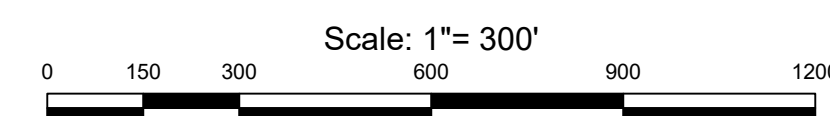


TAX LOT 1.08, BLOCK 111 TOWNSHIP OF WEST ORGANGE,
ESSEX COUNTY, NEW JERSEY

C-1
EC-1
S-1
G-1
L-1
LA-1
D-1

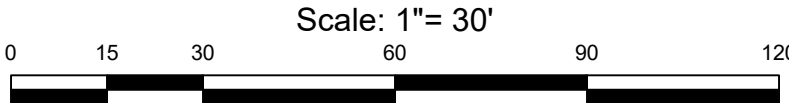


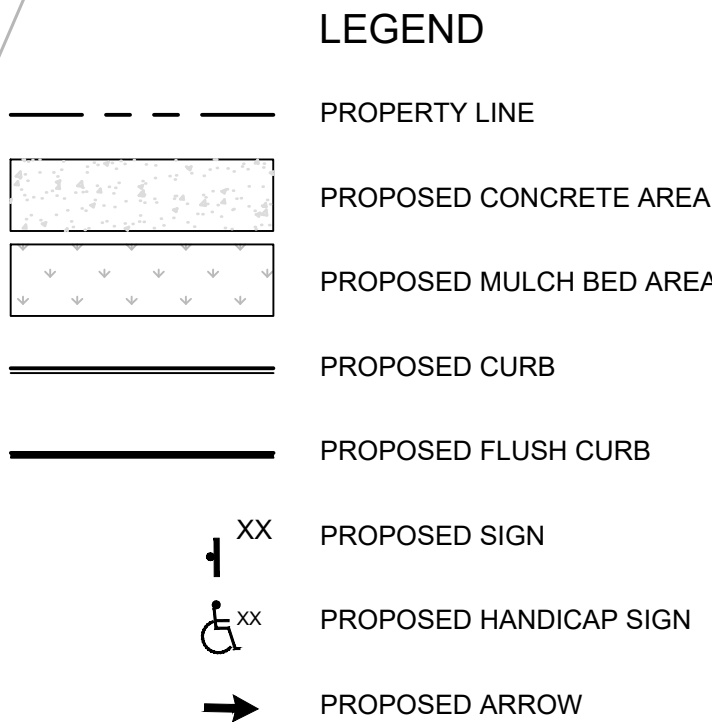
 ZONE BOUNDARY
 PROJECT AREA LIMITS

CIVIL ENGINEER
SESI CONSULTING ENGINEERS
 959 ROUTE 46E, 3RD FLOOR
 PARSIPPANY, NEW JERSEY, 07054
 TEL: (973) 808-9050, FAX: (973) 808-9099
 CONTACTS: ANTHONY CASTILLO
 EMAIL: AC@SESI.ORG

DATE: 12/19/2023 JOB NO. 13237

rev	date	description	by





NOTES:
PARKING REQUIREMENT FOR NON RESIDENTIAL USES (§ 25-12.2) COMMERCIAL RECREATION, FITNESS CENTER/HEALTH CLUB: 1 PER 150 SF OF GROSS FLOOR AREA
25,300SF OF GROSS FLOOR AREA /150 SF = (168.6) 169 REQUIRED
PARKING REQUIREMENT FOR NON RESIDENTIAL USES (§ 25-12.2) RETAIL STORES AND PERSONAL SERVICE: 1 PER 250 SF OF GROSS FLOOR AREA.
25,300SF OF GROSS FLOOR AREA /250 SF = (101.2) 102 REQUIRED

REFERENCE:
EXIST CONDITIONS & BOUNDARY ARE TAKEN FROM SURVEY NAMED 'PROPERTY SURVEY' PREPARED BY DAB SURVEYING INC. DATED JULY 09,2015 WITH LATEST REVISION DATE OF SEPTEMBER 26, 2019.

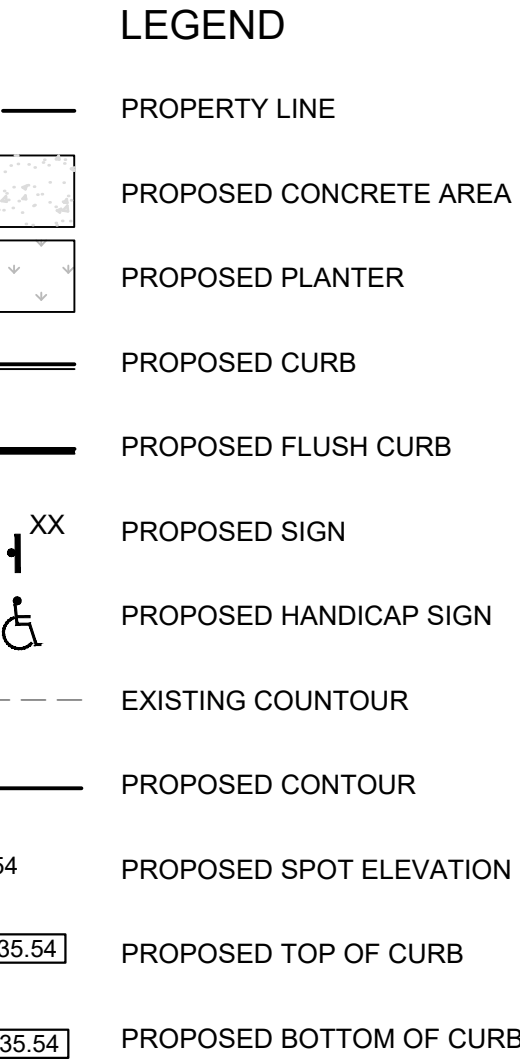
ANTHONY CASTILLO, P.E.
PROFESSIONAL ENGINEER
N.J. LIC. NO. 43112

SITE PLAN

S-1

[illegible]

dwg by: DG
chk by: AC
scale: AS NOTED



Scale: 1" = 30'

A horizontal graphic scale bar with alternating black and white segments. Above the bar, the scale is labeled in feet: 0, 15, 30, 60, 90, and 120. The text 'Scale: 1" = 30\'' is centered above the bar.

N:\A000\13337 - WEST ORANGE, NJ (GARY HELLER)\CAD\SET\13337 LIGHTING 12/19/23 05:59:03PM, sesimicrodata_LAYOUT1.rvt

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REFERENCE:

EXIST CONDITIONS & BOUNDARY ARE TAKEN FROM SURVEY NAMED 'PROPERTY
SURVEY' PREPARED BY DAB SURVEYING INC. DATED JULY 09,2015 WITH LATEST
REVISION DATE OF SEPTEMBER 26, 2019.

DIV GRP CALCULATOR							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
BLDG PARKING & DRIVE AISLE	Illuminance	Fc	1.66	4.4	0.2	8.30	22.00

DIVERSIFIED GROUP
55 LANE ROAD
FAIRFIELD, NJ 07004
LIGHTING DESIGNER: MATTHEW STERNER
PHONE: (908) 997-8462
EMAIL: MSTERNE@DIVGRP.COM

SITE LIGHTING CONTROLS SEQUENCE OF OPERATION IN COMPLIANCE WITH ASHRAE 90.1-2019
- EACH SITE FIXTURE TO BE EQUIPPED WITH LSI'S AIRLINK BLUE, WHICH IS A
WIRELESS BLUETOOTH MESH CONTROL SYSTEM.
- CONTROL SYSTEM IS TO BE ACCESSIBLE VIA IOS APP FOR PROGRAMMING.
- EACH SITE FIXTURE TO HAVE AN INTEGRAL MOTION AND PHOTO SENSOR MODULE
TO PROVIDE MULTI-LEVEL CONTROL BASED ON MOTION AND/OR DAYLIGHT.
- LIGHTING CONTROL SYSTEM WILL ALSO INCORPORATE THE AIRLINK BLUE TIME KEEPER
120 VOLT (ALBTX-120). THIS ADDS THE ABILITY TO SCHEDULE MULTIPLE EVENTS BASED
ON TIME OF DAY OR ASTRONOMICAL CLOCK.
- ALL SITE LIGHTS TO TURN ON AT DUSK AND OFF AT DAWN.

Scale: 1"= 30'

0 15 30 60 90 120

EAGLE ROCK (ROW, VARIOUS) AVENUE

PROSPECT AVENUE

BLOCK 111
LOT 103
DB-6258/183

BLOCK 111
LOT 107
DB-12475/5687

BLOCK 111
LOT 101
DB-4805/83

DIVERSIFIED GRP LUMINAIRE							
Qty	Type	Arrangement	Symbol	Manufacturer	Light Fixture Spec	CCT	Mounting AFG (FT)
2	W1	Single		LSI INDUSTRIES, INC.	MRM-LED-09L-SIL-4-VOLTS-DIM-40-70CRI-FINISH-ALBCS1-MS8	4000K	16
3	W2	Single		LSI INDUSTRIES, INC.	MRM-LED-09L-SIL-4-VOLTS-DIM-40-70CRI-FINISH-ALBCS1-MS8	4000K	16
3	W3	Single		LSI INDUSTRIES, INC.	MRM-LED-09L-SIL-FT-VOLTS-DIM-40-70CRI-FINISH-ALBCS1-MS8	4000K	16
1	W4	Single		LSI INDUSTRIES, INC.	XWS-LED-03L-SIL-3-VOLTS-DIM-40-70CRI-ALBCS1-MS8-FINISH	4000K	10
3	W5	Single		LSI INDUSTRIES, INC.	XWS-LED-03L-SIL-FT-VOLTS-DIM-40-70CRI-ALBCS1-MS8-FINISH	4000K	10

LEGEND	
	PROPERTY LINE
	PROPOSED CONCRETE AREA
	PROPOSED PLANTER
	PROPOSED CURB
	PROPOSED FLUSH CURB
	PROPOSED HANDICAP SIGN

WEST ORANGE PARKING LAYOUT
424 EAGLE ROCK AVENUE
LOT 108, BLOCK 111
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, N. J.

LIGHTING PLAN

ANTHONY CASTILLO, P.E.
PROFESSIONAL ENGINEER
N.J. LIC. NO. 43112

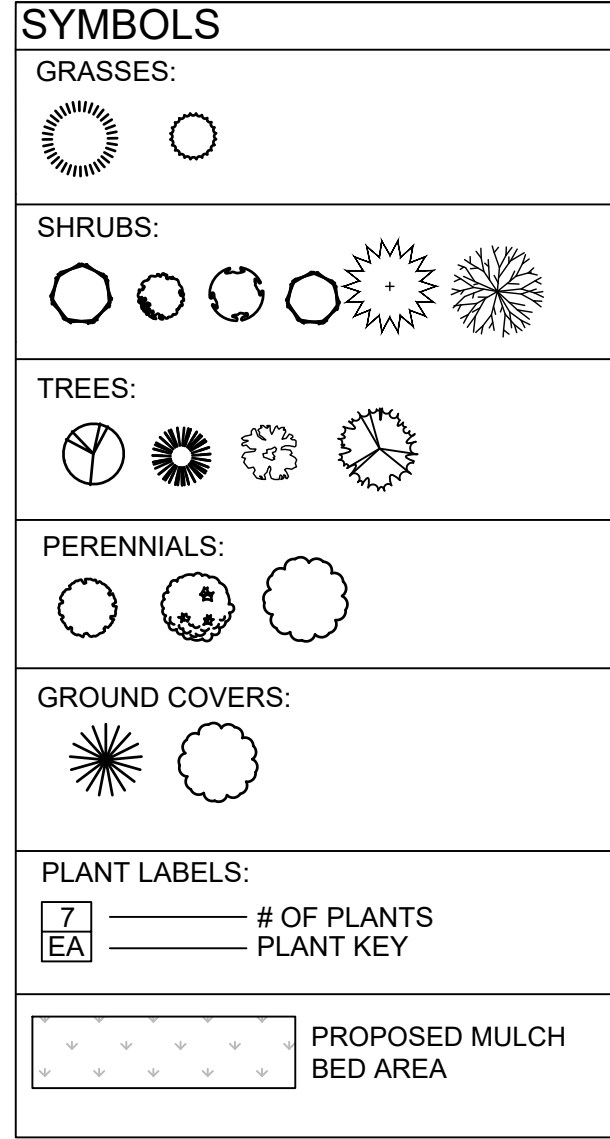
Cert of Auth #24GA27934700
SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL
959 ROUTE 48E, 3RD FLOOR, PARLIPPANY, NJ 07654 PH: 973.808.9050

dwg by: DG
chk by: AC
scale: AS NOTED
date: 12/19/2023

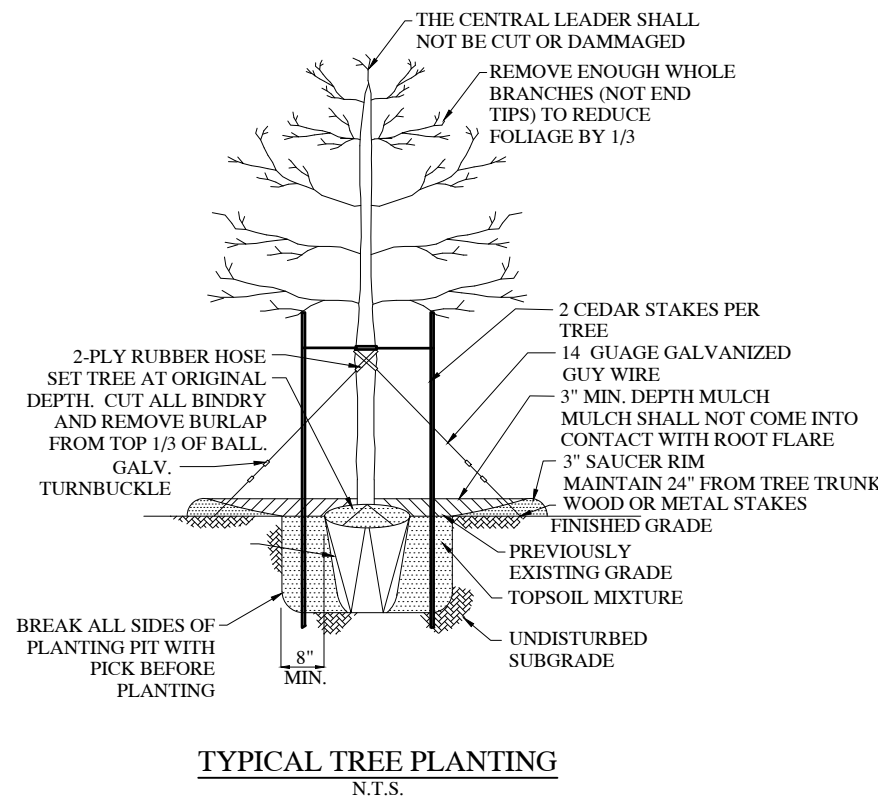
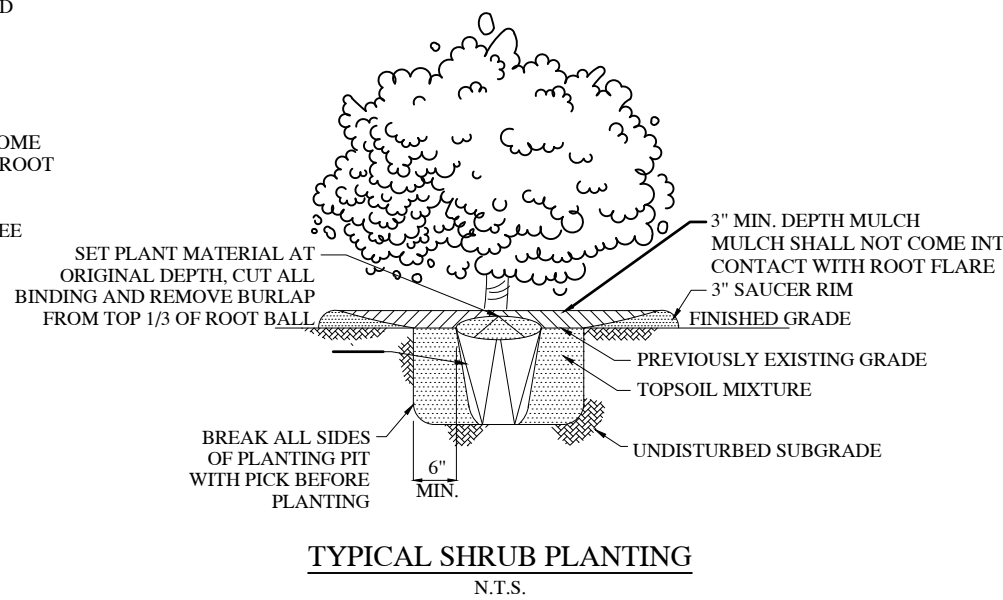
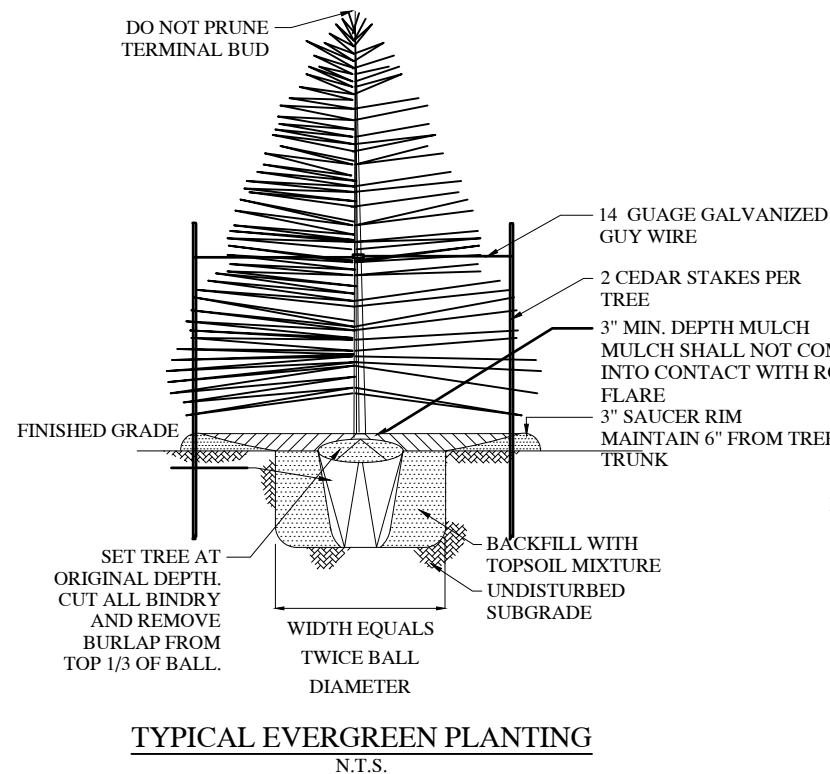
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job no. 13337
drawing no.

L-1

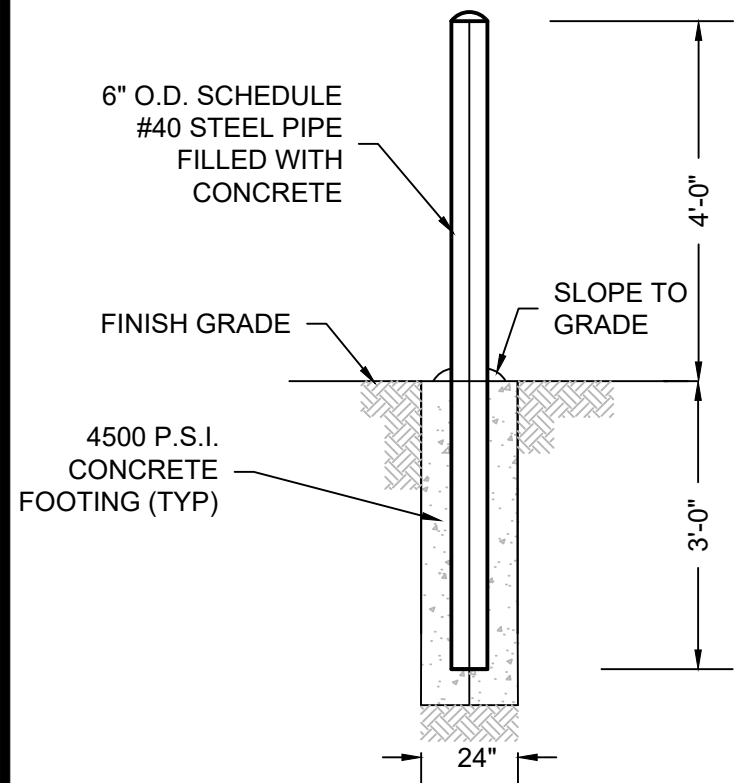
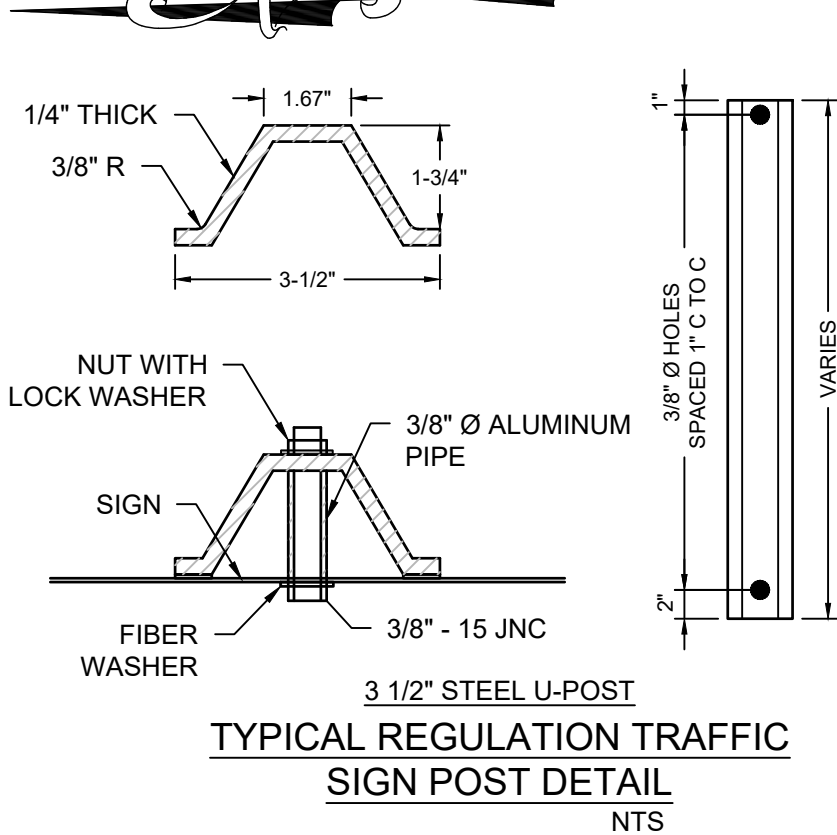


Sym.	Botanical Name	Common Name	Quantity	Planted Size (at time of installation)	Mature Size	
					Height	Spread
AR	Thuja occidentalis	Anna's Magical Ball Arborvitae	41	1 gallon pot	20-40 ft	10-15 ft
BO	Buxus 'Green Mound'	"Green Mound " Boxwood	36	1 gallon pot	2-3 ft	2-3 ft
CA	Nepeta 'Pisike'	"Little Trudy" Catmint	31	1 gallon pot	0.75-1 ft	1-1.50 ft
CC	Lagerstroemia	Crape Myrtle	4	2-3 ft	6-25 ft	6-25 ft
PS	Spirea japonica	"Little Princess" Spirea	15	3 gallon pot	4-6 ft	5-7 ft
BA	Baptisia australis	Baptisia	4	1 gallon pot	3-4 ft	3-4 ft
RG	Calamagrostis x acutiflora	"Karl's Foerster's" Feather Reed Grass	7	1 gallon pot	3-5 ft	1.50-2.50 ft
JM	Acer palmatum 'Emperor I	Emperor Japanese Maples	1	2-3 ft	10-15 ft	10-15 ft
SJ	Juniperus conferta	"All Gold" Shore Juniper	16	1 gallon pot	0.75-1.50 ft	6-8 ft
HJ	Juniperus horizontalis	Bar Harbor Juniper	22	1 gallon pot	0.50-1.50 ft	5-8 ft
DT	Pyrus Calleryana	Ornamental Flowering Dogwood Tree	4	2-3 ft	25-35 ft	13-16 ft
WH	Ilex Sparkleberry	"Berry Poppins" Winterberry Holly	20	2 gallon pot	6-10 ft	6-10 ft
MG	Muhlenbergia capillaris	Muhly Grass	10	1 gallon pot	2-3 ft	2-3 ft
AH	Ilex Opaca	American Holly	4	3 gallon pot	15-30 ft	10-20 ft
CB	Berberis thunbergii	Pygmy Crimson Barberry	7	3 gallon pot	3-6 ft	4-7 ft
ES	Rudbeckia hirta	Black-Eyed Susan	2	1 gallon pot	2-3 ft	1-2 ft
RM	Acer Rubrum	Red Maple Tree	2	2.5 in caliper	6-7 ft	30-40 ft

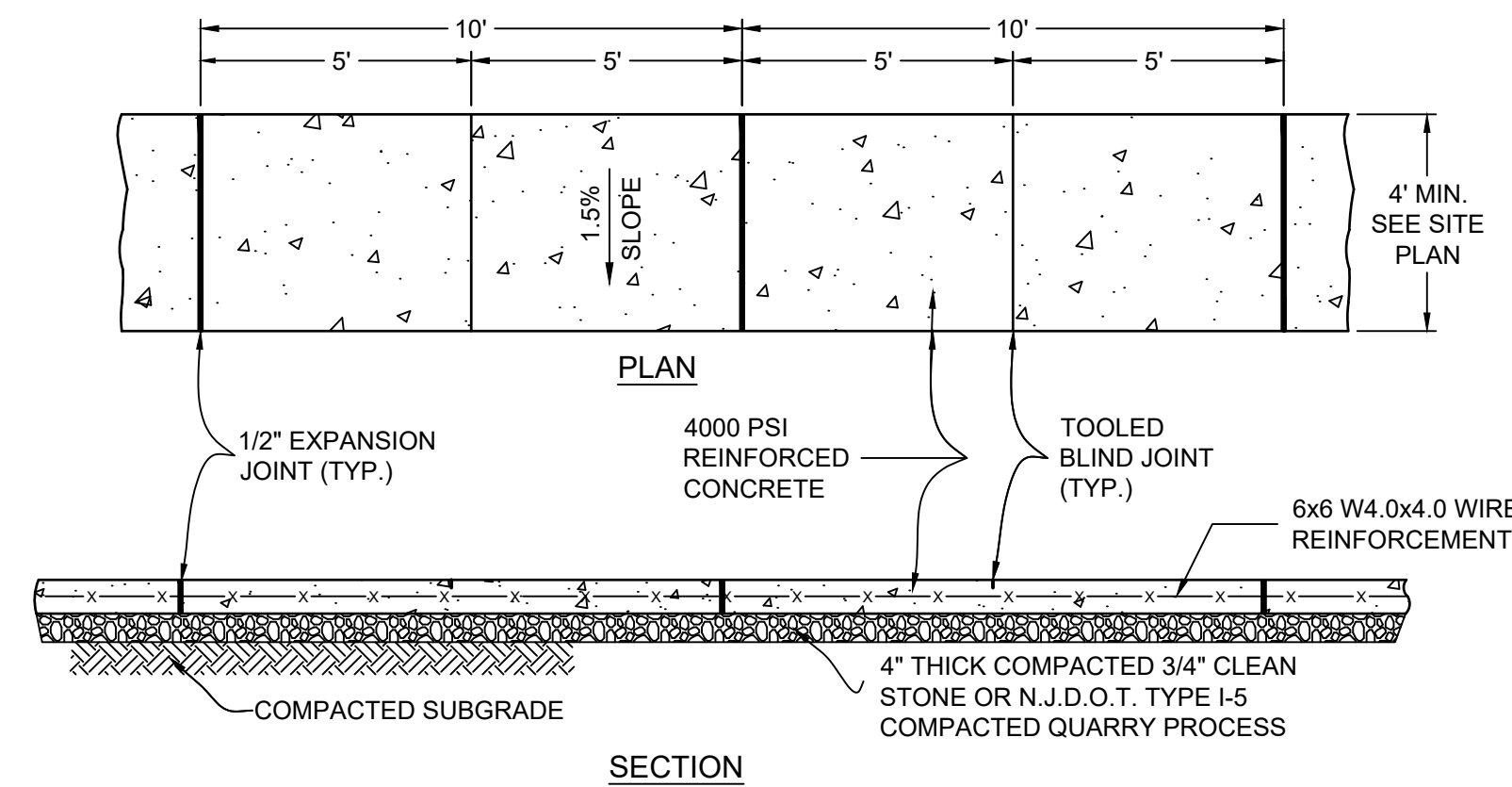


REFERENCE:
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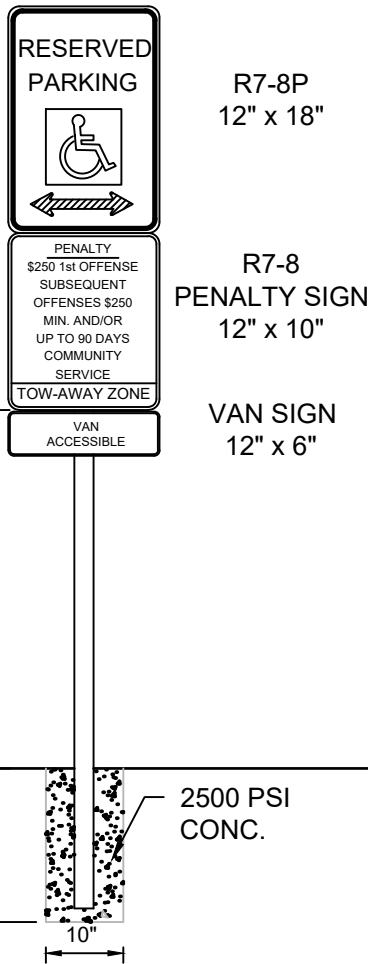
BOLLARD DETAIL
NTS



TYPICAL ON GRADE SIDEWALK DETAIL
NTS

NOTES:

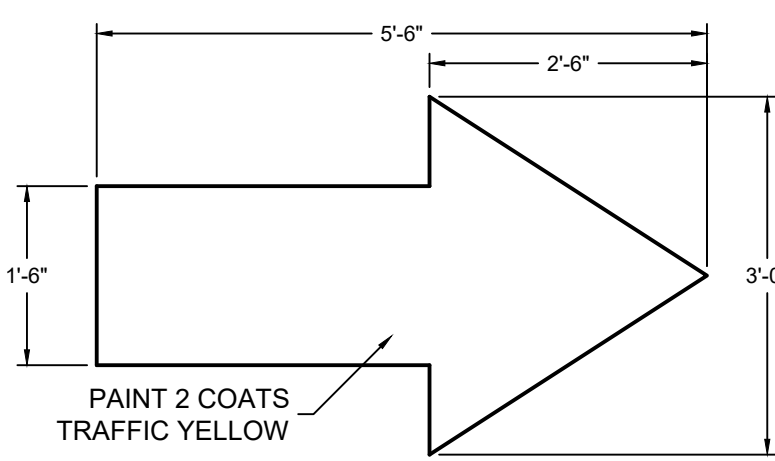
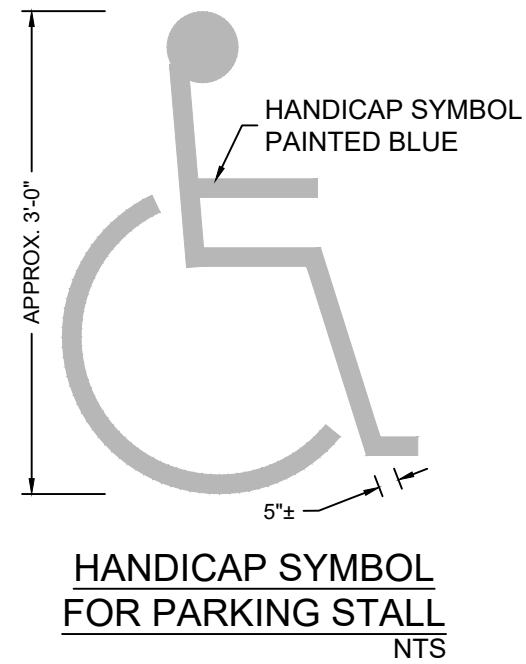
- SUBGRADE SHALL BE COMPACTED IN A MANNER SUITABLE TO THE LOCAL DESIGN ENGINEER. CONTRACTOR SHALL PROVIDE ANY ADDITIONAL FILL REQUIRED IN THE FORM OF 3/4" CLEAN STONE TO BRING SUBGRADE TO THE REQUIRED ELEVATION.
- EXPANSION JOINTS SHALL BE 1/2" WIDE AND FILLED WITH PREFORMED BITUMINOUS IMPREGNATED FIBER JOINT FILLER. THE TOP OF ALL JOINT FILLER SHALL BE 1/4" BELOW THE SURFACE. EXPANSION JOINTS SHALL BE LOCATED 10' ON CENTER, ALTERNATING WITH BLIND JOINTS.
- BLIND JOINTS ARE TO BE SURFACE GROOVES CUT INTO SIDEWALK 1/2" DEEP AND 1/8" WIDE, AND SHALL BE 10' ON CENTER ALTERNATING WITH EXPANSION JOINTS.
- REINFORCEMENT FOR SIDEWALK SHALL BE SHEETS OF 6X6-W4.0XW4.0 PLACED 1 1/2" FROM SURFACE OF SLAB ON SUITABLE SUPPORTS.
- CONCRETE SHALL HAVE A MIN. COMPRESSIVE STRENGTH OF 4000PSI AT 28 DAYS; IT SHALL BE PLACED AT 4 INCH ± 1" SLUMP; IT SHALL BE PROPORTIONED AS FOLLOWS:
 - * MIN. 658 LBS. CEMENT/CY TYPE I OR TYPE II.
 - * 4% AIR ENTRAINMENT
 - * MAX. WATER/CEMENT RATIO = 0.48
 - * COURSE AGGREGATE: MIN. 1450 LBS. OF 1/2" CLEAN, CRUSHED, DURABLE STONE CONFORMING TO REQUIREMENTS OF ASTM C33.
- CONCRETE SHALL NOT BE PLACED ON FROZEN SUBGRADE SOILS. CONCRETE SHALL BE PROTECTED AGAINST FREEZING AND LOSS OF MOISTURE FOR 7 DAYS FOLLOWING PLACEMENT.
- CONTRACTOR SHALL PROVIDE A MAXIMUM CROSS SLOPE OF 1/4" PER FOOT.
- ALL EDGES SHALL BE ROUNDED AND GIVEN A STEEL TROWEL FINISH. ALL SURFACES SHALL BE FLOATED, TOOLED AND A BROOM FINISH PERPENDICULAR TO THE DIRECTION OF PEDESTRIAN TRAFFIC.
- ALL EXPOSED SURFACES ARE TO BE COATED WITH A TRANSLUCENT CURING COMPOUND N.J.D.O.T. STD. SPEC. 8.5.29 IMMEDIATELY FOLLOWING FINAL FINISHING. COVERAGE SHALL NOT BE LESS THAN ONE GALLON PER 200 SQUARE FEET.
- AT DRIVEWAY CROSSINGS, SIDEWALK SHALL BE 6" THICK. ALL OTHER AREAS SHALL BE 4" THICK.
- ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE SHALL BE AIR ENTRAINED 4% TO 6%.
- COLD WEATHER CONCRETE SHALL BE DONE IN ACCORDANCE WITH ACI-306. HOT WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI-305.
- EXPANSION JOINTS SHALL RUN CONTINUOUS ALONG BUILDING FACADE, CURBS, WALLS OR EXISTING PAVEMENT.
- ALL UTILITY CASTING MUST BE FLUSH WITH SIDEWALK SURFACE. NO TRIPPING HAZARDS OR ENCROACHMENTS ARE PERMITTED.



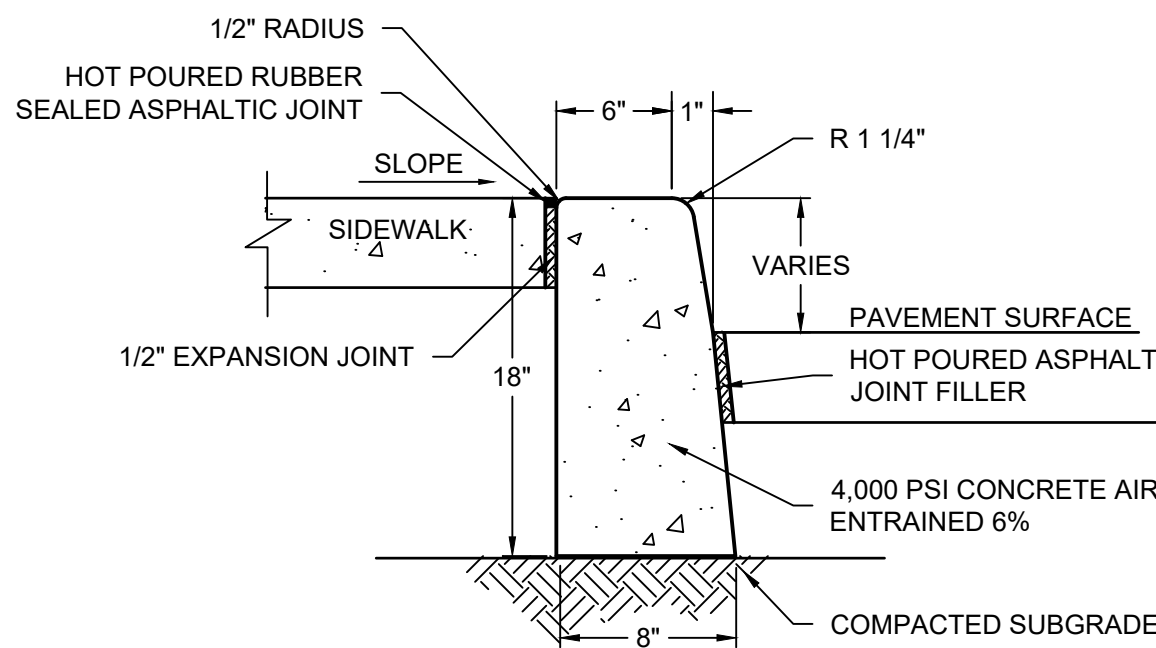
TYPICAL HANDICAP SIGN DETAIL
NTS

NOTES:

- THE BOTTOM OF THE R7-8 SIGN SHALL BE MOUNTED APPROXIMATELY 60 INCHES ABOVE THE PARKING LOT OR SIDEWALK SURFACE WHEN THE SIGN IS PARALLEL TO THE PARKING LOT OR SIDEWALK SURFACE WHEN THE SIGN IS PERPENDICULAR TO THE SIDEWALK.
- THE R7-8 SIGN SHALL BE CENTERED AND MOUNTED AT THE HEAD OF EACH PARKING SPACE.
- THE SIGNS SHOULD HAVE A GREEN LEGEND AND BORDER ON A WHITE BACKGROUND. THE SIGN SHALL ALSO DISPLAY THE INTERNATIONAL SYMBOL OF ACCESSIBILITY (NORMALLY BLUE).
- EACH ACCESSIBLE PARKING SPACE SHALL ALSO BE MARKED WITH A 12 INCH HIGH BY 10 INCH WIDE R7-8 PENALTY SIGN, WITH A BLACK LEGEND AND BORDER ON A WHITE BACKGROUND (DIMENSIONS AND COLORS AS PER NEW YORK DEPARTMENT OF TRANSPORTATION), BENEATH THE R7-8P SIGN.



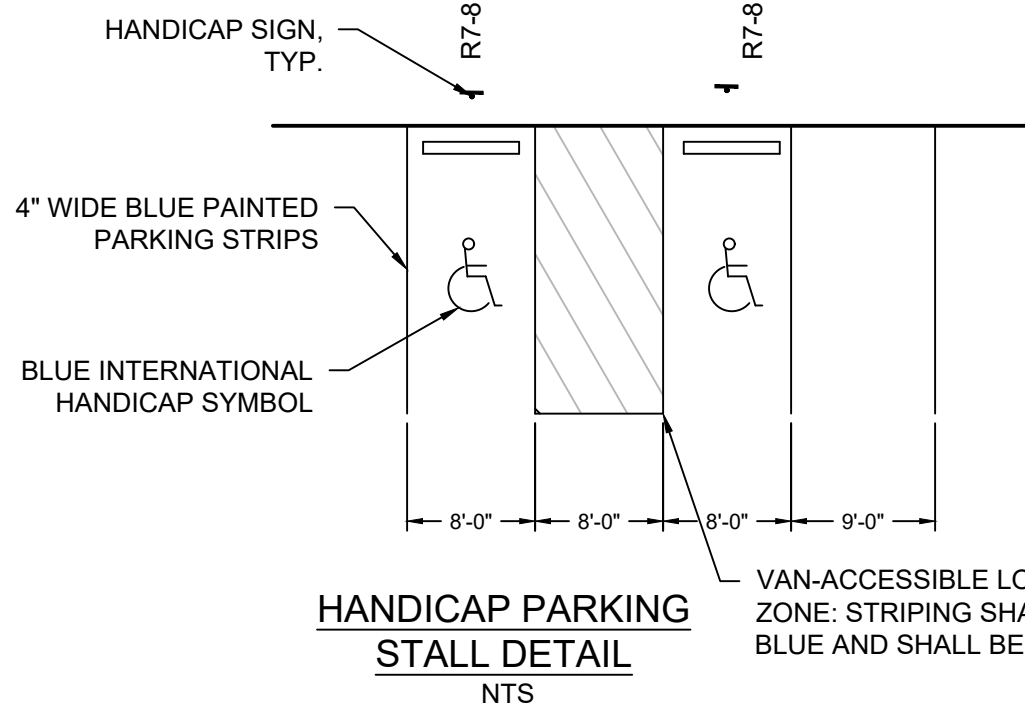
NOTE:
PROVIDE YELLOW PAINTED DIRECTIONAL ARROW AT ALL LOCATIONS INDICATED ON SITE PLAN.



CONCRETE CURB
NTS

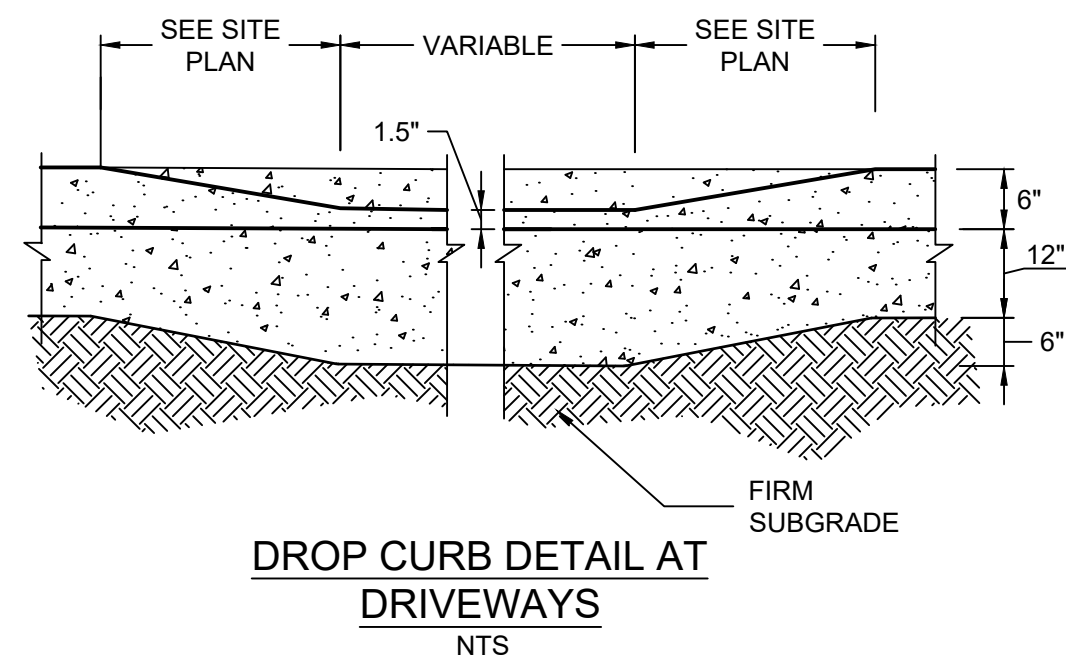
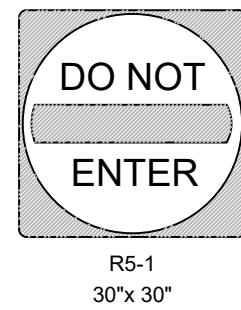
NOTES:

- ANY EXCAVATION BELOW DESIRED GRADE DUE TO OVER EXCAVATION OR WET SOIL CONDITIONS SHALL BE BACKFILLED WITH 3/4" CLEAN CRUSHED STONE. ALL SUBGRADES SHALL BE APPROVED BY THE DESIGN/TOWNSHIP ENGINEER PRIOR TO POURING.
- EXPANSION JOINTS SHALL BE PROVIDED AT EQUAL DISTANCES OF NOT MORE THAN 20' AT THE START AND FINISH OF ALL CURVED SECTIONS, AND AT ALL STORM SEWER INLETS. JOINTS SHALL BE FILLED WITH PREFORMED BITUMINOUS-IMPREGNATED JOINT FILLER, COMPLYING WITH THE REQUIREMENTS OF AASHTO M-213. CONTRACTION JOINTS SHALL BE PROVIDED EVERY 10'. JOINTS SHALL BE 1/2" THICK AND RECESSED 1/4" FROM THE TOP AND FRONT OF THE CONCRETE CURB.
- CURB SHALL BE TEMPORARILY BACKFILLED TO FINISHED GRADE WITH SOIL BEHIND AND STONE ON THE ROAD AS SOON AS IT HAS ATTAINED SUFFICIENT SUPPORTING STRENGTH OR WITHIN 24 HOURS OF POURING (WHICHEVER IS LESS).
- WHEN NEW CURB IS INSTALLED ALONG AN EXISTING PAVED AREA, THE EXISTING PAVEMENT SHALL BE CUT 2' IN FRONT OF THE NEW CURB FACE IN A STRAIGHT LINE AT A 45° ANGLE WITH A CUTTING WHEEL OR PNEUMATIC HAMMER. THE NEW PAVEMENT SHALL BE TACKED AND BUTTED TO THE EXISTING PAVEMENT, IN ACCORDANCE WITH PAVEMENT PATCH DETAIL.
- CURB REPLACEMENT SHALL BE FROM EXPANSION JOINT TO EXPANSION JOINT ONLY.
- ALL CONCRETE SUBJECT TO EXTERIOR EXPOSURE SHALL BE AIR ENTRAINED 4% TO 6%.
- COLD WEATHER CONCRETE SHALL BE DONE IN ACCORDANCE WITH ACI-306. HOT WEATHER CONCRETING SHALL BE DONE IN ACCORDANCE WITH ACI-305.
- CONTRACTOR MUST HAVE INSPECTION PRIOR TO PLACING GRAVEL OR POURING CONCRETE.
- ENTIRE WORK AREA TO BE KEPT CLEAN AND PROPERLY BARRICADED. A MINIMUM FOUR FEET OF PEDESTRIAN RIGHT OF WAY IS TO BE PROVIDED AND MAINTAINED AROUND THE CONSTRUCTION AREA. ALL DWELLINGS, UNITS AND BUSINESSES MUST HAVE PROPER ACCESS.



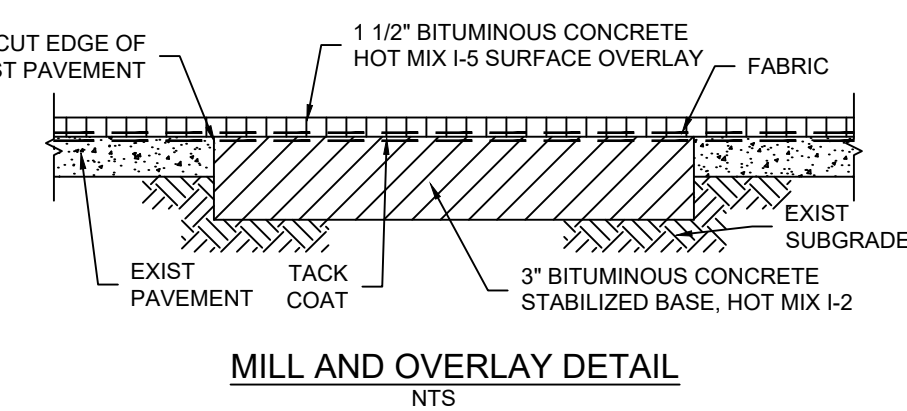
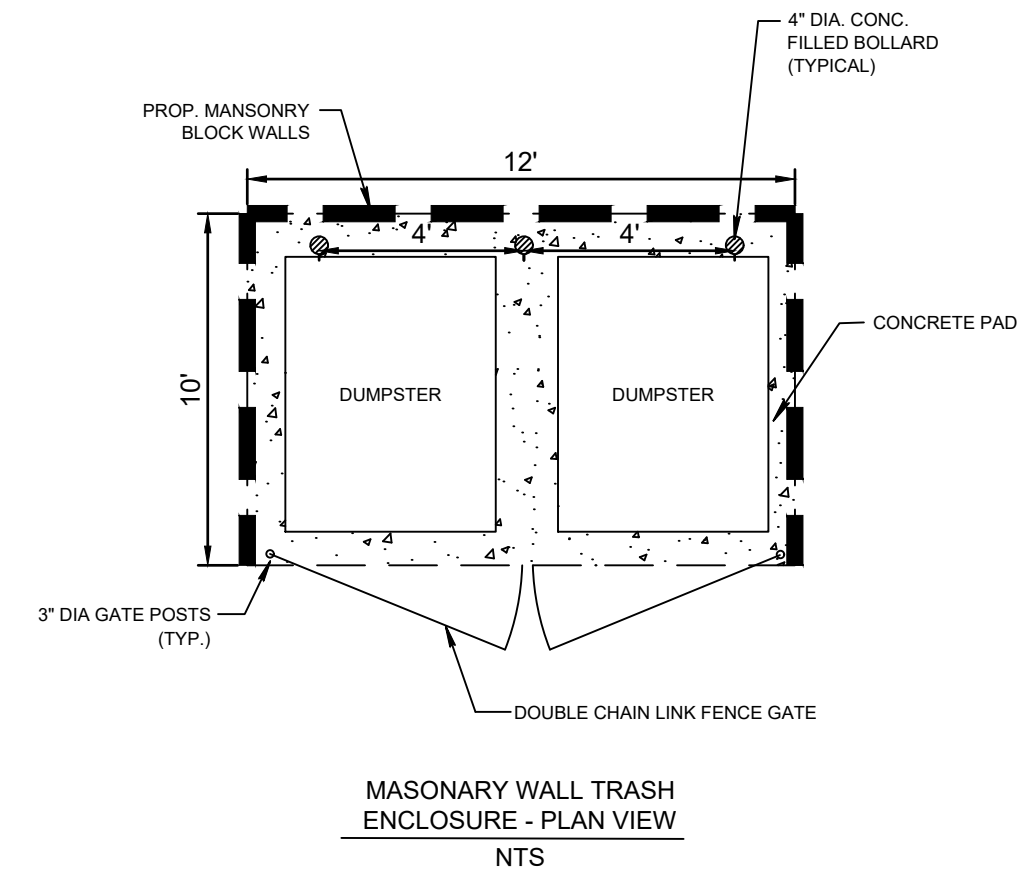
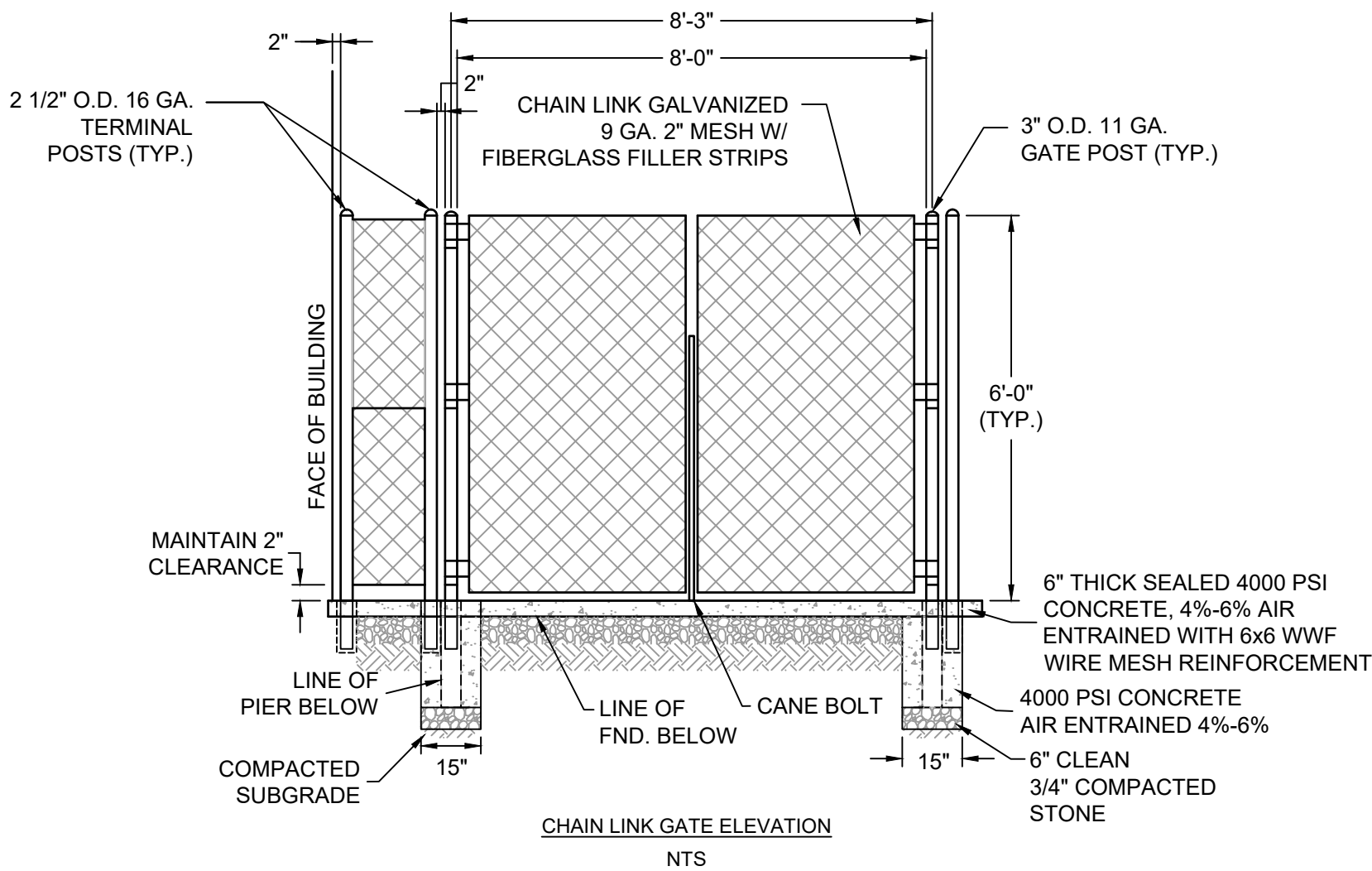
NOTES:

- ALL DISTANCE SUBJECT TO CURRENT ZONING AND SITE REGULATIONS.
- PAINTED HANDICAP SYMBOL TO BE IN ACCORDANCE W/ ADA STANDARDS.



NOTES:

- SIDEWALK AND APRONS SHALL BE CONSTRUCTED OF 4000 PSI CONCRETE, 4%-6% AIR ENTRAINED, WALKS TO BE 4" THICK, AT DRIVEWAYS, WALKS AND APRON SHALL BE 6" THICK.



NOTES:

- AREA TO RECEIVE OVERLAY SHALL BE CLEANED OF ANY SURFACE DIRT, WATER, GREASE, AND VEGETATION.
- CRACKS 1/4" OR LESS SHALL BE FILLED WITH LIQUID ASPHALT UNTIL FLUSH W/ SURFACE.
- CRACKS WIDER THAN 1/4" SHALL BE CLEANED FULL DEPTH OF EXIST. ASPHALT AND FILLED W/ SLURRY, HOT MIX, OR SUITABLE FILLER APPROVED BY ENGINEER.
- HOLES AND LARGE CRACKS SHALL BE CUT OUT AND REPLACED W/ 3" BITUMINOUS CONCRETE STABILIZED BASE, HOT MIX I-2.
- APPLY ASPHALT CEMENT TACK COAT TO SURFACE OF EXIST. ASPHALT AT A RATE OF .27 TO .32 GAL./SQ.YD. AND AT A TEMP. OF APPROX. 300° FAHRENHEIT. SEALANT TEMP. SHOULD BE ADJUSTED TO PROVIDE MOST UNIFORM APPLICATION RATE.
- TACK COAT SHALL BE APPLIED 2" TO 6" WIDER THAN WIDTH OF FABRIC BEING PLACED.
- FABRIC SHALL BE LAID DOWN W/ MIN. WRINKLING AND IN NO CASE SHALL WRINKLES BE LARGE ENOUGH TO CAUSE LAPS.
- JOINTS SHALL BE MADE BY OVERLAPPING FABRIC 1" TO 3". ASPHALT OVERLAY SHALL BE APPLIED AS SOON AS MEMBRANE HAS CURED AND AT A LAYDOWN TEMP. OF 275° TO 300° FAHRENHEIT.
- FABRIC SPECIFIED IS "PETROMAT" AS MANUFACTURED BY PROPEX OR APPROVED EQUAL. CONTRACTOR SHALL PROVIDE A SEPARATE UNIT PRICE FOR PATCH WORK AS DESCRIBED ABOVE.

Cert of Auth #24GA27934700
SESI CONSULTING ENGINEERS
GEOTECHNICAL | ENVIRONMENTAL | SITE CIVIL
959 ROUTE 48E, 3RD FLOOR, PARLISIPPANY, NJ 07054 PH: 973.808.9050

ANTHONY CASTILLO, P.E.
PROFESSIONAL ENGINEER
N.J. LIC. NO. 43112

WEST ORANGE PARKING LAYOUT
424 EAGLE ROCK AVENUE
LOT 1.08, BLOCK 11.1
TOWNSHIP OF WEST ORANGE, ESSEX COUNTY, N. J.

DETAILS

job no. **13327**
drawing no.

D-1