THE ELECTRICAL CONTRACTOR SHALL PROVIDE GROUND RODS AND MAKE CONNECTION TO THE GROUND STUD. THE GROUND STUD SHOULD BE LOCATED INSIDE THE SHAFT AND ACCESSIBLE VIA A HANDHOLE.
- 10. THE ELECTRICAL CONTRACTOR MUST COORDINATE THE INSTALLATION OF WIRING IN THE POLES UP TO THE LIGHTING FIXTURES.
- 11. THE NUMBER AND SIZE OF THE POWER CONDUITS SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR.
- 12. ALL SITE LIGHTING SHALL CONFORM TO THE REQUIREMENTS OF THE MUNICIPALITY, THE ELECTRIC UTILITY, AND THE RECOMMENDATIONS OF THE ILLUMINATING ENGINEERING SOCIETY OF NORTH AMERICA (IESNA).
- 13. SITE LIGHTING SPECIFIED SHALL BE INSTALLED PER MANUFACTURER'S DETAILS AND SPECIFICATIONS.
- 14. POLES AND LUMINAIRES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
- 16. ALL SWEEPS SHALL HAVE A MINIMUM RADIUS OF 24". NO ELBOWS SHALL BE PERMITTED.

15. ALL CONDUIT SHALL BE 2" DIAMETER, SCHEDULE 40 P.V.C. WITH A MINIMUM



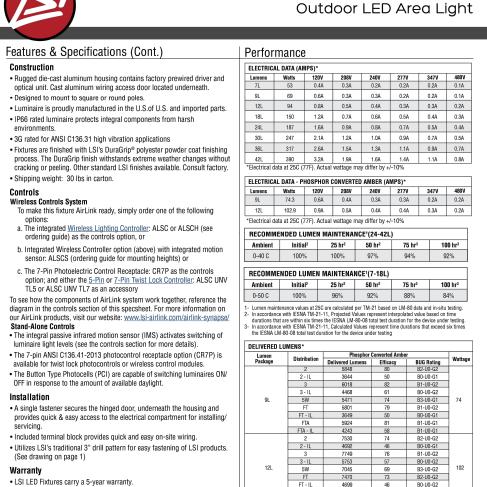


Mirada Medium - MRM Outdoor LED Area Light



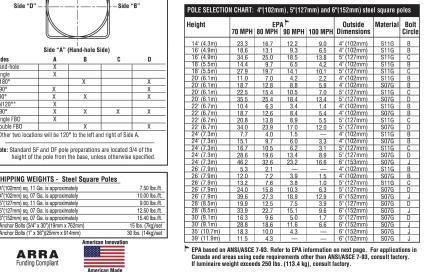


Mirada Medium - MRM



 Listed to UL 1598 and UL 8750. American Recovery and Reinvestment Act Funding Compliant. IDA compliant: with 3000K color temperature selection. • Title 24 Compliant; see local ordinance for qualification informatio Suitable For wet Locations. . IP66 rated Luminaire, IP66 rated optical chamber, • 3G rated for ANSI C136.31 high vibration applications DesignLights Consortium® (DLC) qualified product. Not all versions of this product may be DLC qualified. Please check the DLC Qualified Products List at www.designlights.org/QPL to confirm which versions are qualified. n • (513) 372-3200 • ©LSI Industries Inc. All Rights Reserved.

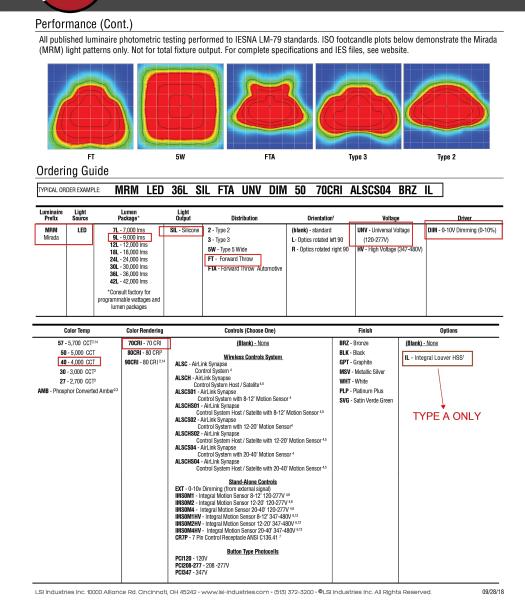
TYPE A POLE **STEEL SQUARE POLES** DIMENSIONS POLE SHAFT - Pole shaft is electro-welded ASTM-A500 Grade C steel tubing with a minimum yield strength of 50,000 psi. On Tenon Mount steel poles, tenon is 2-3/8" 0.D. high-strength pipe. Tenon is 4-3/4" in length. Straight poles are 4", 5", and 6" square. SQN – N= 2-3/8" (60mm) 0.D. x 4-3/4" (121mm) Tenon SQB3, SQB5 – Bolt-On Mount 2-Bolt Pattern $\label{eq:hand-hole} \begin{tabular}{ll} \textbf{HAND-HOLE} - Standard hand-hole location is 12" above pole base. Poles 22' and above have a 3" x 6" reinforced hand-hole. Shorter poles have a 2" x 4" non-reinforced hand-hole. \end{tabular}$ BASE - Pole base is ASTM-A36 hot-rolled steel plate with a minimum yield strength of 36,000 psi Two-piece square base cover is optional. ANCHOR BOLTS - Poles are furnished with anchor bolts featuring zinc-plated double nuts and washers. Galvanized anchor bolts are optional. Anchor bolts conform to ASTM F 1554-07a Grade 55 with a minimum yield strength of 55,000 psi. GROUND LUG - Ground lug is standard. **DUPLEX RECEPTACLE** - Weatherproof duplex receptacle is optional. GROUND FAULT CIRCUIT INTERRUPTER - Ground fault circuit interrupter is optional. FINISHES - Each pole is finished with DuraGrip®, LSI's baked-on polyester-powder finishing process which electrostatically applies and fuses a polyester powder to the pole. Provides an extremely smooth and uniform finish to withstand extreme weather Optional – Base Cover changes without cracking or peeling, and features a five-year limited warranty. Optional DuraGrip® Plus features the added protection of a 3.0 to 5.0 mil thickness of polyesterpowder finish plus an inner coating, as well as a seven-year limited warranty. DETERMINING THE LUMINAIRE/POLE COMBINATION FOR YOUR APPLICATION: Select luminaire from luminaire ordering information Select bracket configuration if required Determine EPA value from luminaire/bracket EPA chart. Select pole height DRILLING LOCATIONS Side "C" Select MPH to match wind speed in the application area (See windspeed map) Confirm pole EPA equal to or exceeding value from note above Consult factory for special wind load requirements and banner brackets

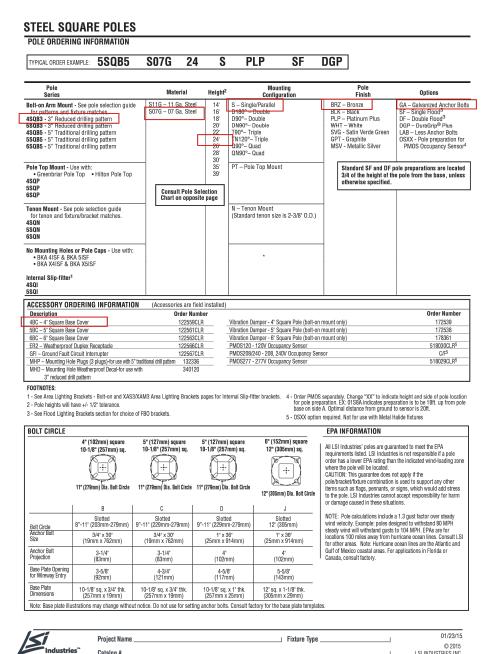


_____ Fixture Type ______

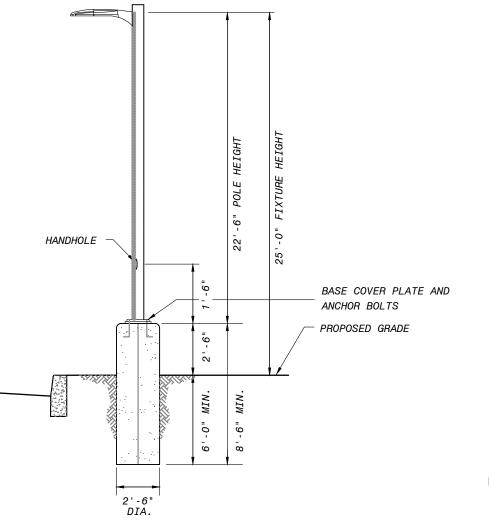
Project Name ____

Mirada Medium - MRM Outdoor LED Area Light





NOTE: ALL POLES & FIXTURES SHALL BE BLACK.

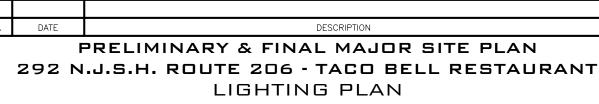


LSI Industries Inc. 10000 Alliance Rd. Cincinnati, OH 45242 • www.lsi-industries.com • (513) 372-3200 • ©LSI Industries Inc. All Rights Reserved.

LIGHT POLE AND FIXTURE DETAIL NOT TO SCALE

REFER TO DETAIL 7 ON DRAWING SHEET 14

LIGHT POLE FOOTING DETAIL

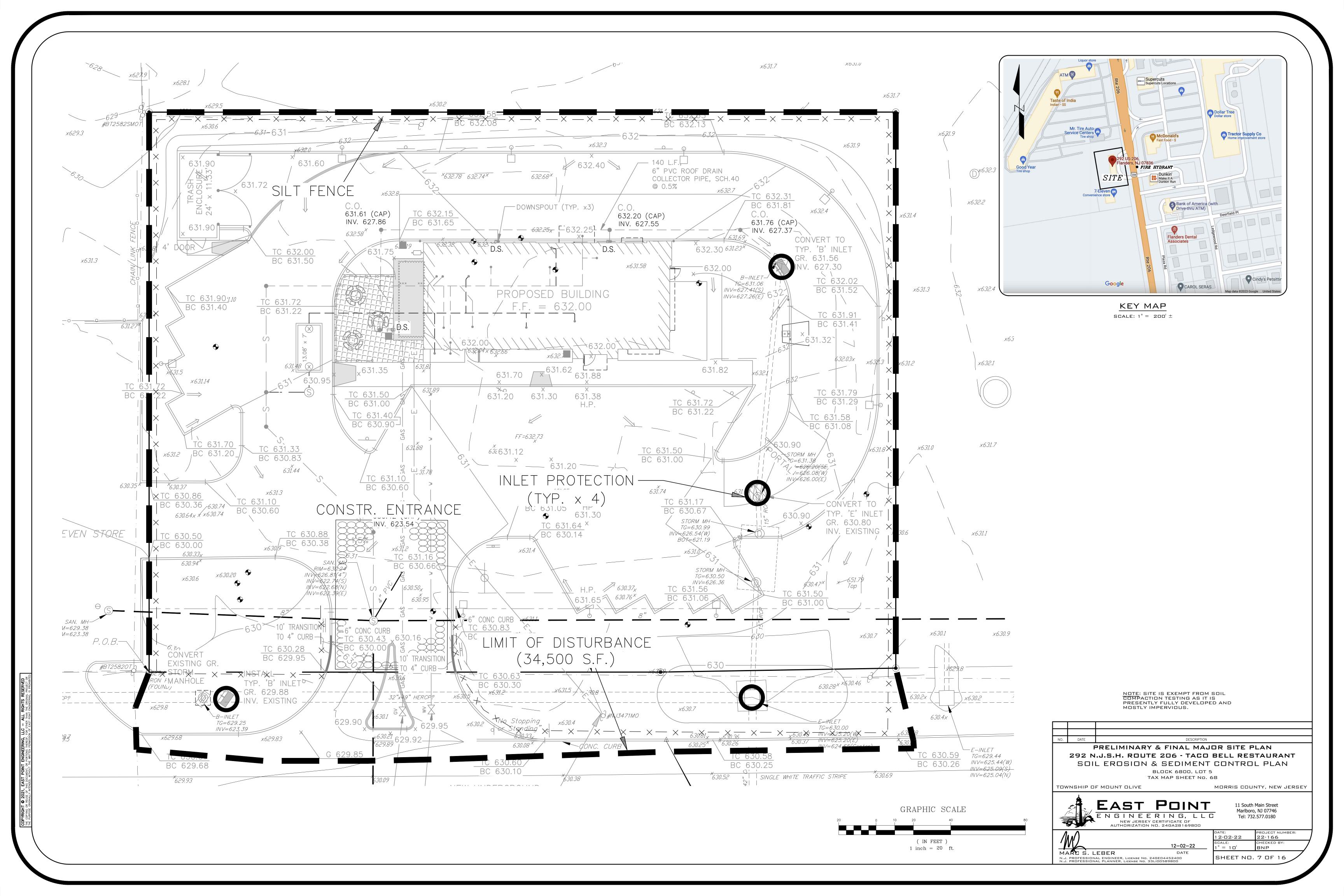


BLOCK 6800, LOT 5 TAX MAP SHEET No. 68

TOWNSHIP OF MOUNT OLIVE MORRIS COUNTY, NEW JERSEY 11 South Main Street Marlboro, NJ 07746 ENGINEERING, LLC Tel: 732.577.0180



NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GA28169800 2-02-22 22-166 RNP SHEET NO. 6 OF 16



Morris County Soil Conservation District Soil Erosion and Sediment Control Notes

1. All Soil Erosion and Sediment Control Practices will be installed in accordance with the Standards for Soil Erosion and Sediment Control in New Jersey, and will be in place prior to any major soil disturbance or in their proper sequence and maintained until permanent protection is

- 2. Any disturbed area that will be left exposed for more than fourteen (14) days and not subject to construction traffic shall immediately receive a temporary seeding. If the season prohibits temporary seeding, the disturbed areas will be mulched with straw or hay and tacked in accordance with the New Jersey Standards. See Note 22 below.
- 3. Permanent vegetation is to be established on exposed areas within ten (10) days after final grading. Mulch is to be used for protection until vegetation is established. See Note 23 below.
- 4. Immediately following initial disturbance or rough grading. All critical areas (steep slopes, sandy soils, wet conditions) subject to erosion will receive a temporary seeding in accordance with Note
- 5. Temporary Diversion Berms are to be installed on all cleared roadways and easement areas. See
- 6. Permanent Seeding and stabilization to be in accordance with the "Standard for Permanent Vegetative Cover for Soil Stabilization". Specified rates and locations shall be on the approved Soil Erosion and Sediment Control Plan.
- 7. The site shall at all times be graded and maintained so that all stormwater runoff is diverted to Soil Erosion and Sediment Control facilities.
- 8. All sedimentation structures (silt fence, inlet filters, and sediment basins) will be inspected and maintained daily.
- 9. Stockpiles shall not be located within 50' of a floodplain, slope, drainage facility, or roadway. All stockpiles bases shall have a silt fence properly entrenched at the toe of slope.
- 10. A Stabilized Construction Access will be installed, whenever an earthen road intersects with a

payed road. See the Stabilized Construction Access detail and chart for dimensions.

- 11. All new roadways will be treated with suitable sub base upon establishment of final grade elevations.
- 12. Payed roadways must be kept clean at all times.

protection devices. See the Tree Protection detail.

- 13. Before discharge points become operational, all storm drainage outlets will be stabilized as required.
- 14. All dewatering operations must be discharged directly into a sediment filter area. The filter
- should be composed of a fabric or approved material. See the Dewatering detail. 15. All sediment basins will be cleaned when the capacity has been reduced by 50%. A clean out
- elevation will be identified on the plan and a marker installed on the site. 16. During and after construction, the applicant will be responsible for the maintenance and upkeep of the drainage structures, vegetation cover, and any other measures deemed appropriate by the District. Said responsibility will end when completed work is approved by the Morris County
- Soil Conservation District. 17. All trees outside the disturbance limit indicated on the subject plan or those trees within the disturbance area which are designated to remain after construction are to be protected with tree
- 18. The Morris County Soil Conservation District may request additional measures to minimize on site or off site erosion problems during construction.
- 19. The Morris County Soil Conservation District must be notified, in writing, at least 48 hours prior to any land disturbance, and a pre-construction meeting held
- 20. Contractor to set up a meeting with the inspector for periodic inspections of the Temporary Sediment Basin prior to and during its construction.
- 21. Topsoil Stockpile Protection
- Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft. Apply fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft.
- Apply Perennial Ryegrass seed at 1 lb. per 1000 sq. ft. Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft.
- Apply a liquid mulch binder or tack to straw or hay mulch. Property entrench a silt fence at the bottom of the stockpile.
- 22. Temporary Stabilization Specifications Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft.
- Apply fertilizer (10-20-10) at a rate of 11 lbs. per 1000 sq. ft. Apply Perennial Ryegrass seed at 1 lb. per 1000 sq. ft.
- Mulch disturbed soil with straw or hay at a rate of 90 lbs. per 1000 sq. ft. Apply a liquid mulch binder or tack to straw or hay mulch.
- 23. Permanent Stabilization Specifications
- a) Apply topsoil to a depth of 5 inches (unsettled). Apply Ground Limestone at a rate of 90 lbs per 1000 sq. ft. and work four inches into
- Apply fertilizer (10-20-10) at a of rate 11 lbs. per 1000 sq. ft.
- Apply Hard Fescue seed at 2.7 lbs. per 1000 sq. ft. and Creeping Red Fescue seed at
- 0.7 lbs per 1000 sq. ft. and Perennial Ryegrass seed at 0.25 lbs per 1000 sq. ft. Mulch stockpile with straw or hay at a rate of 90 lbs. per 1000 sq. ft. Apply a liquid mulch binder or tack to straw or hay mulch.
- *NOTE: 48 HOURS PRIOR TO ANY SOIL DISTURBANCE, NOTICE IN WRITING, SHALL BE GIVEN TO THE MORRIS COUNTY SOIL CONSERVATION DISTRICT AND A PRE-CONSTRUCTION MEETING HELD.

MULCH AND MULCH ANCHORING SPECIFICATIONS

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 done in accordance with Standards for Land Grading.

- 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
- 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 be used.
- Woodchips applied uniformly to a minimum depth of 2 inches may be used. Woodchips will not be used on areas where flowing water could wash them into an inlet and plug it.

SEEDING SCHEDULE - ZONE 6B

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

- 1. 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.
- 2. 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. 4. FERTILIZER - REFER TO SHEET 9B.
- 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

STANDARD FOR TOPSOILING

Definition

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

Methods and Materials

Purpose

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.

Where Applicable

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

Materials

- Topsoil should be friable¹, loamy², free of debris, objectionable weeds and stones, and contain no toxic substance or adverse chemical or physical condition that may be harmful to plant growth. Soluble salts should not be excessive (conductivity less than 0.5 millimhos per centimeter. More than 0.5 millimhos may desiccate seedlings and adversely impact growth). Imported topsoil shall have a minimum organic matter content of 2.75 percent. Organic matter content may be raised by additives.
- Topsoil substitute is a soil material which may have been amended with sand, silt, clay, organic matter, fertilizer or lime and has the appearance of topsoil. Topsoil substitutes may be utilized on sites with insufficient topsoil for establishing permanent vegetation. All topsoil substitute materials shall meet the requirements of topsoil noted above. Soil tests shall be performed to determine the components of sand, silt, clay, organic matter, soluble salts and pH level.

2. Stripping and Stockpiling

TOP OF CURB-

SECTION

1. INLET PROTECTION SHALL SAFELY FILTER OUT SEDIMENT

FROM THE 1 YEAR, 24-HOUR DESIGN STORM. THE

FLOWS UP TO AND INCLUDING THE 25 YEAR DESIGN

2. INLET PROTECTION SHALL BE INSPECTED PERIODICALLY THROUGHOUT CONSTRUCTION AND AFTER ALL STORM

3. FOR TYPE "A" AND "E" INLETS, PROVIDE SECOND WEIR

PANEL ALONG FOURTH EDGE.

fence for added strength.

EVENTS. ACCUMULATED SILT SHALL BE REMOVED FROM

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.



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 environmental damage.
- Stockpiles should be vegetated in accordance with standards previously described herein; see standards for Permanent (pg. 4-1) or Temporary (pg.7-1) Vegetative Cover for Soil Stabilization. Weeds should not be allowed to grow on stockpiles.

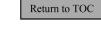
3. Site Preparation

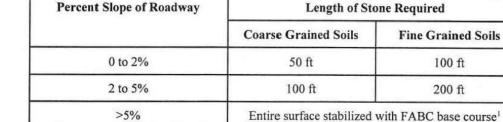
- A. Grade at the onset of the optimal seeding period so as to minimize the duration and area of exposure of disturbed soil to erosion. Immediately proceed to establish vegetative cover in accordance with the specified seed mixture. Time is of the essence
- B. Grade as needed and feasible to permit the 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.

- 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).
- 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.



- SILT FENCE (SEE DETAIL)





TO TRAP SEDIMENT.

As prescribed by local ordinance or other governing authority.

STABILIZED CONSTRUCTION ENTRANCE

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.

PROFILE

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

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

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.

PROVIDE APPROPRIATE _TRANSITION BETWEEN

Fine Grained Soils

100 ft

200 ft

1 DAY

GROUND ~

NOTES:

N.T.S.

CONSTRUCTION SCHEDULE AND PROCEDURE FOR 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 1-2 DAYS 11. CONSTRUCT FINE GRADING TO FINISHED GRADES AND

ADEQUATELY STABILIZED.

ESTABLISH PERMANENT VEGETATIVE COVER ON LOT.

12. REMOVE SILT FENCE AFTER ALL DISTURBED AREAS HAVE BEEN

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

PRELIMINARY & FINAL MAJOR SITE PLAN 292 ROUTE 206 - TACO BELL RESTAURANT SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS

BLOCK 6800, LOT 5

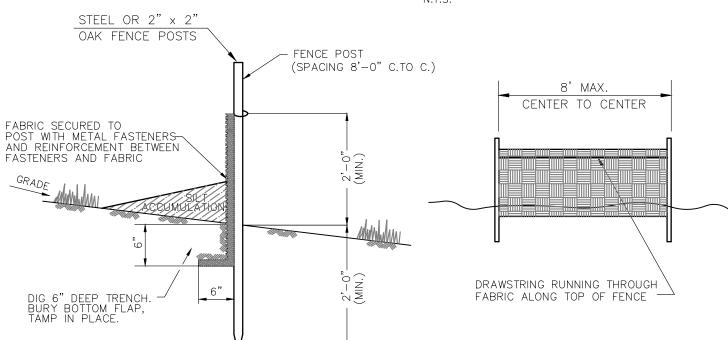
TAX MAP SHEET No. 68 TOWNSHIP OF MOUNT OLIVE MORRIS COUNTY, NEW JERSEY

N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GE044524 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800

11 South Main Street Marlboro, NJ 07746 ENGINEERING, LLC Tel: 732.577.0180 NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GA28169800

2-02-22 22-166 12-02-22 RNP MARC S. LEBER DATE SHEET NO. 8 OF 16

INLET PROTECTION DETAIL N.T.S.



Fence posts shall be spaced 8 feet center—to—center or closer. They shall extend at least 2 feet into the ground

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

<u>SILT FENCE DETAIL</u>

ROOT PROTECTION DURING CONSTRUCTION GUIDE

DRIP CAP OF TREE CLUSTERS TO BE PROTECTED. N.T.S.

-4" HIGH ORANGE CONSTRUCTION FENCE TO BE INSTALLED ALONG THE

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.

for younger, healthy or tolerant

N.T.S.

Root Zone (PRZ)

SEED IMMEDIATELY AFTER STOCKPILING

DETAIL

N.T.S.

1-1/2" TO 2-1/2" CLEAN STONE— AROUND ENTIRE PERIMETER TO GRATE (TYP.) PROVIDE WEIR FOR FLOODING RELIEF 1" DIAMETER PERFORATIONS-

2"x6" LUMBER OR 3/4" EXTERIOR PLYWOOD HINGE OR CORNER BRACE (TYP.)

NOTE: SILT TO BE REMOVED FROM AROUND INLET PERIODICALLY THROUGHOUT CONSTRUCTION <u>TYPICAL TOPSOIL STOCKPILE</u>

> Estimate a tree's Protected Root Zone (PRZ) by calculating the Critical Root Radius (crr). 1. Measure the dbh (diameter of tree at breast height, 4.5 fee above ground on the uphill side of tree) in inches. 2. Multiply measured dbh by 1.5 or 1.0. Express the result in feet. Dbh x 1.5: Critical root radius for older, unhealthy, or sensitive Dbh x 1.0: Critical root radius

(CRR)

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

Critical root radius

Standards for Soil Erosion and Sediment Control in New Jersey

TEMPORARY VEGETATIVE COVER FOR SOIL STABILIZATION

<u>Definition</u>

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

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.).

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

January 2014

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.

TABLE 7-2

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

	SEEDING RATE		OPTIMUM SEEDING DATE			OPTIMUM SEED
SEED SELECTIONS	(pou	(pounds)		Based on Plant Ha Zone ³		DEPTH ⁴ (inches)
	Per Acre	Per 1000 Sq. Ft.	ZONE 5b, 6s	ZONE 6b	ZONE 7a, b	
	COOL	L SEASON	GRASSE	8		
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	M SEASON	N GRASSE	s		
6. Pearl millet	20	0.5	6/1-8/1	5/15- 8/15	5/1-9/1	1.0

Return to TOC

Standards for Soil Erosion and Sediment Control in New Jersey

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

Return to TOC

January 2014

Standards for Soil Erosion and Sediment Control in New Jersey

- 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 agent is required.
- 4. Liquid Mulch-Binders. May be used to anchor 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 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

STANDARD PERMANENT VEGETATIVE COVER FOR SOIL STABILIZATION

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

<u>Purpose</u>

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>

- 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.
- 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
- shall be amended with organic matter, as needed, in accordance with the Standard for Topsoiling. D. Install needed erosion control practices or facilities such as diversions, grade-stabilization structures, channel stabilization measures, sediment basins, and waterways.

structure. A uniform application to a depth of 5 inches (unsettled) is required on all sites. Topsoil

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

Standards for Soil Erosion and Sediment Control in New Jersey 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 seedbed reparation. See Standard for Management of High Acid-Producing Soils for specific requirements.

- 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.
 - 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. Warm-season mixtures are grasses and legumes which maximize growth at high temperatures, generally 85° F and above. See Table 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.
- 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
- 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, 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

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

must be 3 tons per acre. No tackifying or adhesive agent is required.

- 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 recommendation 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

Return to TOC

Standards for Soil Erosion and Sediment Control in New Jersey January 2014 growth or germination inhibiting materials, used at the rate of 1,500 pounds per acre (or as ecommended by the product manufacturer) and may be applied by a hydroseeder. Mulch shall **not 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 292 ROUTE 206 - TACO BELL RESTAURANT SOIL EROSION & SEDIMENT CONTROL

> > NOTES & DETAILS BLOCK 6800, LOT 5

TAX MAP SHEET No. 68 TOWNSHIP OF MOUNT OLIVE MORRIS COUNTY, NEW JERSEY

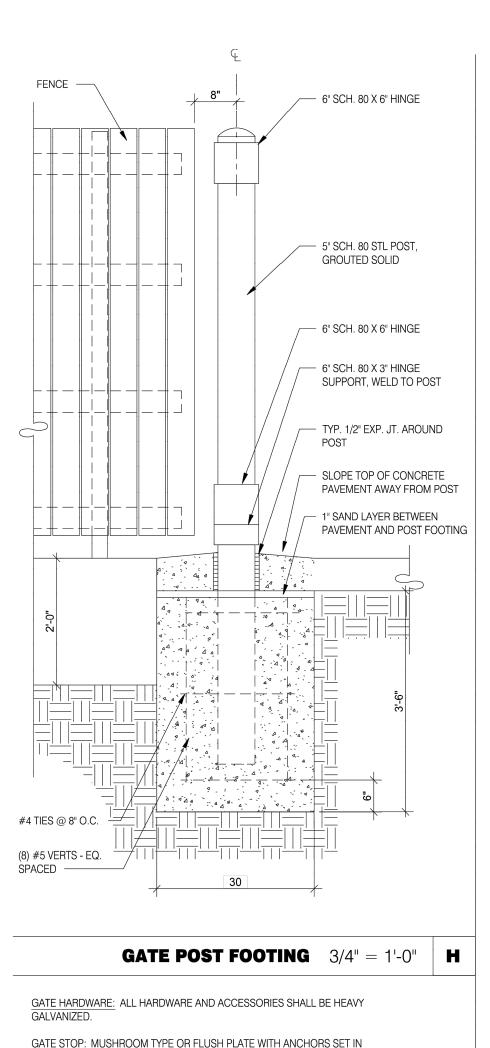


12-02-22 MARC S. LEBER

N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GEO4452400 N.J. PROFESSIONAL PLANNER. LICENSE NO. 33LI00589800

22-166 BNP DATE SHEET NO. 9 OF 16

11 South Main Street Marlboro, NJ 07746 Tel: 732.577.0180



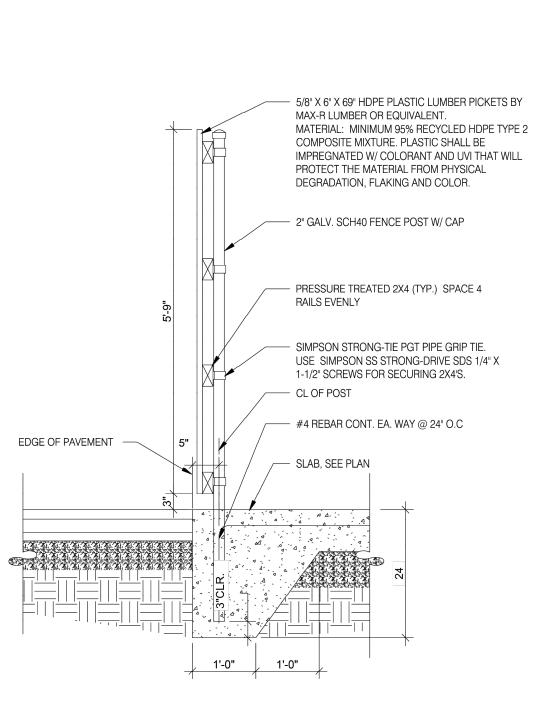
CONCRETE TO ENGAGE THE CENTER DROP ROD OR PLUNGER BAR.

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

COMPONENTS.

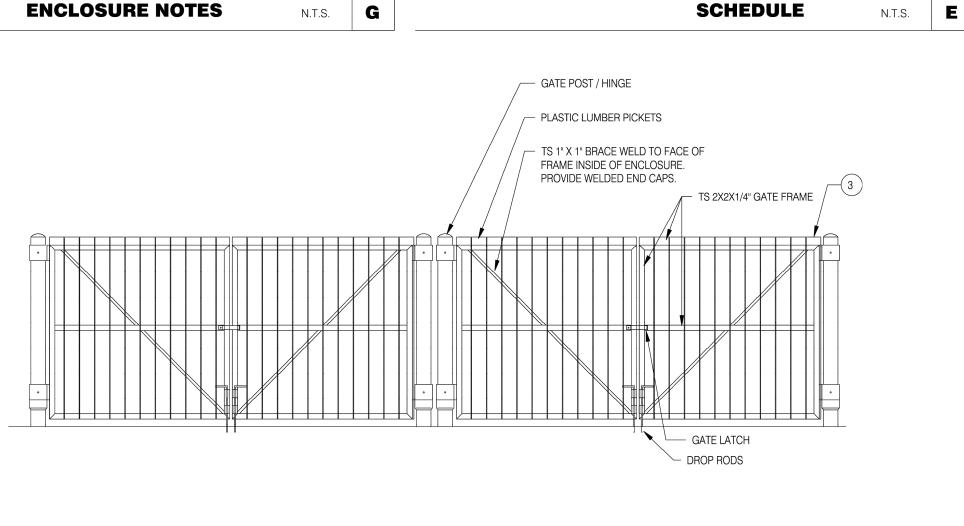
GRIND SMOOTH ALL CONNECTIONS, TYP. PRIME AND PAINT ALL STEEL

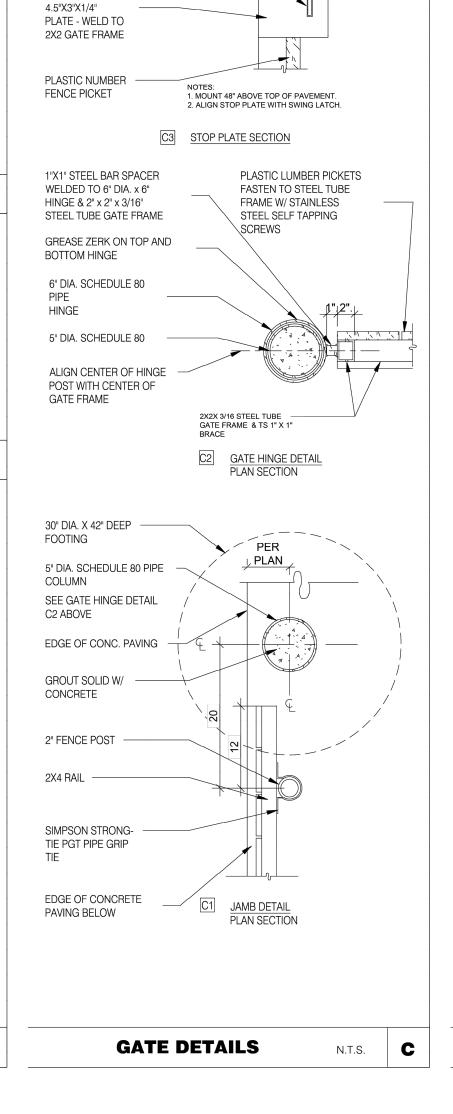


		FENCE SECTION	3/4" = 1'-0"	F
SYMBOL	AREA	MANUFACTURER	COLOR	
1	GATE FRAME COLOR	SHERWIN WILLIAMS	SW 7055 ENDURING BRONZE	
2	PIPE BOLLARDS	SHERWIN WILLIAMS	CAUTION YELLOW	
3	HDPE LUMBER	MAX. R	LIGHT BROWN TEXTURE	

FRONT ELEVATION

N.T.S.





CONCRETE NOTES:

10' O.C. IN SLABS.

1. INSTALL 1/2" EXP. JT. MATERIAL

2. INSTALL CONTROL JOINTS AT MAX.

AND SEALANT BETWEEN CONCRETE SLABS

EDGE OF CONC

PAVING ON GRADE

TS 1" X 1"

BRACE

REST

4" x 24" x 1/4" PLATE --BOLTED TO FRAME & FENCE 1" DIA. STEEL GUIDES WELDED TO

PLATE (TYP. OF 3)

DIA. STEEL GUIDES

(TYP. OF 3)

(3/4" DIA.)

POSITIONS

WELDED TO PLATE

24" x 5" CANE BOLT

BOT. OF CANE BOLT

PLATE 1" BELOW BOT.

3/8" HOLE FOR THRU

1/4" THICK PLATE PAINTED

PROVIDE 3/8"

NOTCH FOR

RAME

SWING LATCH 2X2 STEEL GATE

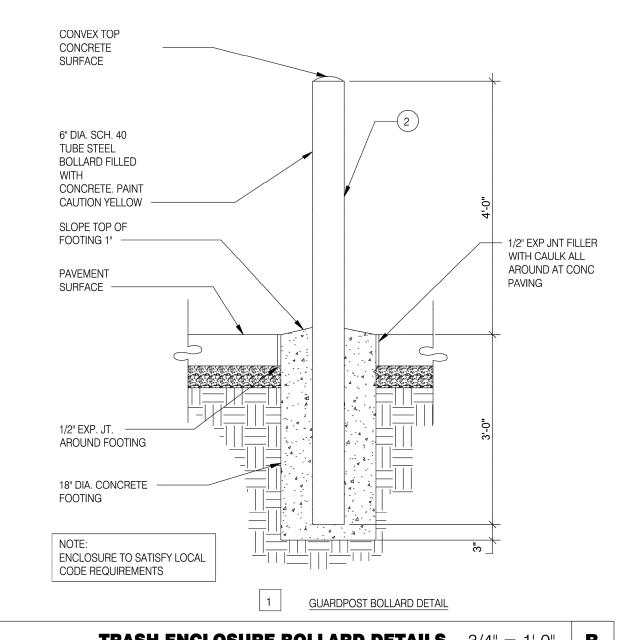
1" DIA. X 1" DEEP SLEEVE IN PAVEMENT FOR CANE BOLT AT CLOSED & 90° OPEN

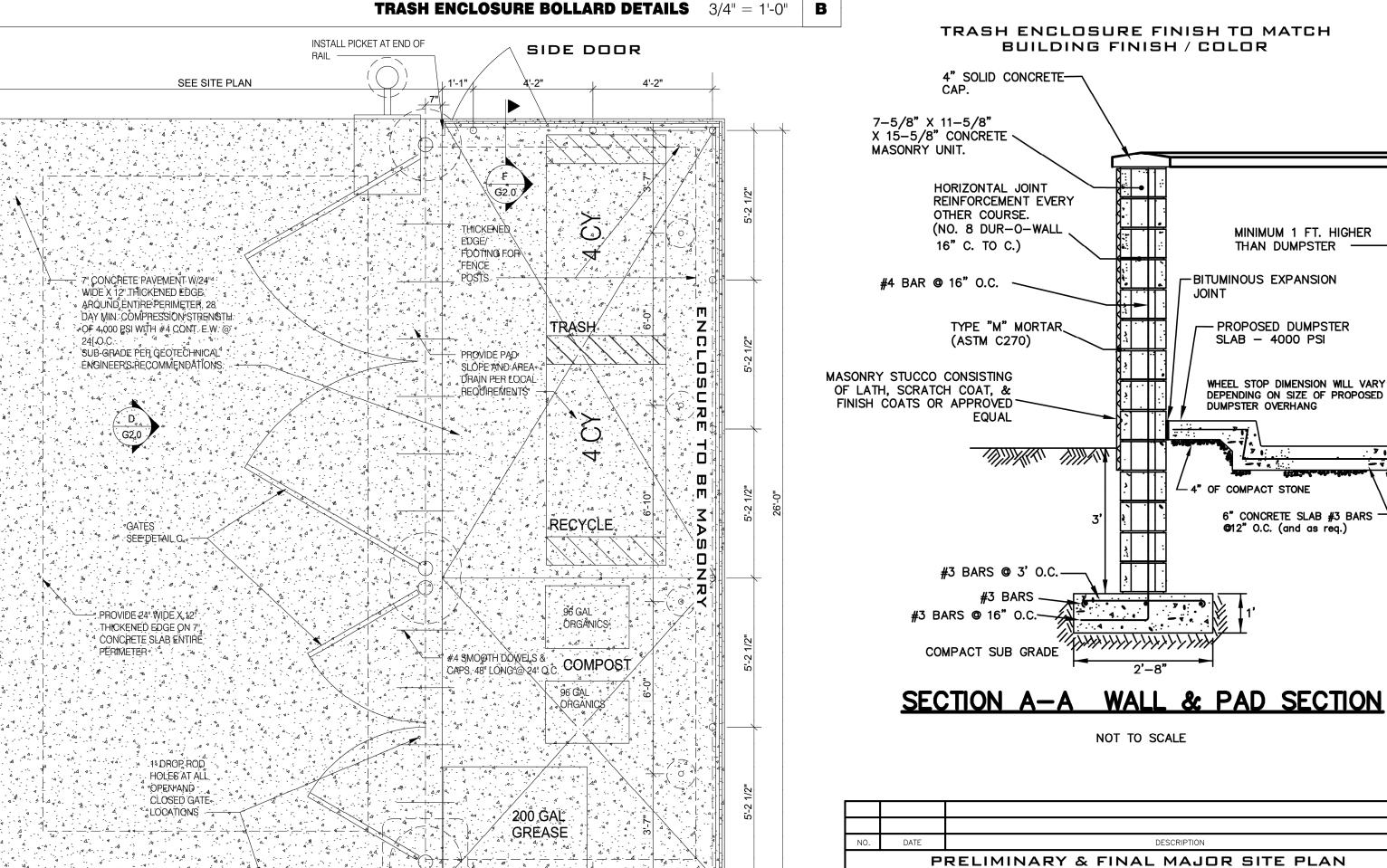
ELEVATION

C5 CANE BOLT (1 PER GATE)

C4 GATE HANDLE

OF GATE FRAME





EDGE OF CONC PAVING

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

292 ROUTE 206 - TACO BELL RESTAURANT
TRASH ENCLOSURE DETAILS

BLOCK 6800, LOT 5

TAX MAP SHEET No. 68

12-02-22

DATE

ENGINEERING, LLC

NEW JERSEY CERTIFICATE OF AUTHORIZATION NO. 24GA28169800

MORRIS COUNTY, NEW JERSEY

11 South Main Street Marlboro, NJ 07746

Tel: 732.577.0180

SHEET NO. 10 OF 16

22-166

BNP

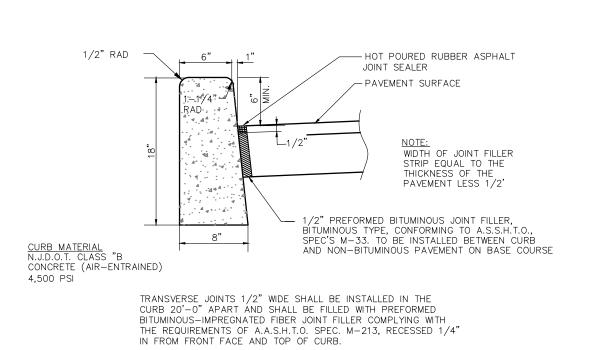
2-02-22

TOWNSHIP OF MOUNT OLIVE

MARC S. LEBER

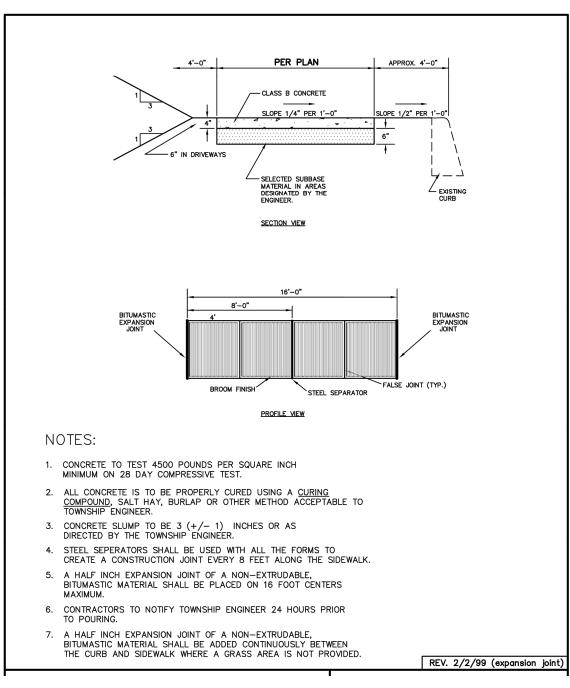
N.J. PROFESSIONAL ENGINEER, LICENSE NO. 24GEO4452400 N.J. PROFESSIONAL PLANNER, LICENSE NO. 33LI00589800

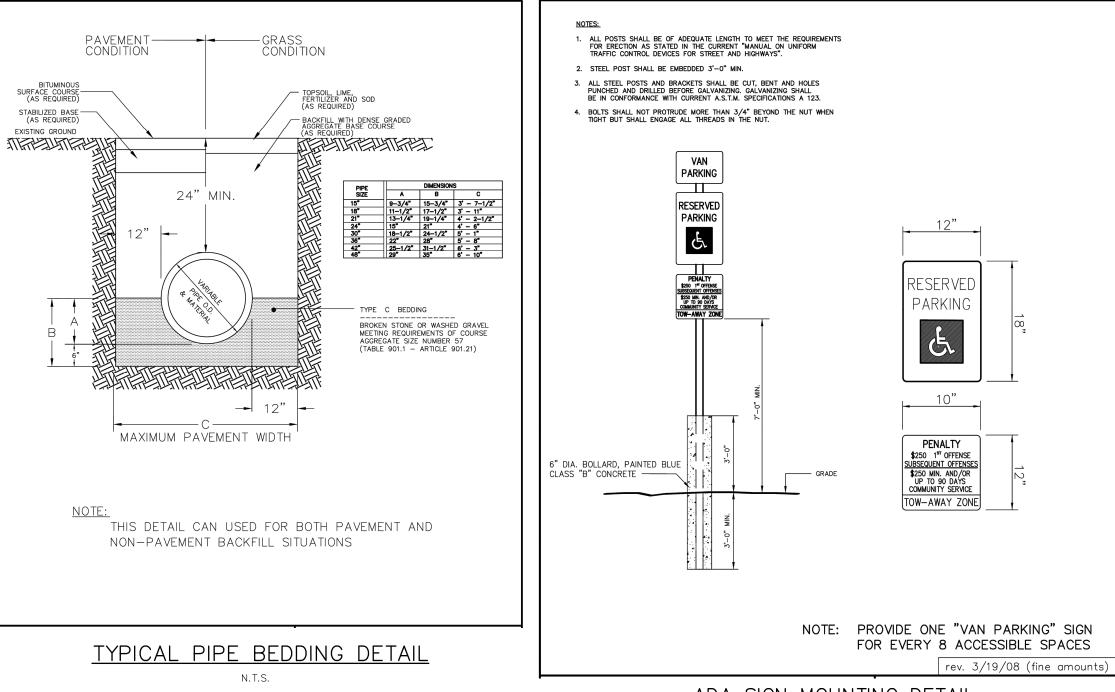
COPYRIGHT © 2022, EAST POINT ENGINEERING, LLC — ALL RIGHTS RESERVED HE COPYING OR REUSE OF THIS DOCUMENT, OR PORTIONS THEREOF, FOR OTHER THAN THE ORIGINAL PROJECT OR HE PURPOSE ORIGINALLY INTENDED, MITHOUT THE WRITTEN PERMISSION OF EAST POINT ENGINEERING, IS PROHIBITED.

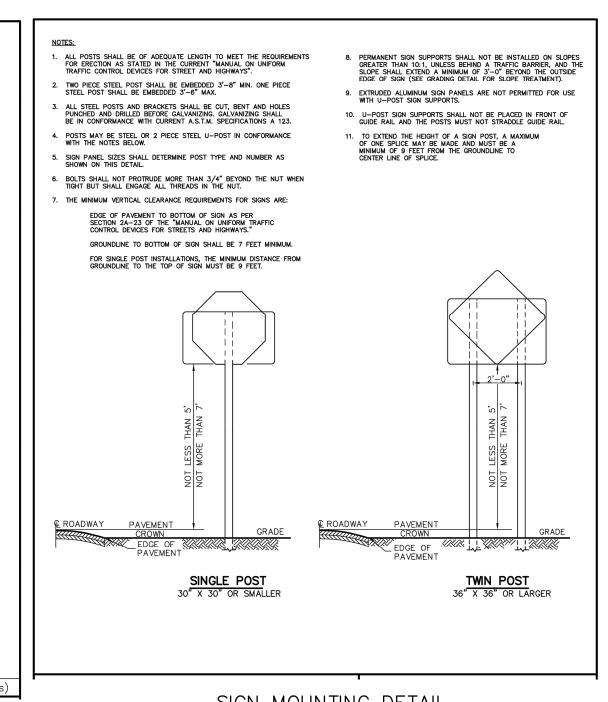


CONCRETE VERTICAL CURB

N.T.S.







CONCRETE SIDEWALK DETAIL N.T.S.

ADA SIGN MOUNTING DETAIL

N.T.S.

SIGN MOUNTING DETAIL

Non-traffic bearing

Cast iron manholes and extensions sold separately

NOTE: GREASE TRAP SHALL BE PUMPED OUT

QUARTERLY.

finished grade

1-609-298-2150

1-800-MERSHON

1-609-298-7969 / FAX#

1500 (2 Comp) Grease Trap

1500 (2 COMPARTMENT) GREASE TRAP

Compartments are 2/3 and 1/3 per NJDEP specifications

As Manufactured by Mershon Concrete - Bordentown, NJ

MERSHON

CONCRETE

Rt. 130, PO Box 254

Bordentown, NJ 08505

inert coating

1. Tank is 4000 psi concrete - steel reinforced

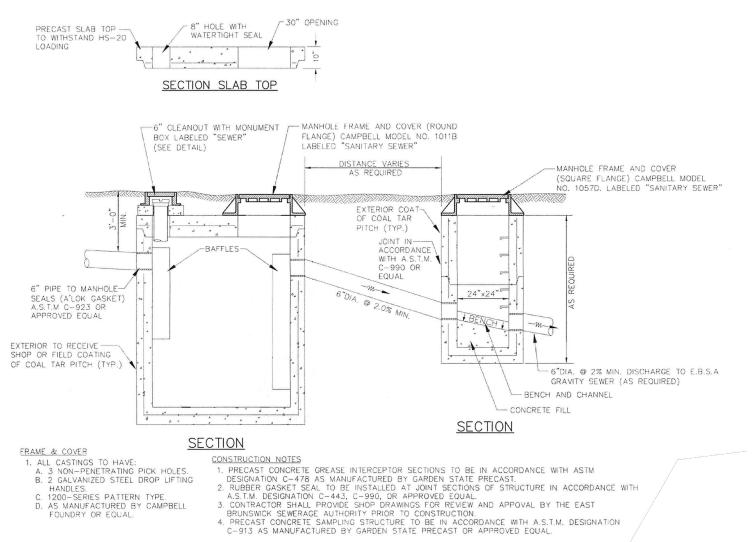
2. Concrete conforms to ACI 318-16-4.5.1

3. Tank complies with all requirements of NJDEP Chapter 199 7:9A-8.2

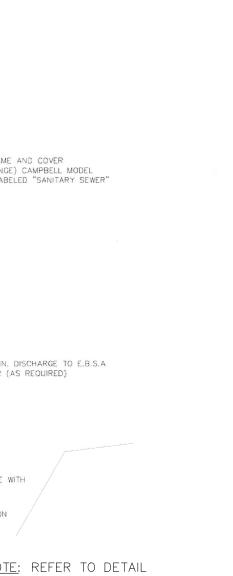
4. In an effort to continually improve our

products, Mershon Concrete reserves the right to change product design without notice.

and ACI 318-16-4.5.2



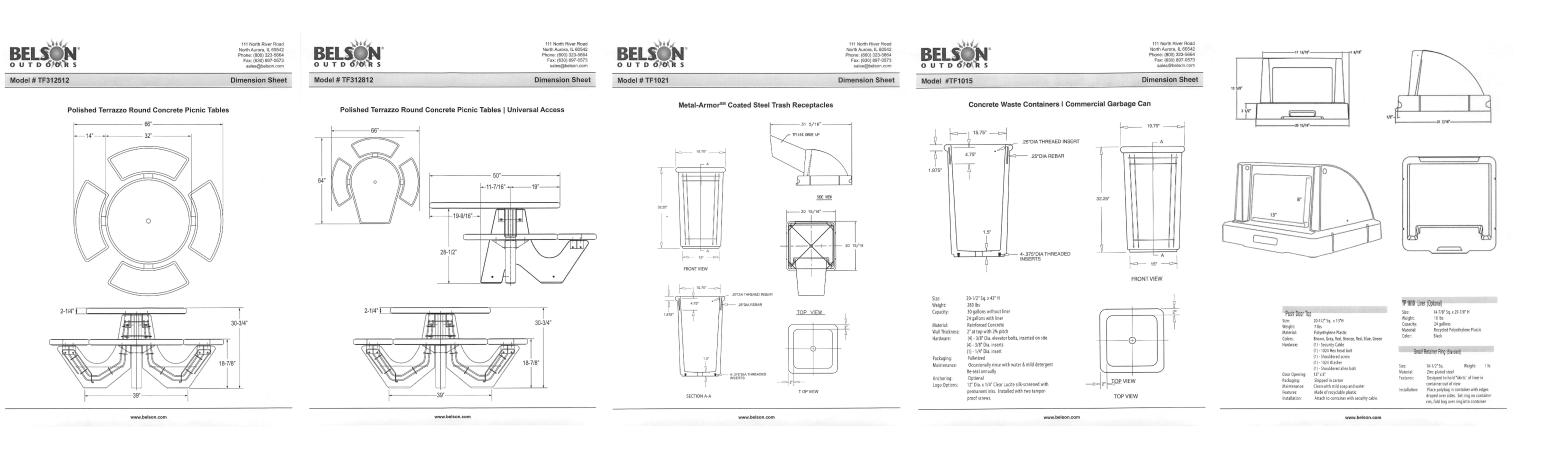
TYPICAL GREASE TRAP & SAMPLING MANHOLE DETAIL (THIS SHEET) FOR ACTUAL GREASE TRAP SIZING.

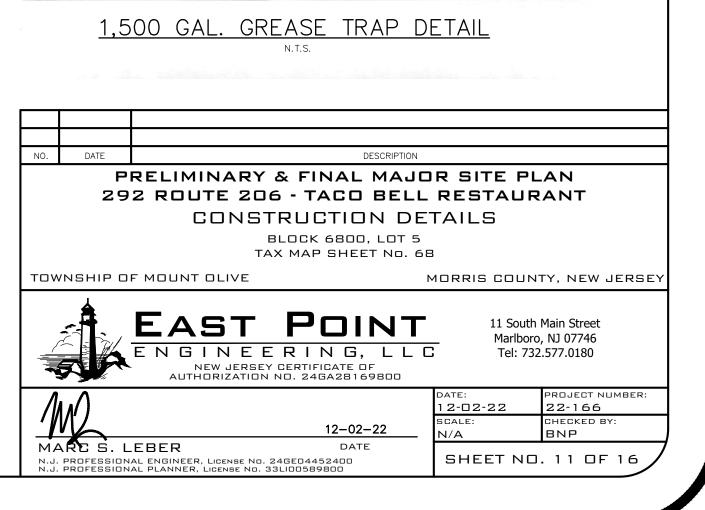


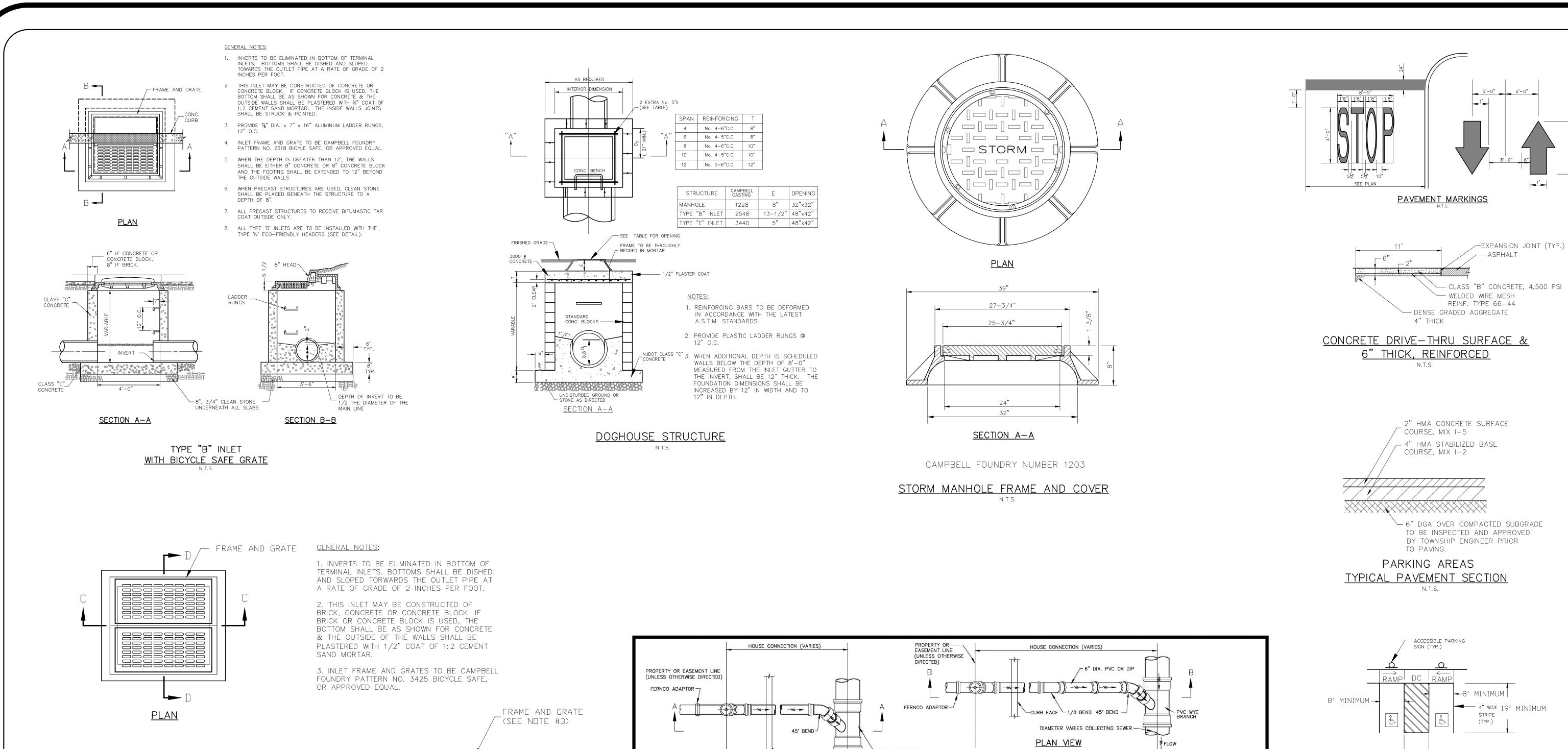
Polished Terrazzo Round Concrete Picnic Tables OUTDOOR FIXTURE DETAILS - 14" - - 32" - - - -NOTES: 1. OUTDOOR BENCH MODEL #TF312512, MISTY GRAY 2. OUTDOOR BENCH ADA MODEL #TF312812, MISTY GRAY FINISH, QTY. 1 3. DRIVE-THRU TRASH RECEPTACLE MODEL #TF1021, 4. PATIO TRASH RECEPTACLE MODEL #TF1015, MISTY 5. OUTSIDE MAIN ENTRANCE TRASH RECEPTACLE MODEL #TF1015, MISTY GRAY FINISH, QTY. 1

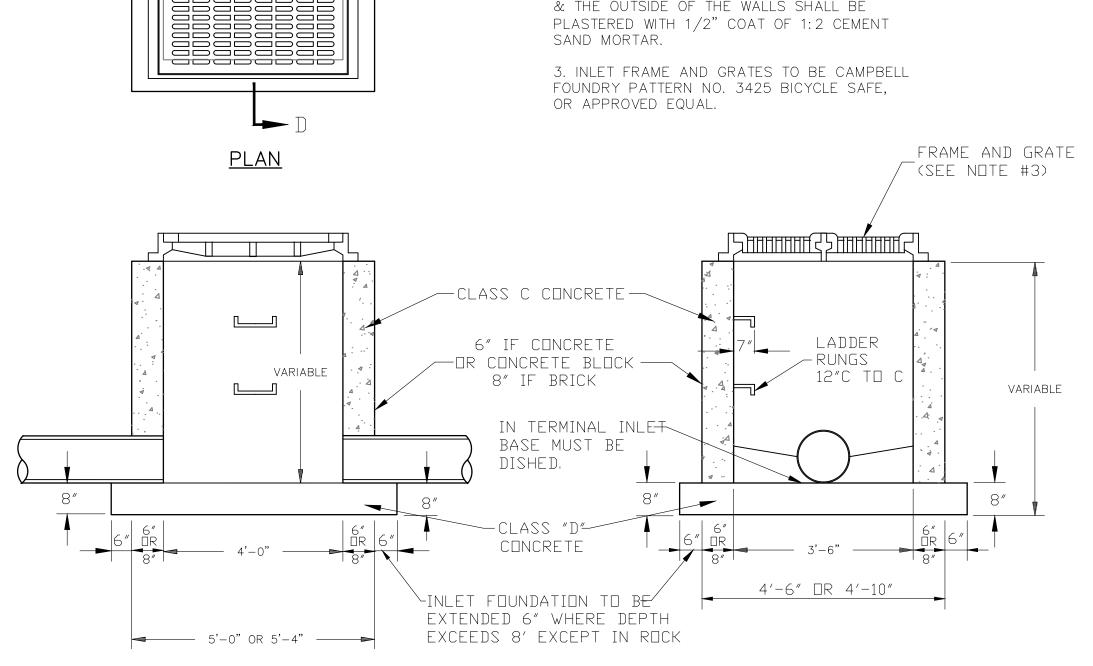
MISTY GRAY FINISH, QTY. 1

GRAY FINISH, QTY. 1





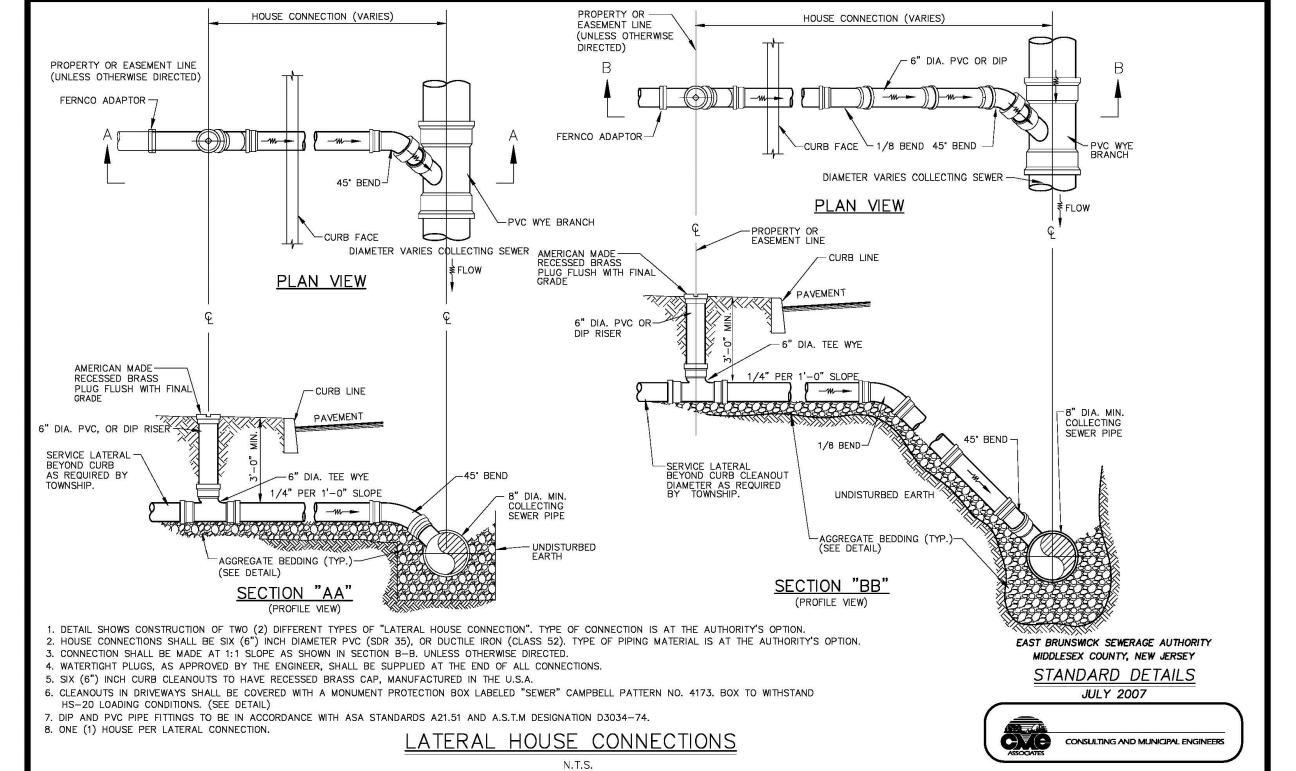


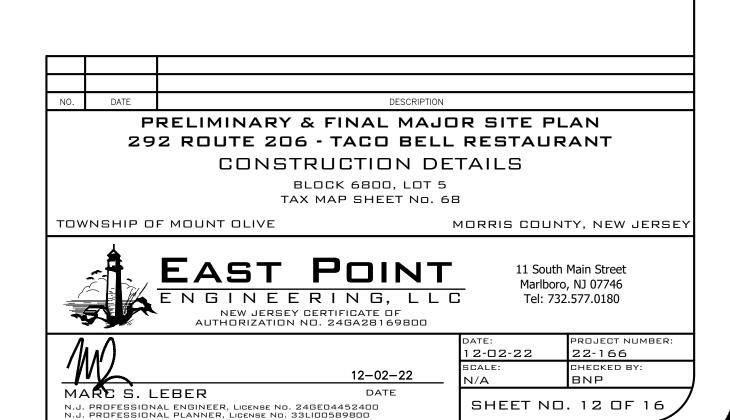




SECTION 'D-D'

SECTION 'C-C'





8' MINIMUM VAN ACCESS

5' MINIMUM CAR ACCESS

2. SPACES DESIGNATED AS BEING "VAN ACCESSIBLE" SHALL BE ADJACENT TO ACCESS AISLES WITH A MIN. WIDTH OF 8 FEET.

ACCESSIBLE PARKING STRIPING LAYOUT

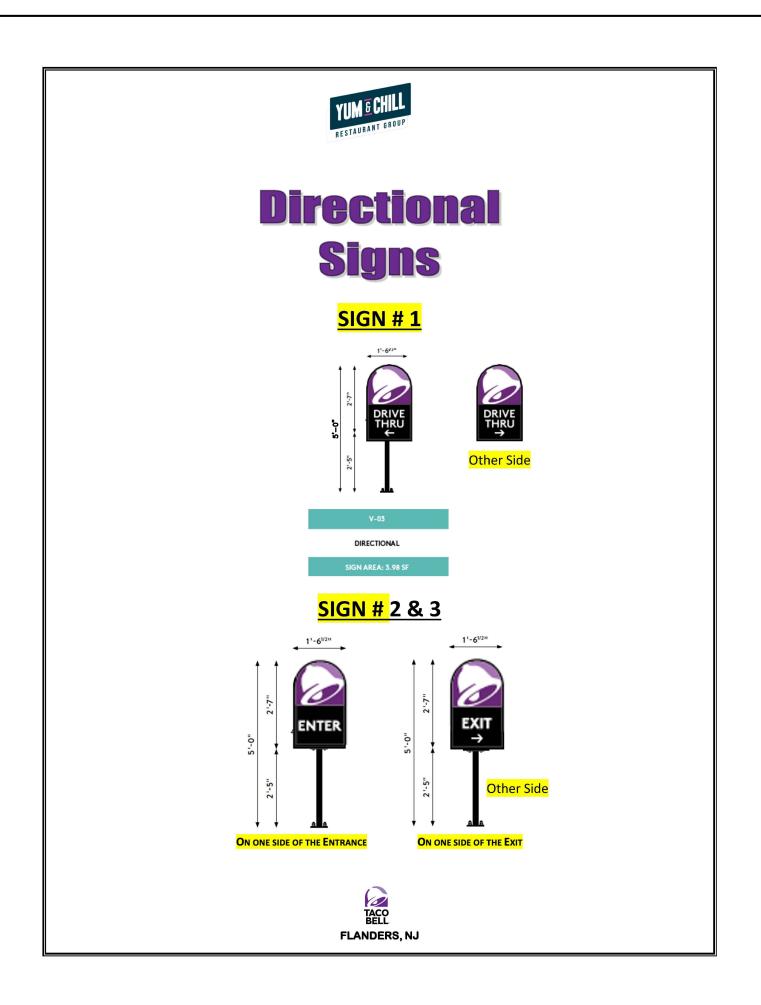
4. STRIPING SHALL BE LONG-LIFE EPOXY RESIN OR THERMOPLASTIC.

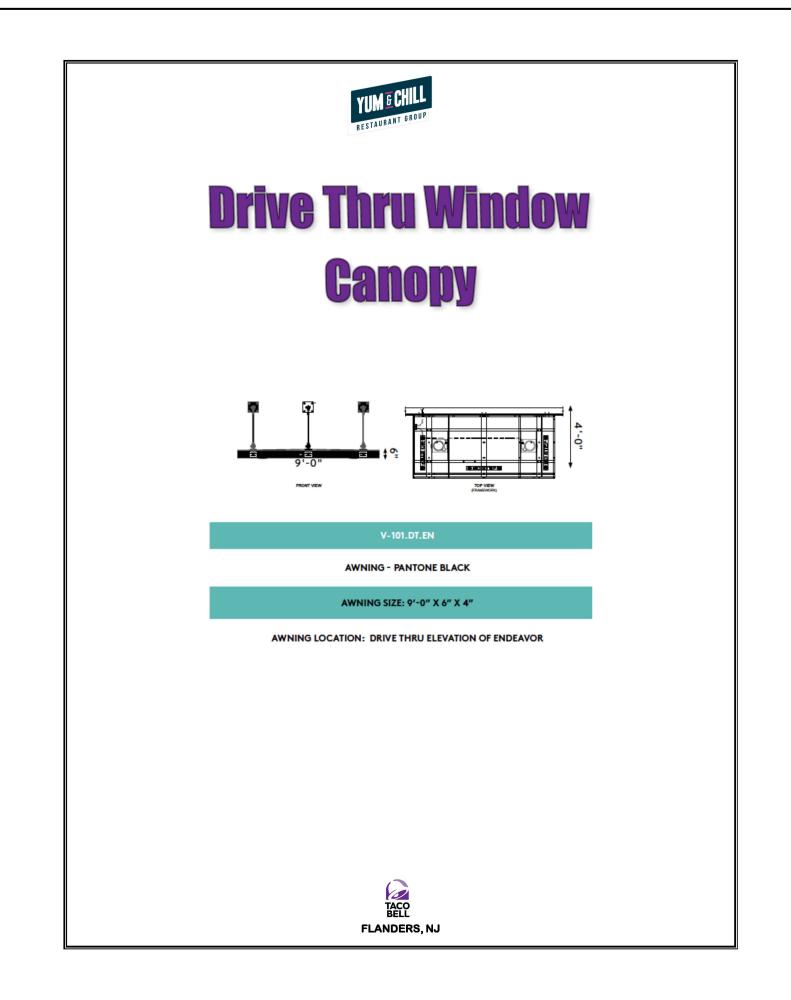
NOTES:

1. ALL STALLS SHALL BE A MINIMUM OF 8'X18'.

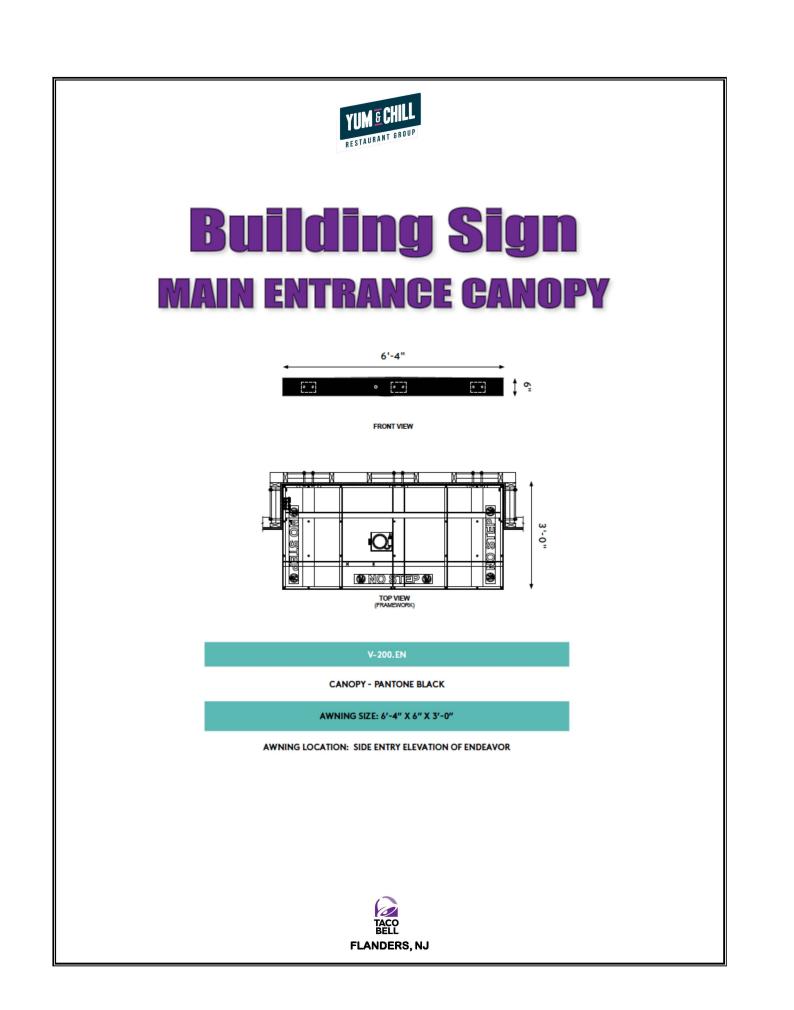
3. PROPOSED STRIPING SHALL BE BLUE IN COLOR.







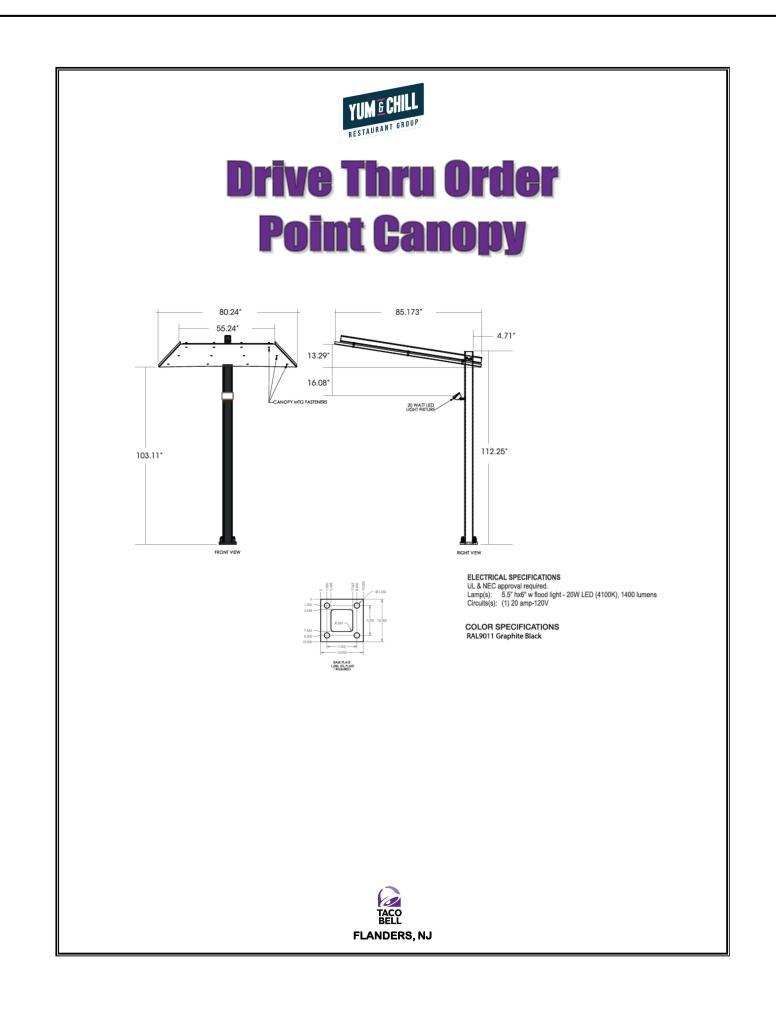




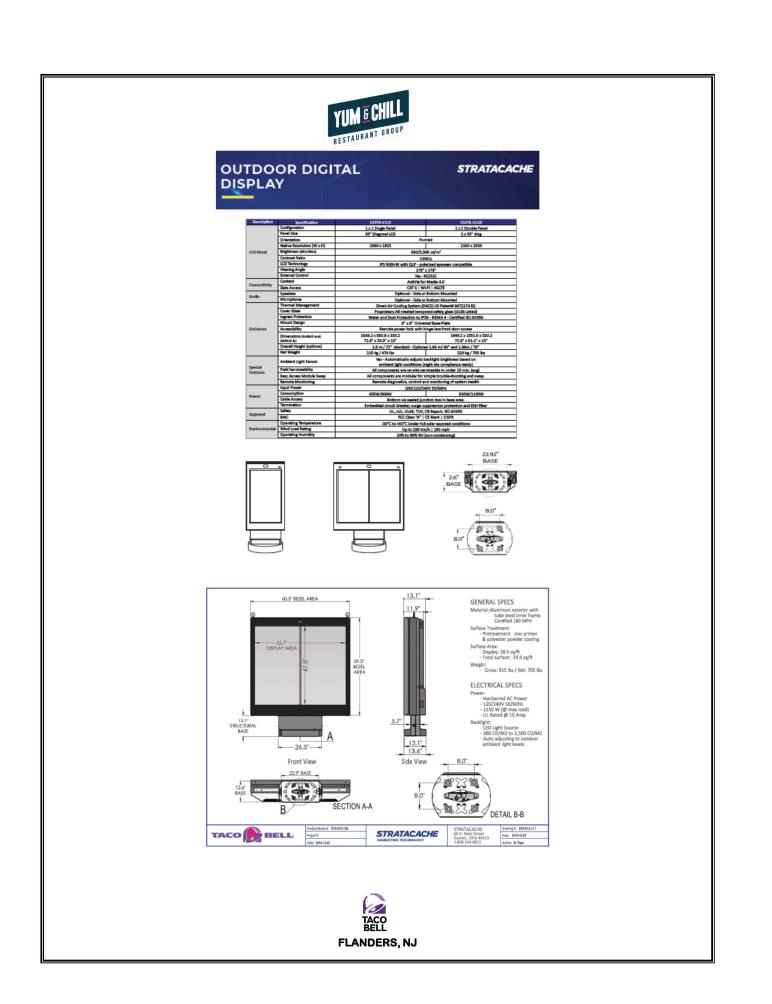




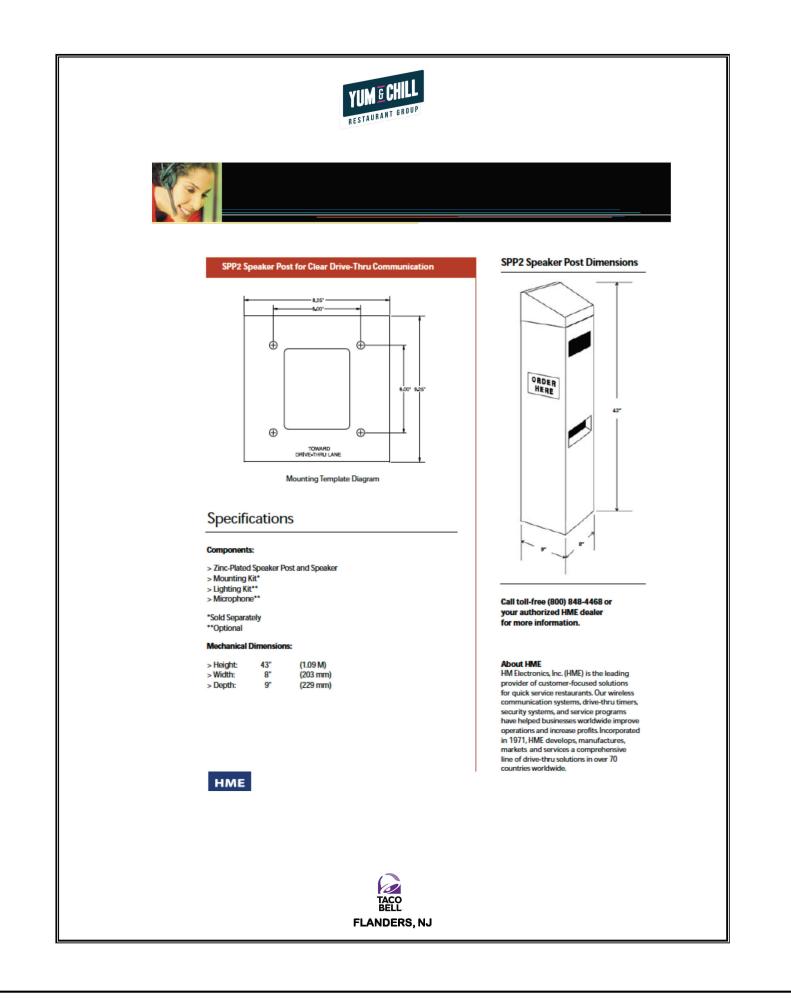


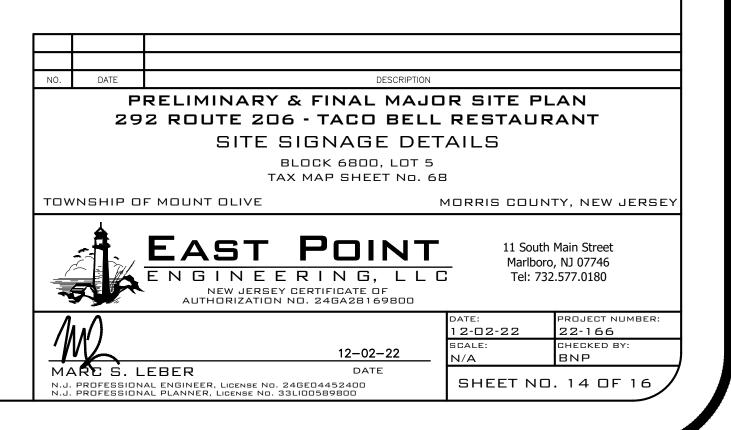


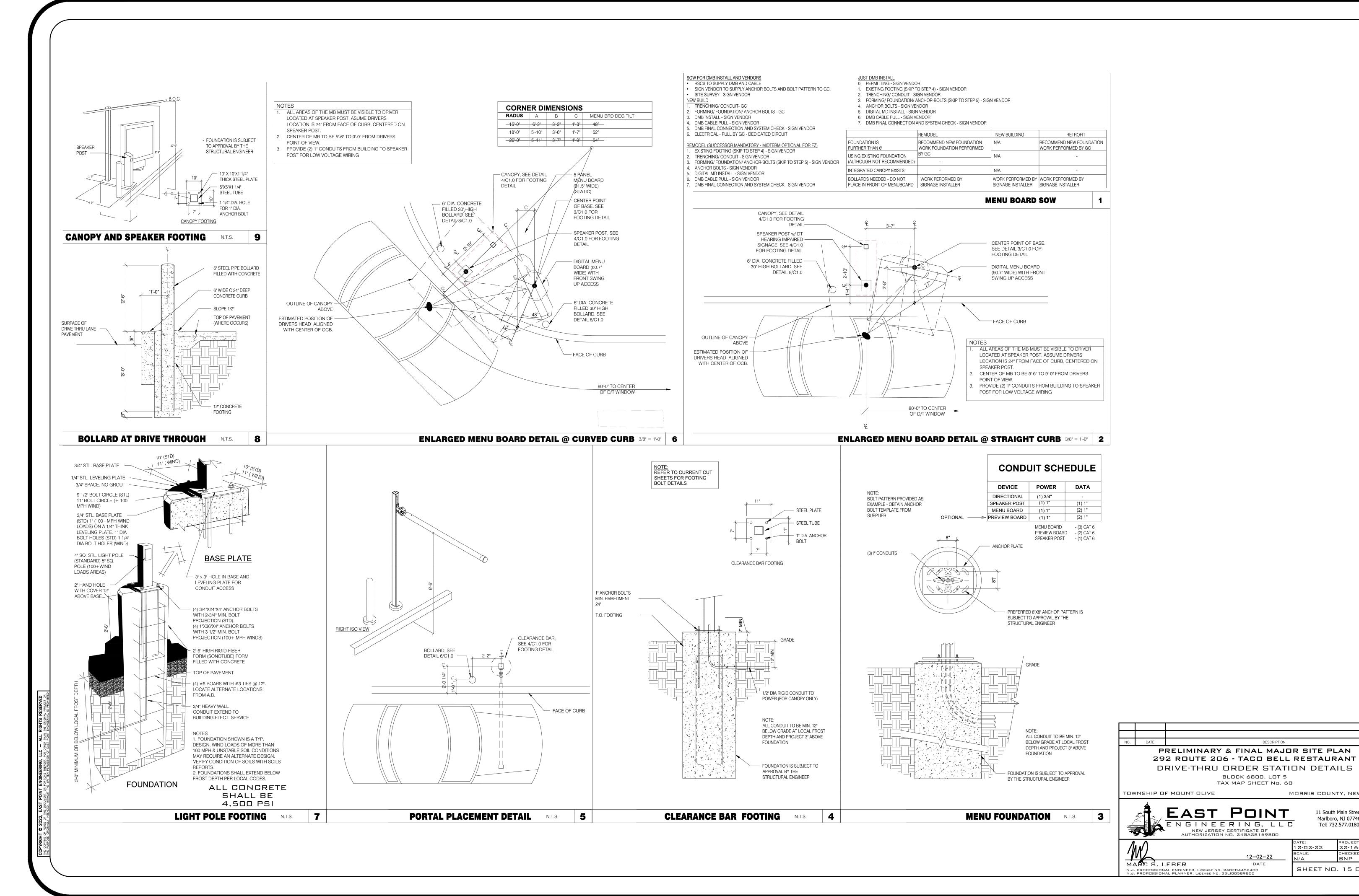












BLOCK 6800, LOT 5

TAX MAP SHEET No. 68

DATE

MORRIS COUNTY, NEW JERSEY

11 South Main Street

Marlboro, NJ 07746

Tel: 732.577.0180

22-166

BNP

SHEET NO. 15 OF 16

2-02-22



