

PRELIMINARY & FINAL SITE PLAN RESIDENTIAL DEVELOPMENT

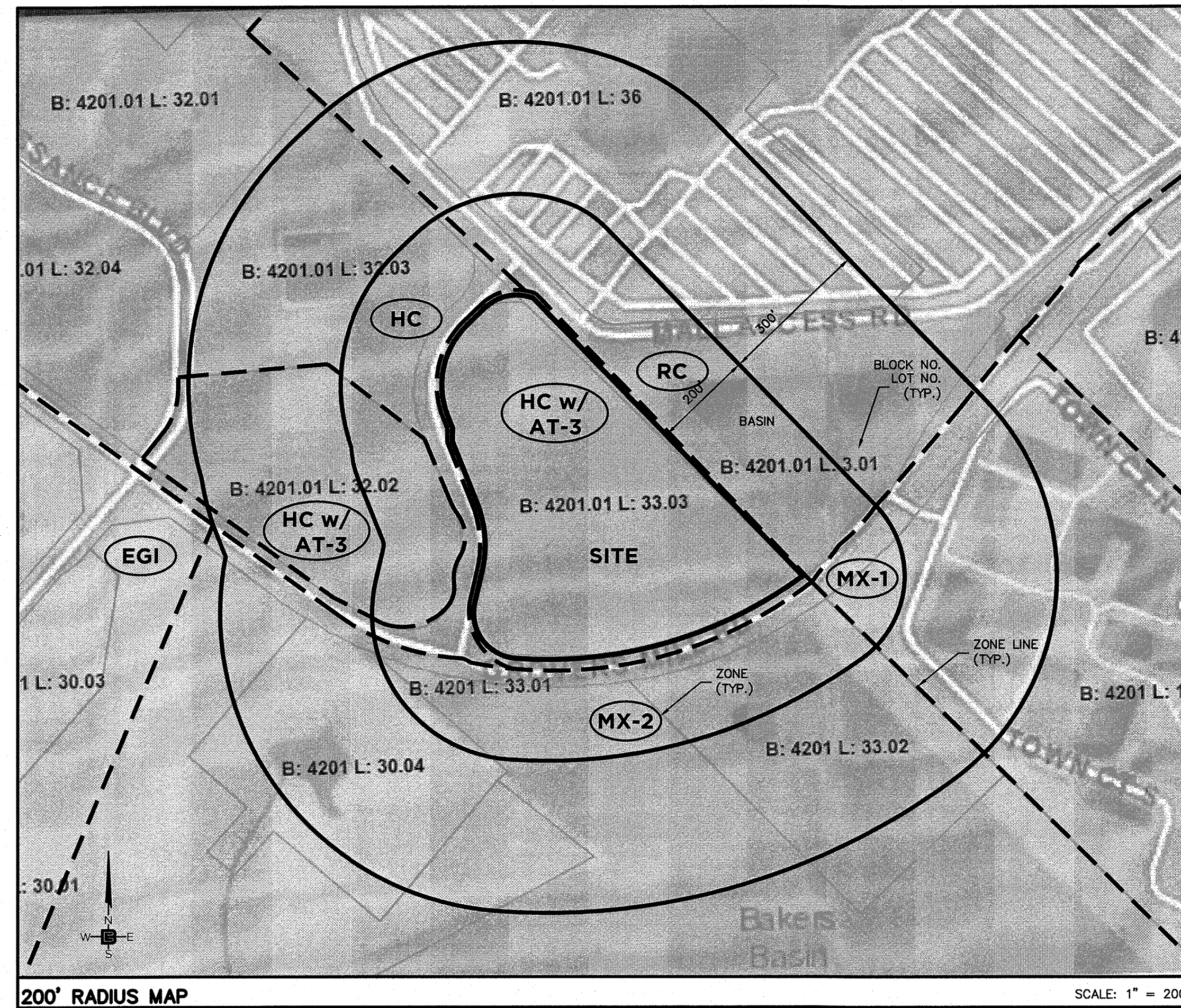
BLOCK 4201.01, LOT 33.03 GROVERS MILL ROAD TOWNSHIP OF LAWRENCE COUNTY OF MERCER, NEW JERSEY

PROPERTY OWNERS WITHIN 200'

BLOCK	LOT	PROPERTY OWNER	PROPERTY LOCATION
4201	10.03	TOWN COURT OWNER TIC LLC 5850 W 3RD ST #109 LOS ANGELES, CA 90036	5850 W 3RD ST #109 LAWRENCEVILLE, NJ 08648
30.04		DEPT OF TRANSPORTATION 1035 PARKWAY AVE TRENTON, NJ 08625	1035 PARKWAY AVE TRENTON, NJ 08625
33.01		DEPT OF ENVIRONMENTAL PROTECTION JOHN FITCH PLAZA TRENTON, NJ 08625	JOHN FITCH PLAZA TRENTON, NJ 08625
33.01	(T01)	SPRINT SPECTRUM PROP TAX DEPT PO BX 8430 (P103XC109) KANSAS CITY, MO 64114.8430	PO BX 8430 (P103XC109) TRENTON, NJ 08625
33.01	(T03)	VERIZON WIRELESS C/O DUFF & PHELPS PO BOX 2549 ADDISON, TX 75001	PO BOX 2549 TRENTON, NJ 08625
4201.01	3.01	QUAKER BRIDGE MALL, LLC 225 WEST WASHINGTON ST INDIANAPOLIS, IN 46204	225 WEST WASHINGTON ST INDIANAPOLIS, IN 46204
32.02		FAMPEC, LLC 100 RENAISSANCE BLVD LAWRENCEVILLE, NJ 08648	100 RENAISSANCE BLVD LAWRENCEVILLE, NJ 08648
32.03		AUTO CAMPUS REALTY LLC 100 RENAISSANCE BLVD LAWRENCEVILLE, NJ 08648	100 RENAISSANCE BLVD LAWRENCEVILLE, NJ 08648
36		TF LMRVCL NJ/DEPT 36134,BC-151A 3333 BEVERLY ROAD HOFFMAN ESTATES, IL 60179	3333 BEVERLY ROAD HOFFMAN ESTATES, IL 60179

MUNICIPALITIES & UTILITIES

CORPORATE SECRETARY EWING-LAWRENCE SEWERAGE AUTHORITY 600 WHITEHEAD ROAD LAWRENCEVILLE, NJ 08648	CORPORATE SECRETARY PUBLIC SERVICE ELECTRIC & GAS COMPANY 80 PARK PLAZA, 4B NEWARK NJ 07101
N.J. AMERICAN WATER 1025 LAUREL OAK ROAD VOORHEES NJ 08043 ATTN: DONNA SHORT	ELIZABETHTOWN GAS COMPANY ONE ELIZABETHTOWN PLAZA THIRD FLOOR EAST UNION NJ 07083-1975
CORPORATE SECRETARY TRENTON WATER WORKS P.O. BOX 528 TRENTON NJ 08604	CORPORATE SECRETARY VERIZON 540 BROAD STREET NEWARK NJ 07101
AQUA WATER COMPANY 2875 ERIAL ROAD ERIAL NJ 08091 ATTN: JAMES BARBATO	GENERAL MANAGER COMCAST CABLEVISION 940 PROSPECT STREET TRENTON NJ 08619
RCN CORPORATION 105 CARNEGIE CENTER PRINCETON NJ 08540	CORPORATE SECRETARY AT&T 1 AT&T WAY BEDMINSTER NJ 07921
MERCER COUNTY PLANNING BOARD 640 SOUTH BROAD STREET P.O. BOX 8068 TRENTON NJ 08650-8068	CORPORATE SECRETARY JERSEY CENTRAL POWER AND LIGHT CORPORATION 300 MADISON AVENUE MORRISTOWN NJ 07962
SUN PIPE LINE COMPANY ATTN: R-O-W DEPARTMENT 1801 MARKET STREET 26TH FLOOR PHILADELPHIA PA 19103-1699	CORPORATE SECRETARY TRANSCONTINENTAL GAS PIPE LINE CORPORATION 2800 POST OAK BOULEVARD HOUSTON TX 77056
SUNOCO PIPE LINE, L.P. RIGHT-OF-WAY DEPARTMENT MONTELLO COMPLEX 525 FRITZTOWN ROAD SINKING SPRING PA 19608	COMMISSIONER N.J. DEPARTMENT OF TRANSPORTATION 1035 PARKWAY AVENUE, CN 600 TRENTON NJ 08625



ZONING NOTES

- OWNER/APPLICANT: TRICONE
2525 US-130 SUITE B4
CRANBURY, NJ 08512
- LOCATION: GROVERS MILL ROAD & MALL ACCESS ROAD
BLOCK 4201.01, LOT 33.03
TOWNSHIP OF LAWRENCE, NJ
- ZONE: AT-3 APARTMENT & TOWNHOUSE RESIDENTIAL
- USE: EXISTING: UNDEVELOPED
PROPOSED: TOWNHOUSE/APARTMENT (PERMITTED) 85 UNITS PROPOSED
- BULK REQUIREMENTS: (§ 409, ORD. 2283-17)

	REQUIRED	PROPOSED
MIN. GROSS TRACT AREA (AC)	10	6.86(E)
MIN. BUILDABLE AREA (AC)	7	3.73(V)
LOT WIDTH (FT)	N/A	780
LOT DEPTH (FT)	N/A	375
MAX. UNITS PER ACRE	15	12.39
MIN. OPEN SPACE(%)	30	45.8
MIN. FRONTAGE (FT)	300	1,200
MIN. BUILDING SETBACK(FT)	50	25(V)
MAX. UNITS PER TOWNHOUSE BUILDING	8	8
MAX. UNITS PER APARTMENT BUILDING	24	24/30(V)
MAX. UNITS PER MIXED BUILDING	12	N/A
MIN. DISTANCE BETWEEN BUILDINGS*	50	50
FRONT/BACK(FT)	30	30.5
SIDE(FT)	30	30.5
BUILDING TO COMMON PARKING(FT)	15	9(V)
MAX. BUILDING HEIGHT(STY/FT)	3/38	42.38(V)
MAX. BUILDING LENGTH(FT)	240	215
MIN. PRIVATE REAR YARD PER GROUND FLOOR UNIT(SF)**	200	COMPLY
MIN. PRIVATE BALCONY PER ABOVE GROUND UNIT(SF)**	50	COMPLY
MIN. TOWNHOUSE WIDTH(FT)	50	24
MIN. APARTMENT SIZE(SF)	550	690
MIN. STORAGE AREA PER UNIT TOWNHOUSE(SF)	300	300
APARTMENT(SF)**	100	89.7
MIN. ACCESSORY STRUCTURE SETBACK(FT)	5	142
MAX. UNIT TYPE IN MIXED DEVELOPMENT(%)	N/A/20	N/A
MIN. AFFORDABLE HOUSING UNITS(TOTAL/%)		17

	REQUIRED	PROPOSED
PROPOSED APARTMENT BUILDING A:		
1 BEDROOM - 1.8 SP/UNIT (9 - 1 BEDROOM x 1.8) = 16.2 SPACES	16.2	23 INTERIOR
2 BEDROOM - 2.0 SP/UNIT (15 - 2 BEDROOM x 2.0) = 30.0 SPACES	30.0	14 EXTERIOR
TOTAL REQUIRED SPACES BUILDING "A" =	46.2	37

	REQUIRED	PROPOSED
PROPOSED APARTMENT BUILDING F:		
1 BEDROOM - 1.8 SP/UNIT (6 - 1 BEDROOM x 1.8) = 10.8 SPACES	10.8	35 INTERIOR
2 BEDROOM - 2.0 SP/UNIT (21 - 2 BEDROOM x 2.0) = 42.0 SPACES	42.0	20 EXTERIOR
3 BEDROOM - 2.1 SP/UNIT (3 - 3 BEDROOM x 2.1) = 6.3 SPACES	6.3	55
TOTAL REQUIRED SPACES BUILDING "F" =	59.1	110
TOTAL APARTMENT SPACES (46.2 + 59.1) =	105.3	125

	REQUIRED	PROPOSED
PROPOSED TOWNHOUSE:		
(PROPOSED: 2 GARAGE SPACES + 1 DRIVEWAY SPACE = 3 PER TOWNHOUSE)		
31 3-BR TOWNHOUSE x 2.4 =	74.4	93
TOTAL REQUIRED SPACES (105.3 + 74.4) =	179.7	198 TOTAL SPACES
MIN. PARKING/DRIVEWAY SETBACK(FT)	25	31.5
MIN. PARKING SPACE SIZE(FT)	9x18	9x18
MIN. 90° PARKING AISLE WIDTH (FT)	24	24
MIN. HANDICAP SPACES (1401 TO 150):	5	6

REQUIRED ELECTRIC VEHICLE SUPPLY EQUIPMENT SPACES (EVSE):

	REQUIRED	PROVIDED
RESIDENTIAL/APARTMENTS		
MIN. (EVSE)(15% OF REQUIRED): (105.3 SP x .15) = 15.80	16	16
MIN. HANDICAP (EVSE)(5% OF REQUIRED): (15.80 SP x .05) = 0.79	1	COMPLIES
TOTAL EVSE SPACES =	16	
TOTAL SPACES =	198	
EVSE BONUS/CREDIT (2 TO 1) =	10	
TOTAL ADJUSTED SPACES =	208	

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DWG. #	DRAWING TITLE	DATED/ LAST REVISED	REV. #
C1.1	COVER SHEET	3-19-24	1
C2.1	SITE PLAN	3-19-24	1
C2.2	SOIL EROSION & SEDIMENT CONTROL PLAN (OMIT)	3-19-24	2
C2.3	GRADING PLAN	3-19-24	2
C2.4	UTILITY PLAN	3-19-24	1
C2.5	LIGHTING & LANDSCAPING PLAN	3-19-24	1
C2.6	LIGHTING INTENSITIES PLAN	3-19-24	1
C2.7	PARKING PLAN	3-19-24	1
C2.8	GRADING & LANDSCAPE PLAN	3-19-24	0
C2.9	WETLANDS PERMITTING PLAN	3-19-24	1
C2.10	TREE REMOVAL PLAN	3-19-24	0
C3.1	SITE DETAILS	3-19-24	1
C3.2	DRAINAGE DETAILS	3-19-24	1
C3.3	UTILITY DETAILS	3-19-24	1
C3.4	LANDSCAPING DETAILS	3-19-24	1
C3.5	LIGHTING DETAILS	3-19-24	1
C4.1	ROAD PROFILES	3-19-24	0
SV-1	LOCATION & TOPOGRAPHICAL SURVEY	8-9-21	2

UNIT MIX

- 6 3-BR TOWNHOUSE
- 25 4-BR TOWNHOUSE
- 3 3-BR APARTMENT
- 36 2-BR APARTMENT
- 15 1-BR APARTMENT
- 85 TOTAL

REQUIRED APPROVALS

- LAWRENCE TOWNSHIP PLANNING BOARD
- MERCER COUNTY PLANNING BOARD
- MERCER COUNTY SOIL CONSERVATION
- NJDEP TREATMENT WORKS
- NJDEP BUFFER AVERAGING

REQUIRED VARIANCES

- MIN. GROSS TRACT AREA
- MIN. BUILDABLE AREA
- MIN. BUILDING SETBACK
- MAX. UNITS PER APARTMENT BUILDING
- MIN. BUILDING TO COMMON PARKING

DESIGN EXCEPTIONS

- 49204 - MAX. FENCE/WALL HEIGHT
(4' REQUIRED - 13' PROPOSED)
- 525H1d - MIN. BUFFER RESIDENTIAL TO RETAIL
(25' REQUIRED - 0' PROPOSED)

- TBD - TO BE DETERMINED
- (E) - INDICATES AN EXISTING NON-COMFORMITY
- (V) - INDICATES A VARIANCE IS REQUIRED
- NC - NO CHANGE
- N/A - NOT APPLICABLE

- * THE PLANNING OR ZONING BOARD, AFTER DUE CONSIDERATION OF PLANS, TESTIMONY, OF OTHER EVIDENCE, MAY WAIVE STRICT COMPLIANCE WITH THIS SUBSECTION TO FURTHER THE ARCHITECTURAL RELATIONSHIP OF BUILDING GROUPS.
- ** OR AN ACTIVE AND/OR PASSIVE RECREATION AREA EQUAL TO 200SF PER UNIT AVAILABLE TO ALL TENANTS OR OWNERS.
- *** MAY BE REDUCED TO NO MORE THAN 75 SF IF EACH BUILDING HAS AN INTERNAL GARAGE AND RECYCLABLE COLLECTION AREA OR READILY ACCESSIBLE EXTERIOR GARAGE AND TRASH COLLECTION POINT.

SOLID WASTE MANAGEMENT

- TOWNHOMES TO STORE TRASH AND RECYCLING WITHIN UNITS TO BE PLACED ON CURB SIDE FOR PICKUP.
- APARTMENT BUILDINGS HAVE TRASH SHOOTS AND COMPACTORS. TRASH TO BE STORED IN TRASH ROOM FOR PRIVATE COLLECTION. RECYCLING TO BE STORED IN TRASH ROOM AND PLACED AT CURB FOR PICKUP.

APPROVED BY THE LAWRENCE TOWNSHIP
PLANNING BOARD OF ADJUSTMENT AT A
MEETING HELD ON _____ 2023

CHAIRPERSON	DATE
SECRETARY	DATE
ADMINISTRATIVE OFFICER	DATE
ENGINEER	DATE

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MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9368 RI LIC. NO. 6694

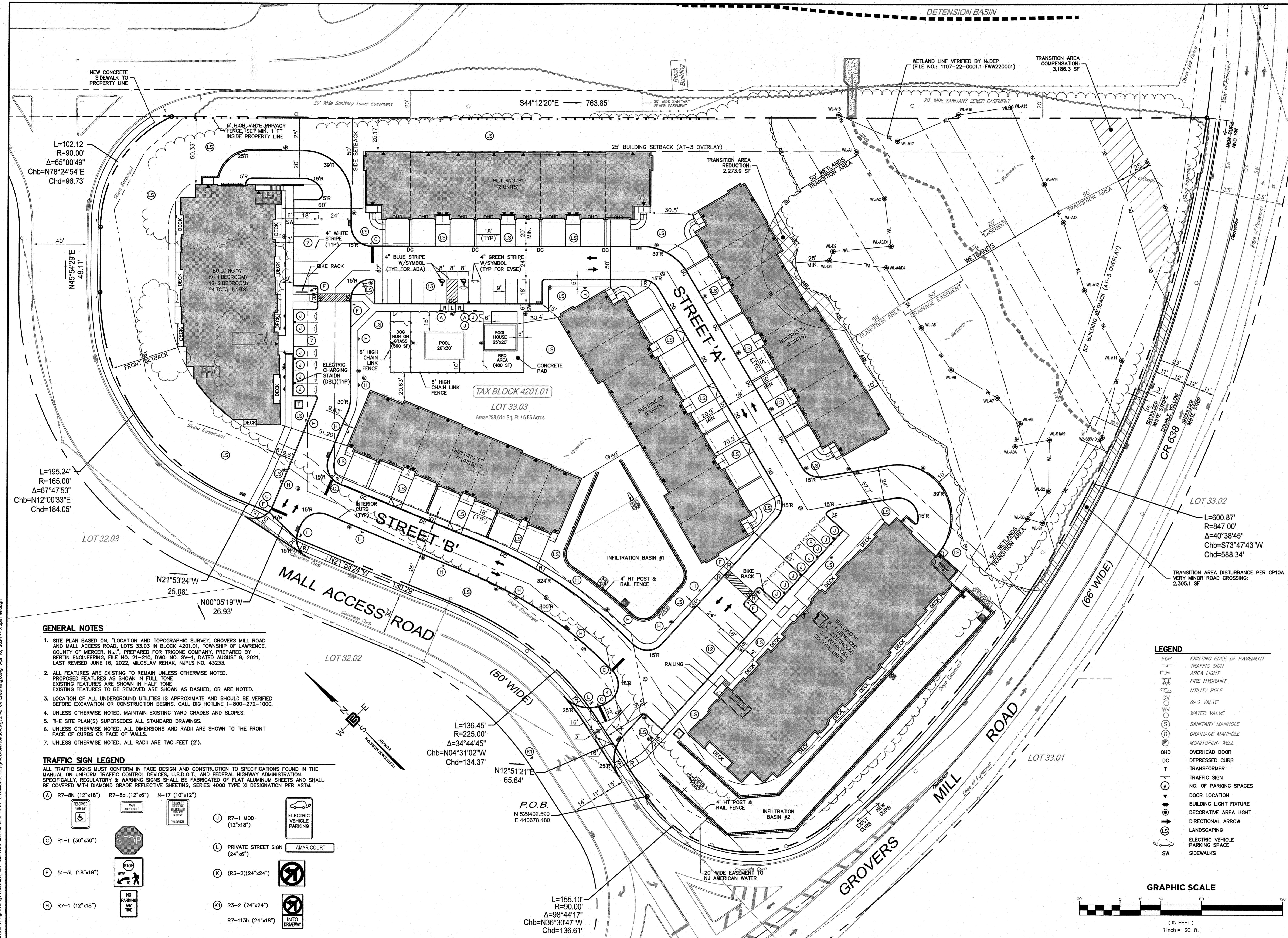
ERIC M. HOUGH, P.E.
PROFESSIONAL ENGINEER
NJ LIC. NO. 51895

NO.	DATE	REVISION
1	3-19-24	REVISED DRAWING LIST

COVER SHEET

PROJECT
RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

CLIENT	
TRICONE 2525 US-130 SUITE B4 CRANBURY, NJ 08512	
CERTIFICATE OF AUTHORIZATION: 24GA28068900 / Z1MH0002800	
DRAWN BY: V.L.	CHECKED BY: C.J.B.
SCALE: AS SHOWN	PROJECT NO.: 21-210
DATE: 10-12-23	REVISION NO.: 1
DRAWING NO.: C1.1	



L=102.12'
R=90.00'
Δ=65°00'49"
Chb=N78°24'54"E
Chd=96.73'

L=195.24'
R=165.00'
Δ=67°47'53"
Chb=N12°00'33"E
Chd=184.05'

L=600.87'
R=847.00'
Δ=40°38'45"
Chb=S73°47'43"W
Chd=588.34'

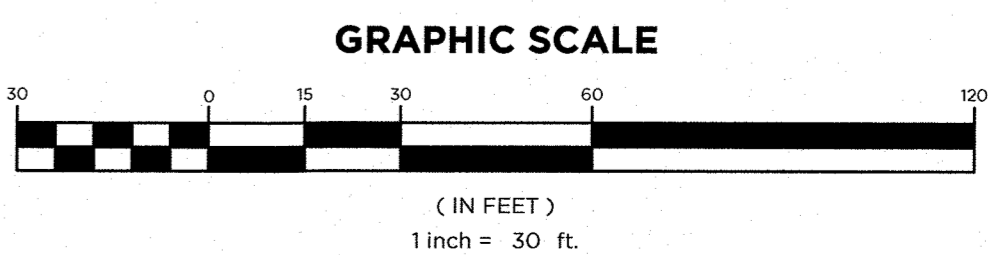
- GENERAL NOTES**
- SITE PLAN BASED ON "LOCATION AND TOPOGRAPHIC SURVEY, GROVERS MILL ROAD AND MALL ACCESS ROAD, LOTS 33.03 IN BLOCK 4201.01, TOWNSHIP OF LAWRENCE, COUNTY OF MERCER, N.J.," PREPARED FOR TRICONE COMPANY, PREPARED BY BERTIN ENGINEERING, FILE NO. 21-210, DWG. NO. SV-1, DATED AUGUST 9, 2021, LAST REVISED JUNE 16, 2022, MILOSLAV REHAK, NJPLS NO. 43233.
 - ALL FEATURES ARE EXISTING TO REMAIN UNLESS OTHERWISE NOTED. PROPOSED FEATURES ARE SHOWN IN FULL TONE. EXISTING FEATURES ARE SHOWN IN HALF TONE. EXISTING FEATURES TO BE REMOVED ARE SHOWN AS DASHED, OR ARE NOTED.
 - LOCATION OF ALL UNDERGROUND UTILITIES IS APPROXIMATE AND SHOULD BE VERIFIED BEFORE EXCAVATION OR CONSTRUCTION BEGINS. CALL DIG HOTLINE 1-800-272-1000.
 - UNLESS OTHERWISE NOTED, MAINTAIN EXISTING YARD GRADES AND SLOPES.
 - THE SITE PLAN(S) SUPERSEDES ALL STANDARD DRAWINGS.
 - UNLESS OTHERWISE NOTED, ALL DIMENSIONS AND RADII ARE SHOWN TO THE FRONT FACE OF CURBS OR FACE OF WALLS.
 - UNLESS OTHERWISE NOTED, ALL RADII ARE TWO FEET (2').

TRAFFIC SIGN LEGEND

ALL TRAFFIC SIGNS MUST CONFORM IN FACE DESIGN AND CONSTRUCTION TO SPECIFICATIONS FOUND IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, U.S.D.O.T., AND FEDERAL HIGHWAY ADMINISTRATION. SPECIFICALLY, REGULATORY & WARNING SIGNS SHALL BE FABRICATED OF FLAT ALUMINUM SHEETS AND SHALL BE COVERED WITH DIAMOND GRADE REFLECTIVE SHEETING, SERIES 4000 TYPE XI DESIGNATION PER ASTM.

	R7-8a (12'x18")	N-17 (10'x12")		R7-1 MOD (12'x18")	
	R1-1 (30'x30")			L PRIVATE STREET SIGN (24'x8")	
	51-5L (18'x18")			R3-2 (24'x24")	
	R7-1 (12'x18")			R3-2 (24'x24")	

- LEGEND**
- EXISTING EDGE OF PAVEMENT
 - TRAFFIC SIGN
 - AREA LIGHT
 - FIRE HYDRANT
 - UTILITY POLE
 - GAS VALVE
 - WATER VALVE
 - SANITARY MANHOLE
 - DRAINAGE MANHOLE
 - MONITORING WELL
 - OVERHEAD DOOR
 - DEPRESSED CURB
 - TRANSFORMER
 - TRAFFIC SIGN
 - NO. OF PARKING SPACES
 - DOOR LOCATION
 - BUILDING LIGHT FIXTURE
 - DECORATIVE AREA LIGHT
 - DIRECTIONAL ARROW
 - LANDSCAPING
 - ELECTRIC VEHICLE PARKING SPACE
 - SIDEWALKS



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NH LIC. NO. 9368 RI LIC. NO. 6694

ERIC M. HOUGH, P.E.
PROFESSIONAL ENGINEER
NJ LIC. NO. 31893

NO.	DATE	DESCRIPTION
1	5-19-24	ADDED STREET NAMES & TRANSFORMER LOCATIONS

SITE PLAN

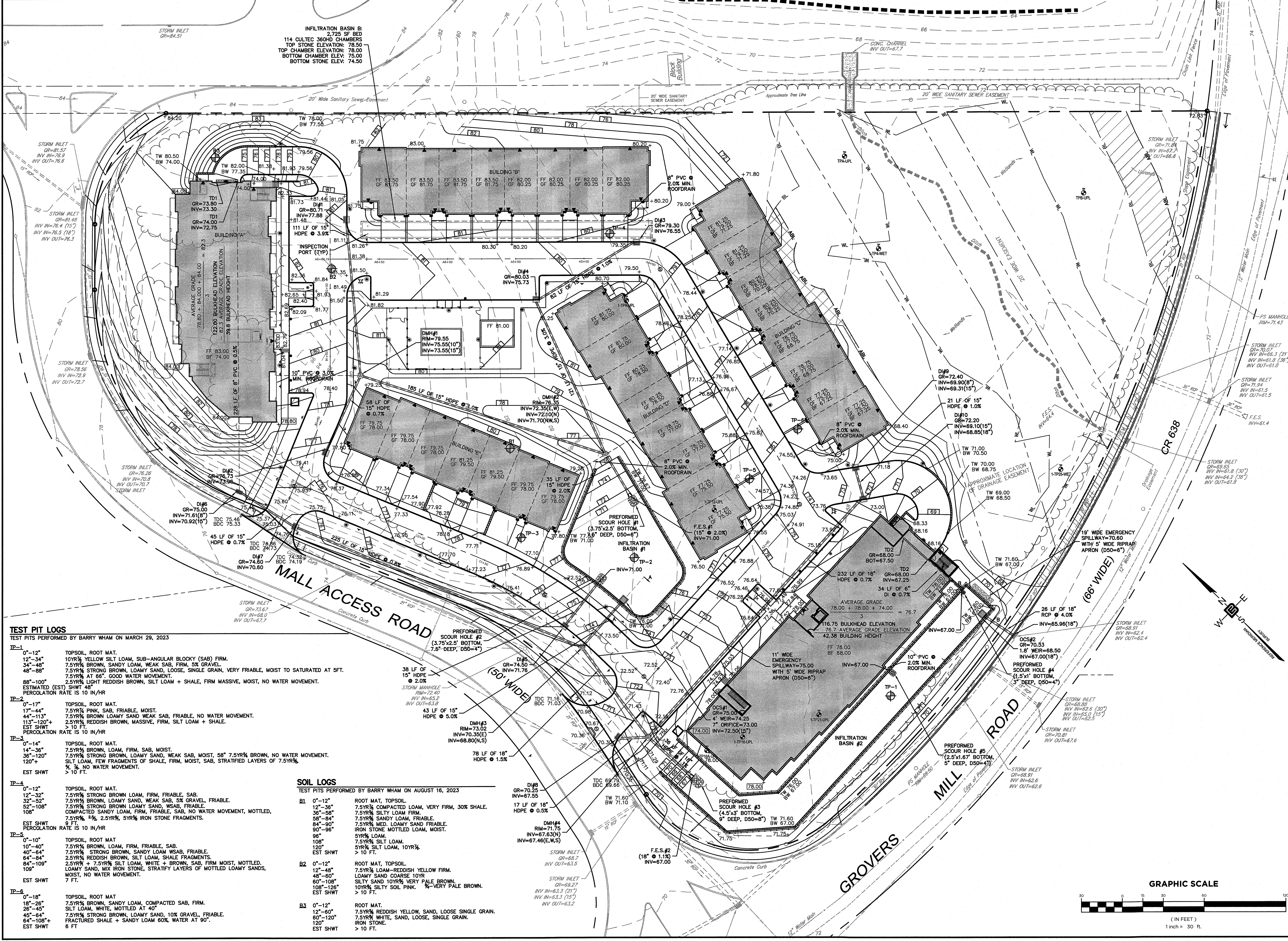
RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

TRICONE
2525 US-130 SUITE B4
CRANBURY, NJ 08512

DRAWN BY: VL	CHECKED BY: C.J.B.
SCALE: 1" = 30'	PROJECT NO: 21-210
DATE: 10-12-23	REVISION NO: 1

C2.1

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TEST PIT LOGS
TEST PITS PERFORMED BY BARRY WHAM ON MARCH 29, 2023

TP-1

0'-12" TOPSOIL, ROOT MAT.
12"-34" 10YR% YELLOW SILT LOAM, SUB-ANGULAR BLOCKY (SAB) FIRM.
34"-48" 7.5YR% BROWN, LOAMY SAND, WEAK SAB, FIRM, 5% GRAVEL.
48"-88" 7.5YR% STRONG BROWN, LOAMY SAND, LOOSE, SINGLE GRAIN, VERY FRIABLE, MOIST TO SATURATED AT SFT.
88"-100" 7.5YR% AT 66". GOOD WATER MOVEMENT.
ESTIMATED (EST) SHWT PERCOLATION RATE IS 10 IN/HR

TP-2

0'-17" TOPSOIL, ROOT MAT.
17"-44" 7.5YR% PINK, SAB, FRIABLE, MOIST.
44"-113" 7.5YR% BROWN LOAMY SAND WEAK SAB, FRIABLE, NO WATER MOVEMENT.
113"-120"+ 2.5YR% REDDISH BROWN, MASSIVE, FIRM, SILT LOAM + SHALE.
EST SHWT PERCOLATION RATE IS 10 IN/HR

TP-3

0'-14" TOPSOIL, ROOT MAT.
14"-36" 7.5YR% BROWN, LOAM, FIRM, SAB, MOIST.
36"-120" 7.5YR% STRONG BROWN, LOAMY SAND, WEAK SAB, MOIST, 58" 7.5YR% BROWN, NO WATER MOVEMENT.
120"+ SILT LOAM, FEW FRAGMENTS OF SHALE, FIRM, MOIST, SAB, STRATIFIED LAYERS OF 7.5YR% & 10YR% NO WATER MOVEMENT.
EST SHWT PERCOLATION RATE IS 10 IN/HR

TP-4

0'-12" TOPSOIL, ROOT MAT.
12"-32" 7.5YR% STRONG BROWN LOAM, FIRM, FRIABLE, SAB.
32"-52" 7.5YR% BROWN, LOAMY SAND, WEAK SAB, 5% GRAVEL, FRIABLE.
52"-108" 7.5YR% STRONG BROWN LOAMY SAND, WSAB, FRIABLE.
108" COMPACTED SANDY LOAM, FIRM, FRIABLE, SAB, NO WATER MOVEMENT, MOTTLED, 7.5YR% & 2.5YR% 5YR% IRON STONE FRAGMENTS.
EST SHWT PERCOLATION RATE IS 10 IN/HR

TP-5

0'-10" TOPSOIL, ROOT MAT
10"-40" 7.5YR% BROWN, LOAM, FIRM, FRIABLE, SAB.
40"-64" 7.5YR% STRONG BROWN, SANDY LOAM WSAB, FRIABLE.
64"-84" 2.5YR% REDDISH BROWN, SILT LOAM, SHALE FRAGMENTS.
84"-109" 2.5YR% + 7.5YR% SILT LOAM, WHITE + BROWN, SAB, FIRM MOIST, MOTTLED, LOAMY SAND, MIX IRON STONE, STRATIFY LAYERS OF MOTTLED LOAMY SANDS, MOIST, NO WATER MOVEMENT.
109" FRIABLE, MOIST, NO WATER MOVEMENT.
EST SHWT

TP-6

0'-18" TOPSOIL, ROOT MAT
18"-26" 7.5YR% BROWN, SANDY LOAM, COMPACTED SAB, FIRM.
26"-45" SILT LOAM, WHITE, MOTTLED AT 40"
45"-64" 7.5YR% STRONG BROWN, LOAMY SAND, 10% GRAVEL, FRIABLE.
64"-108" FRACTURED SHALE + SANDY LOAM 60% WATER AT 90".
6 FT

SOIL LOGS
TEST PITS PERFORMED BY BARRY WHAM ON AUGUST 16, 2023

B1

0'-12" ROOT MAT, TOPSOIL.
12"-36" 7.5YR% COMPACTED LOAM, VERY FIRM, 30% SHALE.
36"-58" 7.5YR% SILTY LOAM FIRM.
58"-84" 7.5YR% SANDY LOAM, FRIABLE.
84"-90" 7.5YR% MED. LOAMY SAND FRIABLE.
90"-96" IRON STONE MOTTLED LOAM, MOIST.
96" 5YR% LOAM.
108" 7.5YR% SILT LOAM.
120" 5YR% SILT LOAM, 10YR% > 10 FT.

B2

0'-12" ROOT MAT, TOPSOIL.
12"-48" 7.5YR% LOAM-REDDISH YELLOW FIRM.
48"-60" LOAMY SAND COARSE 10YR
60"-108" SILTY SAND 10YR% VERY PALE BROWN.
108"-126" 10YR% SILTY SOIL PINK. ¼-VERY PALE BROWN.
> 10 FT.

B3

0'-12" ROOT MAT.
12"-60" 7.5YR% REDDISH YELLOW, SAND, LOOSE SINGLE GRAIN.
60"-120" 7.5YR% WHITE, SAND, LOOSE, SINGLE GRAIN.
120" IRON STONE.
> 10 FT.

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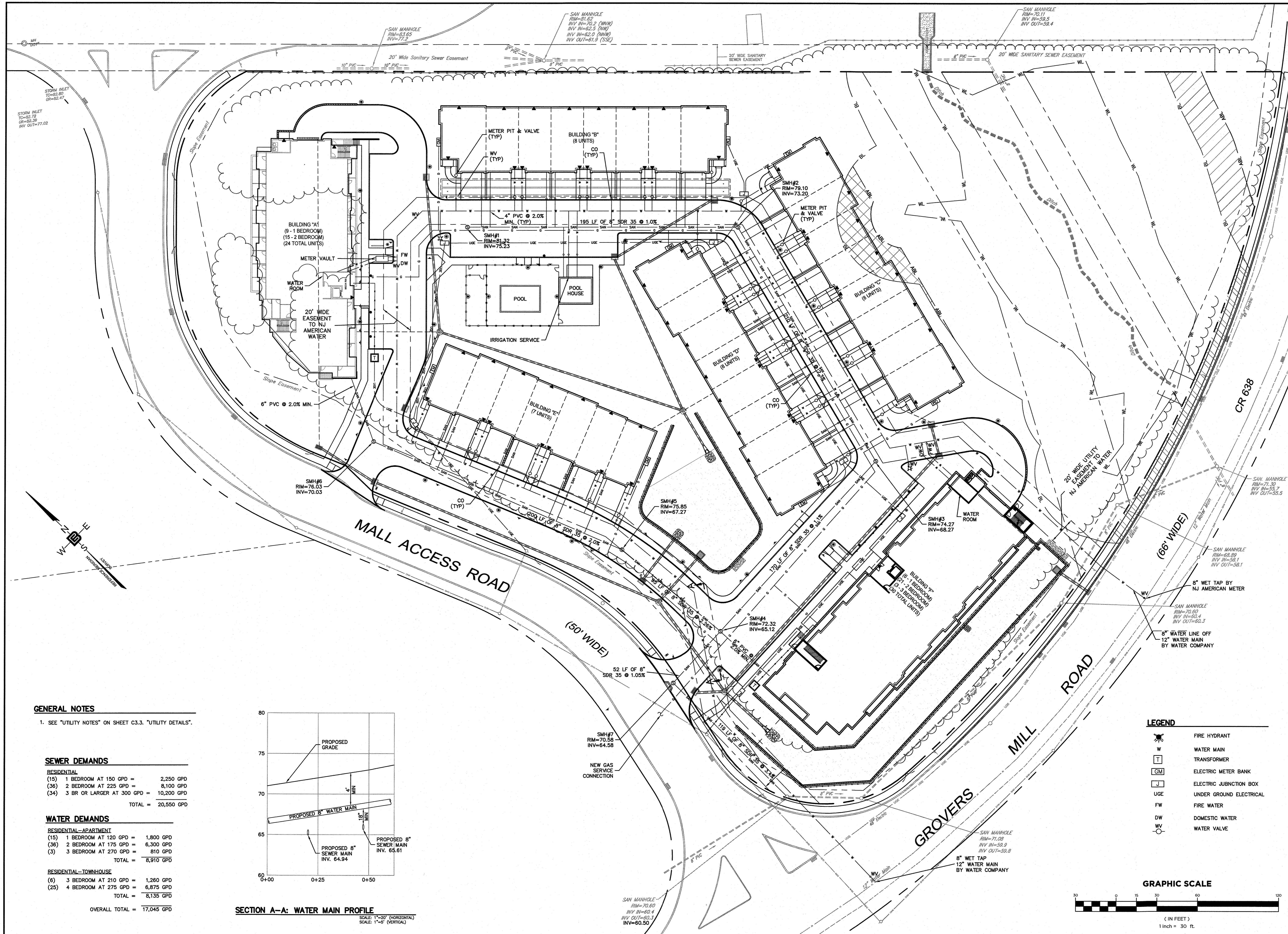
ERIC M. HOUGH, P.E.
PROFESSIONAL ENGINEER
NJ LIC. NO. 51633

GRADING & DRAINAGE PLAN

PROJECT
RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

CLIENT
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2525 US-130 SUITE B4
CRANBURY, NJ 08512

DRAWN BY: C.B. JR. CHECKED BY: C.J.B.
SCALE: 1" = 30' PROJECT NO.: 21-210
DATE: 10-12-23 REVISION NO.: 2
DRAWING NO.: **C2.3**



GENERAL NOTES
 1. SEE "UTILITY NOTES" ON SHEET C3.3. "UTILITY DETAILS".

SEWER DEMANDS

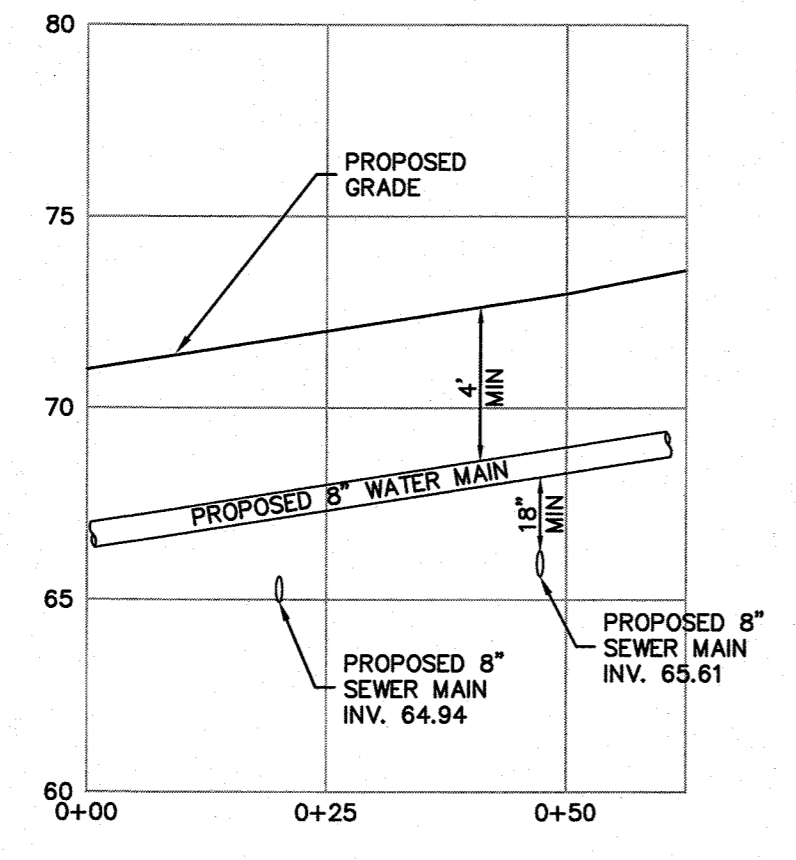
RESIDENTIAL		
(15)	1 BEDROOM AT 150 GPD =	2,250 GPD
(36)	2 BEDROOM AT 225 GPD =	8,100 GPD
(34)	3 BR OR LARGER AT 300 GPD =	10,200 GPD
TOTAL =		20,550 GPD

WATER DEMANDS

RESIDENTIAL-APARTMENT		
(15)	1 BEDROOM AT 120 GPD =	1,800 GPD
(36)	2 BEDROOM AT 175 GPD =	6,300 GPD
(3)	3 BEDROOM AT 270 GPD =	810 GPD
TOTAL =		8,910 GPD

RESIDENTIAL-TOWNHOUSE		
(6)	3 BEDROOM AT 210 GPD =	1,260 GPD
(25)	4 BEDROOM AT 275 GPD =	6,875 GPD
TOTAL =		8,135 GPD

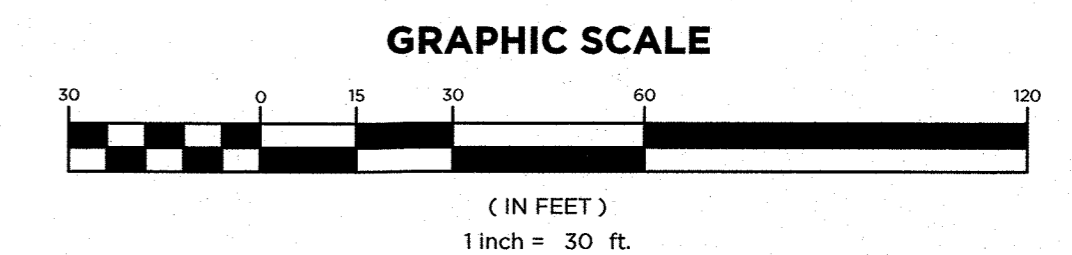
OVERALL TOTAL = 17,045 GPD



SECTION A-A: WATER MAIN PROFILE
 SCALE: 1"=20' (HORIZONTAL)
 SCALE: 1"=5' (VERTICAL)

LEGEND

	FIRE HYDRANT
	WATER MAIN
	TRANSFORMER
	ELECTRIC METER BANK
	ELECTRIC JUNCTION BOX
	UNDER GROUND ELECTRICAL
	FIRE WATER
	DOMESTIC WATER
	WATER VALVE



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 N.J. REG. NO. 51893

NO.	DATE	REVISION
1	1-18-24	ADDED WATER MAIN & GENERAL NOTES; RELOCATED WATER SERVICE LINE

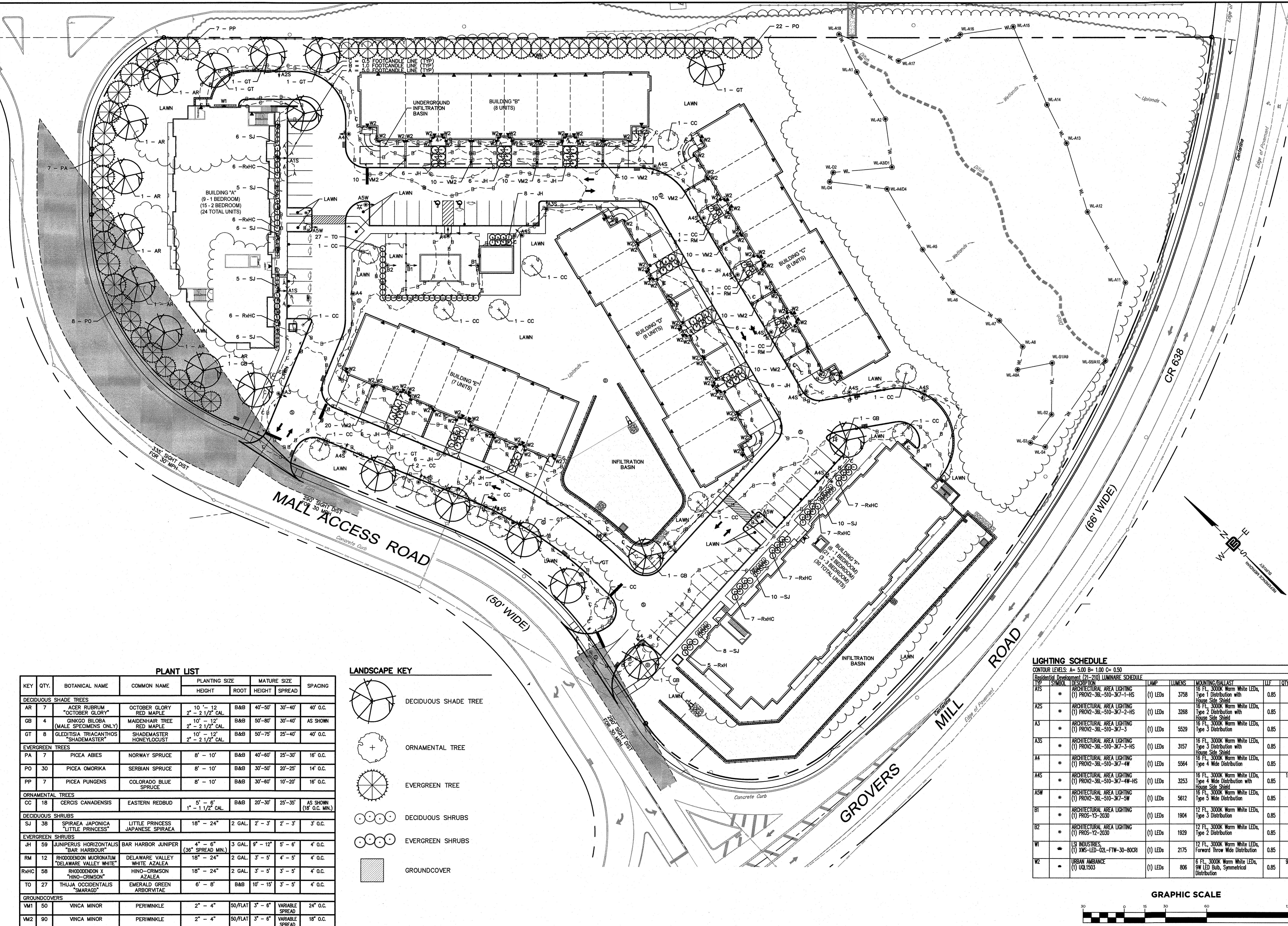
UTILITY PLAN

PROJECT
RESIDENTIAL DEVELOPMENT
 BLOCK 420101, LOT 33.03
 GROVERS MILL ROAD & MALL ACCESS ROAD
 TOWNSHIP OF LAWRENCE
 MERCER COUNTY, NEW JERSEY

CLIENT
TRICONE
 2525 US-130 SUITE B4
 CRANBURY, NJ 08512

CERTIFICATE OF AUTHORIZATION
 24GA28068900 / 21MH00002800

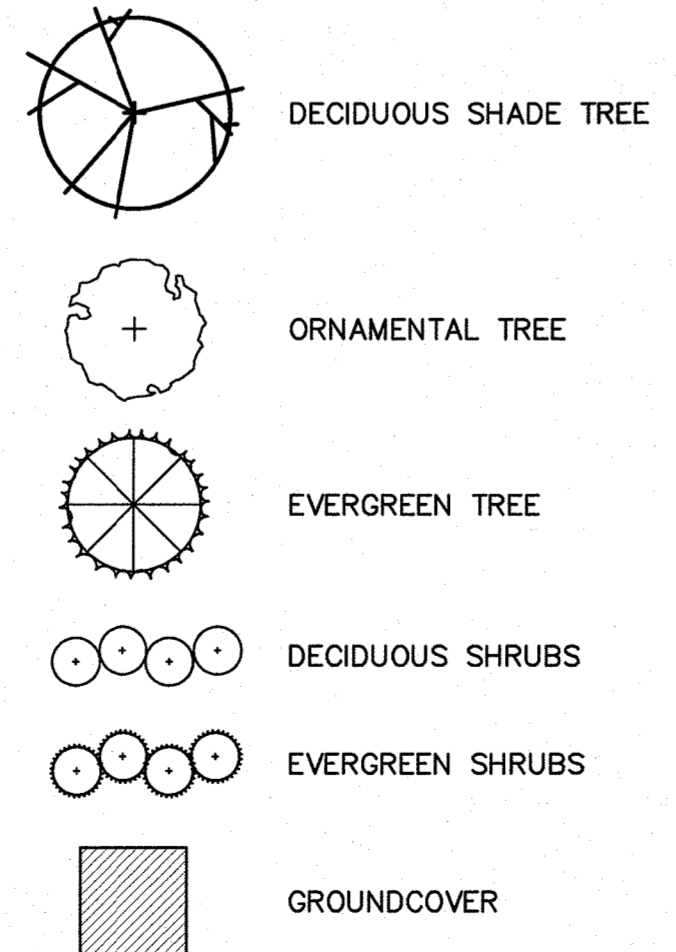
DRAWN BY: C.B. JR	CHECKED BY: C.J.B.
SCALE: 1" = 30'	PROJECT NO.: 21-210
DATE: 10-12-23	REVISION NO.: 1
DRAWING NO.: C2.4	



PLANT LIST

KEY	QTY.	BOTANICAL NAME	COMMON NAME	PLANTING SIZE		MATURE SIZE		SPACING
				HEIGHT	ROOT	HEIGHT	SPREAD	
DECIDUOUS SHADE TREES								
AR	7	ACER RUBRUM "OCTOBER GLORY"	OCTOBER GLORY	10' - 12'	B&B	40' - 50'	30' - 40'	40' O.C.
GB	4	GINKGO BILOBA (MALE SPECIMENS ONLY)	MAIDENHAIR TREE	10' - 12'	B&B	50' - 80'	30' - 40'	AS SHOWN
GT	8	GLEDITSIA TRIACANTHOS "SHADEMASTER"	SHADEMASTER HONEYLOCUST	10' - 12'	B&B	50' - 75'	25' - 40'	40' O.C.
EVERGREEN TREES								
PA	7	PICEA ABIES	NORWAY SPRUCE	8' - 10'	B&B	40' - 60'	25' - 30'	16' O.C.
PO	30	PICEA OMORIKA	SERBIAN SPRUCE	8' - 10'	B&B	30' - 50'	20' - 25'	14' O.C.
PP	7	PICEA PUNGENS	COLORADO BLUE SPRUCE	8' - 10'	B&B	30' - 60'	10' - 20'	16' O.C.
ORNAMENTAL TREES								
CC	18	CERCIS CANADENSIS	EASTERN REDBUD	5' - 6'	B&B	20' - 30'	25' - 35'	AS SHOWN (18' O.C. MIN.)
DECIDUOUS SHRUBS								
SJ	38	SPIRAEA JAPONICA "LITTLE PRINCESS"	LITTLE PRINCESS JAPANESE SPIRAEA	18" - 24"	2 GAL.	2' - 3'	2' - 3'	3' O.C.
EVERGREEN SHRUBS								
JH	59	JUNIPERUS HORIZONTALIS "BAR HARBOR"	BAR HARBOR JUNIPER	4" - 6" (36" SPREAD MIN.)	3 GAL.	9" - 12"	5' - 6"	4' O.C.
RM	12	RHODODENDRON MICRONATUM "DELAWARE VALLEY WHITE AZALEA"	DELAWARE VALLEY WHITE AZALEA	18" - 24"	2 GAL.	3' - 5'	4' - 5'	4' O.C.
RxHC	58	RHODODENDRON X "HINO-CRIMSON"	HINO-CRIMSON AZALEA	18" - 24"	2 GAL.	3' - 5'	3' - 5'	4' O.C.
TO	27	THUJA OCCIDENTALIS "SMARAGD"	EMERALD GREEN ARBORVITAE	6" - 8"	B&B	10' - 15'	3' - 5'	4' O.C.
GROUNDCOVERS								
VM1	50	VINCA MINOR	PERIWINKLE	2" - 4"	50/FLAT	3" - 6"	VARIABLE SPREAD	24" O.C.
VM2	90	VINCA MINOR	PERIWINKLE	2" - 4"	50/FLAT	3" - 6"	VARIABLE SPREAD	18" O.C.

LANDSCAPE KEY

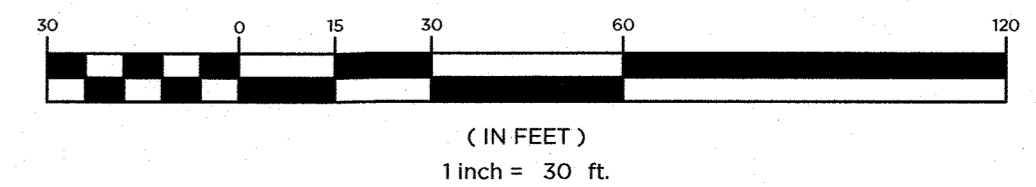


LIGHTING SCHEDULE

CONTOUR LEVELS: A= 5.00 B= 1.00 C= 0.50
Residential Development (21-210) LUMINAIRE SCHEDULE

TYP	SYMBOL	DESCRIPTION	LAMP	LUMENS	MOUNTING BALLAST	ULF	QTY
A1S	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-1-HS	(1) LEDs	3758	16 FT., 3000K Warm White LEDs, Type 1 Distribution with House Side Shield	0.85	2
A2S	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-2-HS	(1) LEDs	3268	16 FT., 3000K Warm White LEDs, Type 2 Distribution with House Side Shield	0.85	1
A3	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-3	(1) LEDs	5529	16 FT., 3000K Warm White LEDs, Type 3 Distribution	0.85	1
A3S	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-3-HS	(1) LEDs	3157	16 FT., 3000K Warm White LEDs, Type 3 Distribution with House Side Shield	0.85	1
A4	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-4W	(1) LEDs	5564	16 FT., 3000K Warm White LEDs, Type 4 Wide Distribution	0.85	6
A4S	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-4W-HS	(1) LEDs	3253	16 FT., 3000K Warm White LEDs, Type 4 Wide Distribution with House Side Shield	0.85	12
A5W	•	ARCHITECTURAL AREA LIGHTING (1) PROV2-36L-510-3K7-5W	(1) LEDs	5612	16 FT., 3000K Warm White LEDs, Type 5 Wide Distribution	0.85	3
B1	•	ARCHITECTURAL AREA LIGHTING (1) PROS-Y3-2030	(1) LEDs	1904	12 FT., 3000K Warm White LEDs, Type 3 Distribution	0.85	2
B2	•	ARCHITECTURAL AREA LIGHTING (1) PROS-Y2-2030	(1) LEDs	1929	12 FT., 3000K Warm White LEDs, Type 2 Distribution	0.85	1
W1	•	LS INDUSTRIES (1) XWS-LED-02L-FTW-30-800RI	(1) LEDs	2175	12 FT., 3000K Warm White LEDs, Forward Throw Wide Distribution	0.85	2
W2	•	URBAN AMBIANCE (1) UQ1503	(1) LEDs	806	8 FT., 3000K Warm White LEDs, SW LED Sub, Symmetrical Distribution	0.85	93

GRAPHIC SCALE



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DRAWING TITLE
LIGHTING & LANDSCAPE PLAN

PROJECT
RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

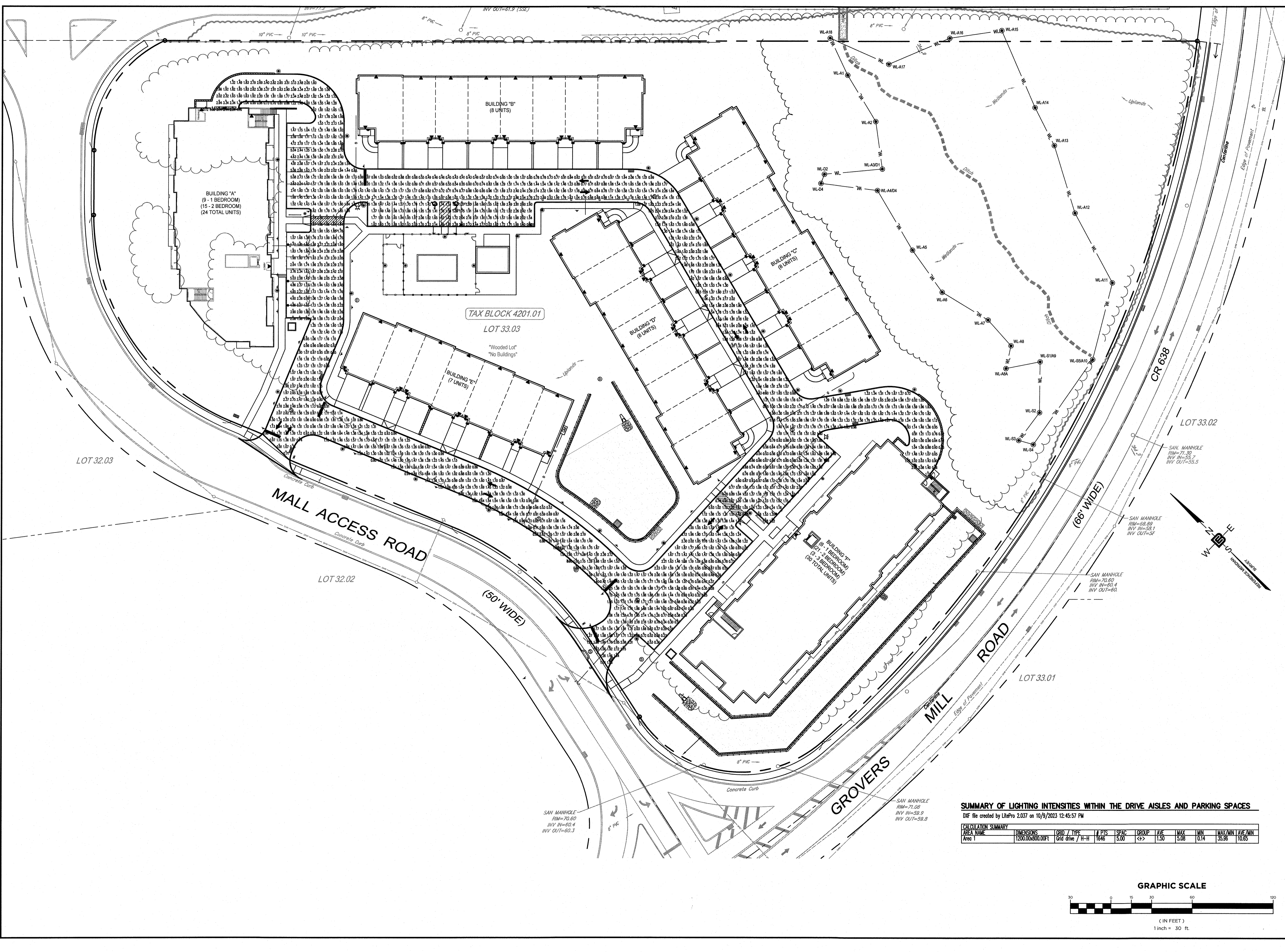
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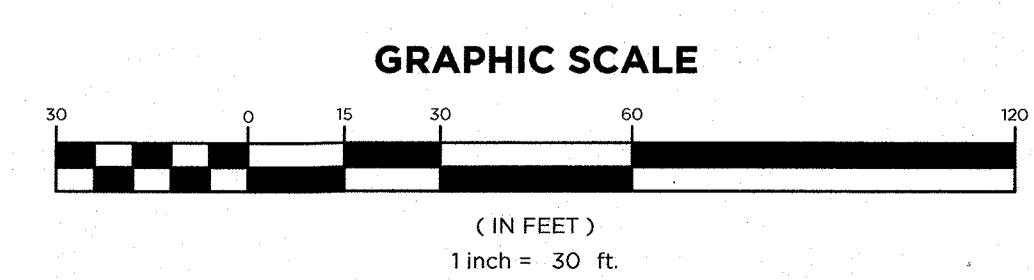
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SUMMARY OF LIGHTING INTENSITIES WITHIN THE DRIVE AISLES AND PARKING SPACES
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AREA NAME	DIMENSIONS	GRID / TYPE	# PIS	SPAC	GROUP	AVE	MAX	MIN	MAX/MIN	AVE/MIN
Area 1	1200.00x800.00ft	Grid drive / H-H	1646	5.00	<+>	1.50	5.08	0.14	35.96	10.65



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NO.	DATE	REVISION
1	10-12-23	REVISED AS PER SITE PLAN

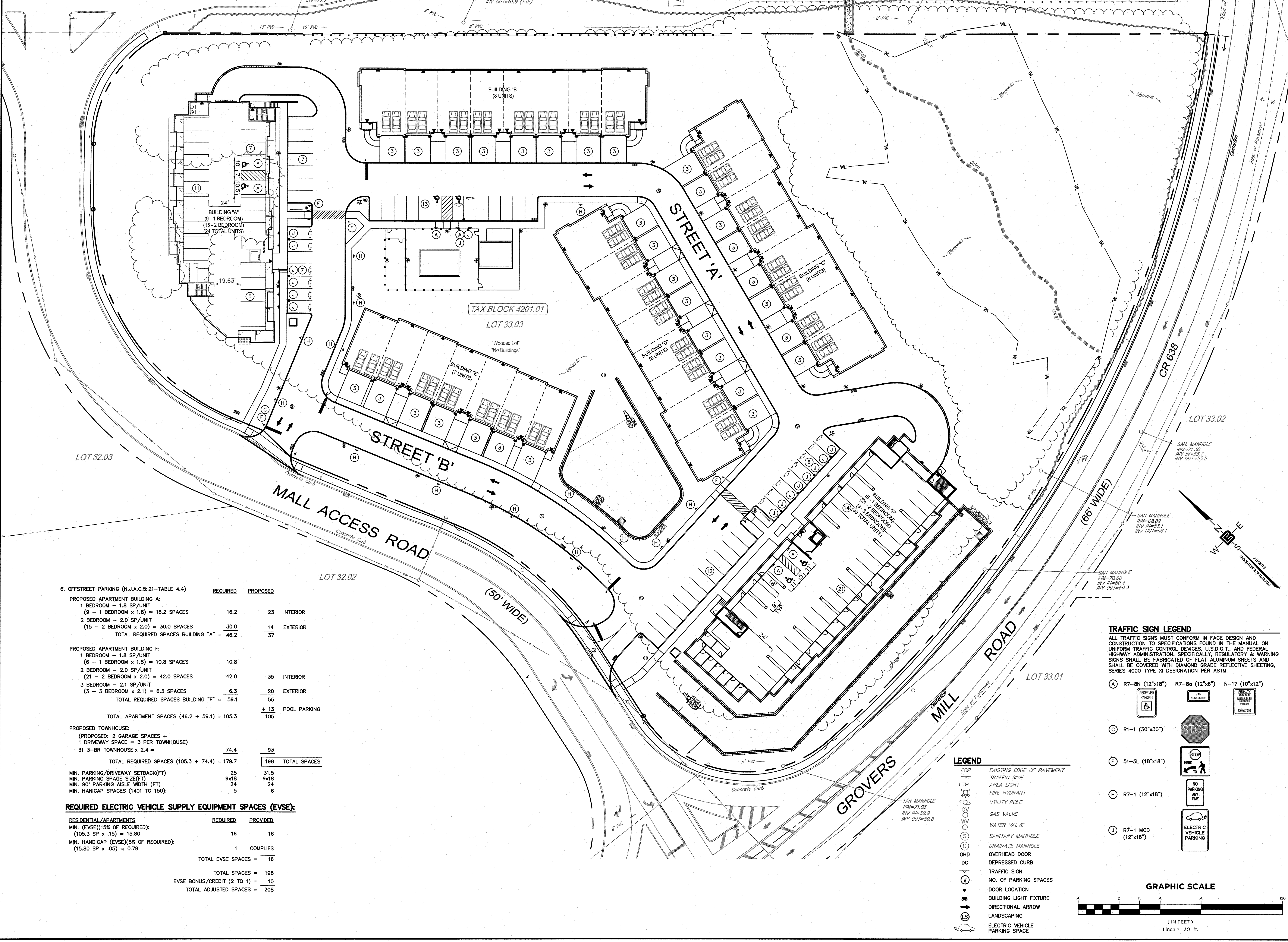
DRAWING TITLE
LIGHTING INTENSITIES PLAN

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RESIDENTIAL DEVELOPMENT
 BLOCK 4201.01, LOT 33.03
 GROVERS MILL ROAD & MALL ACCESS ROAD
 TOWNSHIP OF LAWRENCE
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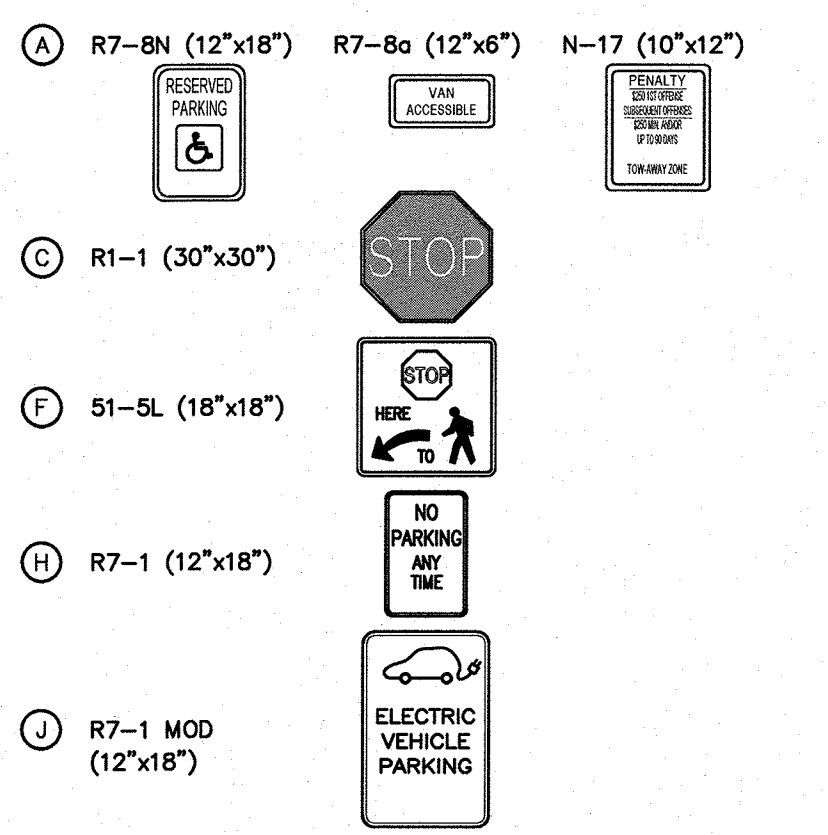
6. OFFSTREET PARKING (N.J.A.C.5:21-TABLE 4.4)

	REQUIRED	PROPOSED	
PROPOSED APARTMENT BUILDING A:			
1 BEDROOM - 1.8 SP/UNIT			INTERIOR
(9 - 1 BEDROOM x 1.8) = 16.2 SPACES	16.2	23	
2 BEDROOM - 2.0 SP/UNIT			EXTERIOR
(15 - 2 BEDROOM x 2.0) = 30.0 SPACES	30.0	14	
TOTAL REQUIRED SPACES BUILDING "A" = 46.2		37	
PROPOSED APARTMENT BUILDING F:			
1 BEDROOM - 1.8 SP/UNIT			
(6 - 1 BEDROOM x 1.8) = 10.8 SPACES	10.8		
2 BEDROOM - 2.0 SP/UNIT			
(21 - 2 BEDROOM x 2.0) = 42.0 SPACES	42.0	35	INTERIOR
3 BEDROOM - 2.1 SP/UNIT			
(3 - 3 BEDROOM x 2.1) = 6.3 SPACES	6.3	20	EXTERIOR
TOTAL REQUIRED SPACES BUILDING "F" = 59.1		55	
		+ 13	POOL PARKING
TOTAL APARTMENT SPACES (46.2 + 59.1) = 105.3		105	
PROPOSED TOWNHOUSE:			
(PROPOSED: 2 GARAGE SPACES + 1 DRIVEWAY SPACE = 3 PER TOWNHOUSE)			
31 3-BR TOWNHOUSE x 2.4 =	74.4	93	
TOTAL REQUIRED SPACES (105.3 + 74.4) = 179.7		198	TOTAL SPACES
MIN. PARKING/DRIVEWAY SETBACK(FT)	25	31.5	
MIN. PARKING SPACE SIZE(FT)	9x18	9x18	
MIN. 90° PARKING AISLE WIDTH (FT)	24	24	
MIN. HANICAP SPACES (1401 TO 150):	5	6	

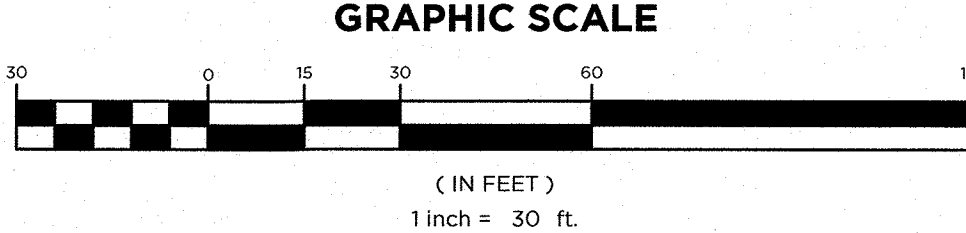
REQUIRED ELECTRIC VEHICLE SUPPLY EQUIPMENT SPACES (EVSE):

	REQUIRED	PROVIDED
RESIDENTIAL APARTMENTS		
MIN. (EVSE)(15% OF REQUIRED):		
(105.3 SP x .15) = 15.80	16	16
MIN. HANDICAP (EVSE)(5% OF REQUIRED):		
(15.80 SP x .05) = 0.79	1	COMPLIES
TOTAL EVSE SPACES = 16		
TOTAL SPACES = 198		
EVSE BONUS/CREDIT (2 TO 1) = 10		
TOTAL ADJUSTED SPACES = 208		

TRAFFIC SIGN LEGEND
 ALL TRAFFIC SIGNS MUST CONFORM IN FACE DESIGN AND CONSTRUCTION TO SPECIFICATIONS FOUND IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, U.S.D.O.T., AND FEDERAL HIGHWAY ADMINISTRATION, SPECIFICALLY, REGULATORY & WARNING SIGNS SHALL BE FABRICATED OF FLAT ALUMINUM SHEETS AND SHALL BE COVERED WITH DIAMOND GRADE REFLECTIVE SHEETING, SERIES 4000 TYPE XI DESIGNATION PER ASTM.



- LEGEND**
- EOP EXISTING EDGE OF PAVEMENT
 - TS TRAFFIC SIGN
 - AL AREA LIGHT
 - FH FIRE HYDRANT
 - UP UTILITY POLE
 - GV GAS VALVE
 - WV WATER VALVE
 - SM SANITARY MANHOLE
 - DM DRAINAGE MANHOLE
 - OD OVERHEAD DOOR
 - DC DEPRESSED CURB
 - TS TRAFFIC SIGN
 - NO. OF PARKING SPACES
 - DL DOOR LOCATION
 - BL BUILDING LIGHT FIXTURE
 - DA DIRECTIONAL ARROW
 - LA LANDSCAPING
 - EV ELECTRIC VEHICLE
 - PS PARKING SPACE



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PARKING PLAN

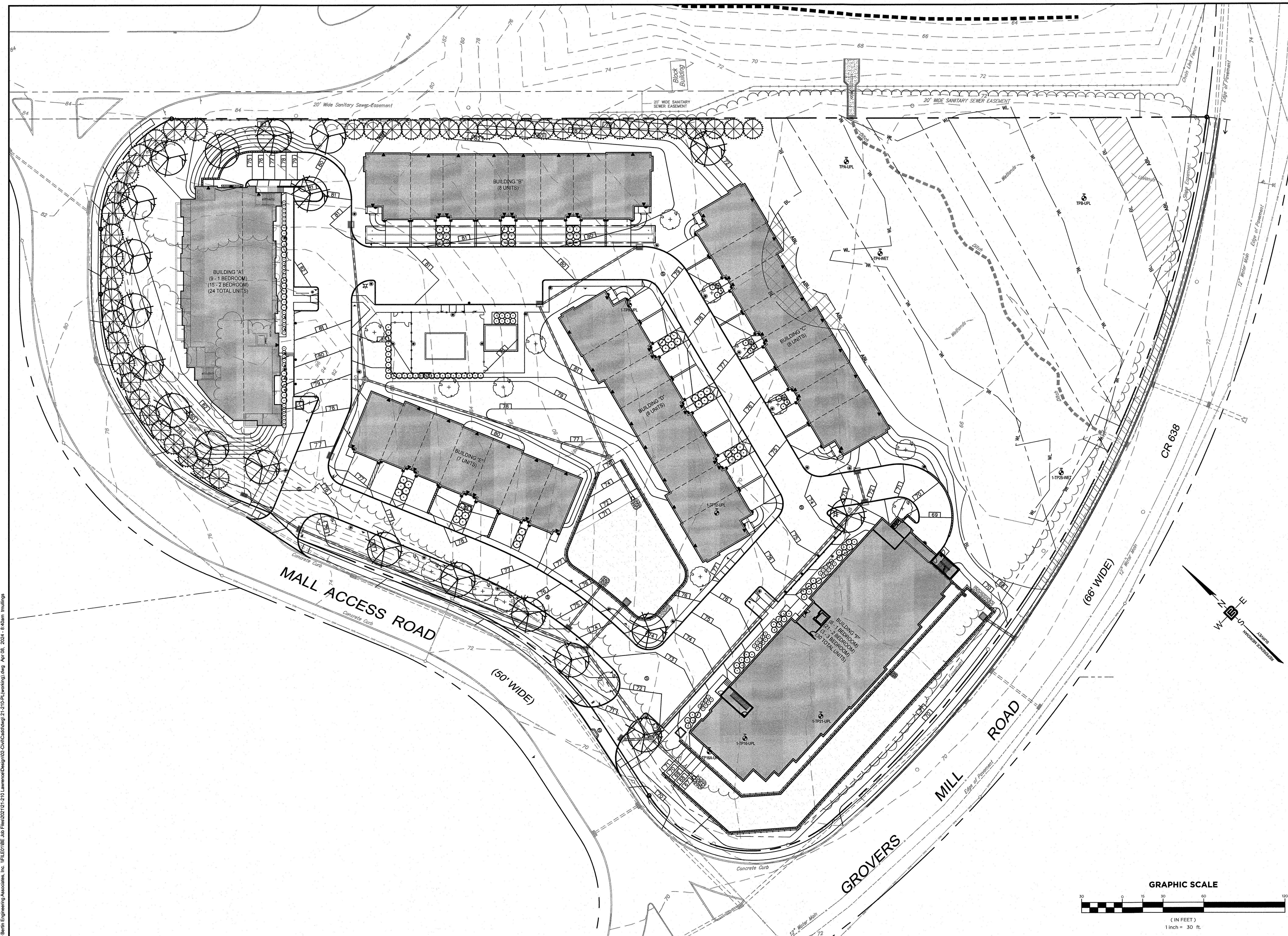
PROJECT: **RESIDENTIAL DEVELOPMENT**
 BLOCK 4201.01, LOT 33.03
 GROVERS MILL ROAD & MALL ACCESS ROAD
 TOWNSHIP OF LAWRENCE
 MERCER COUNTY, NEW JERSEY

CLIENT: **TRICONE**
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NO.	DATE	REVISION

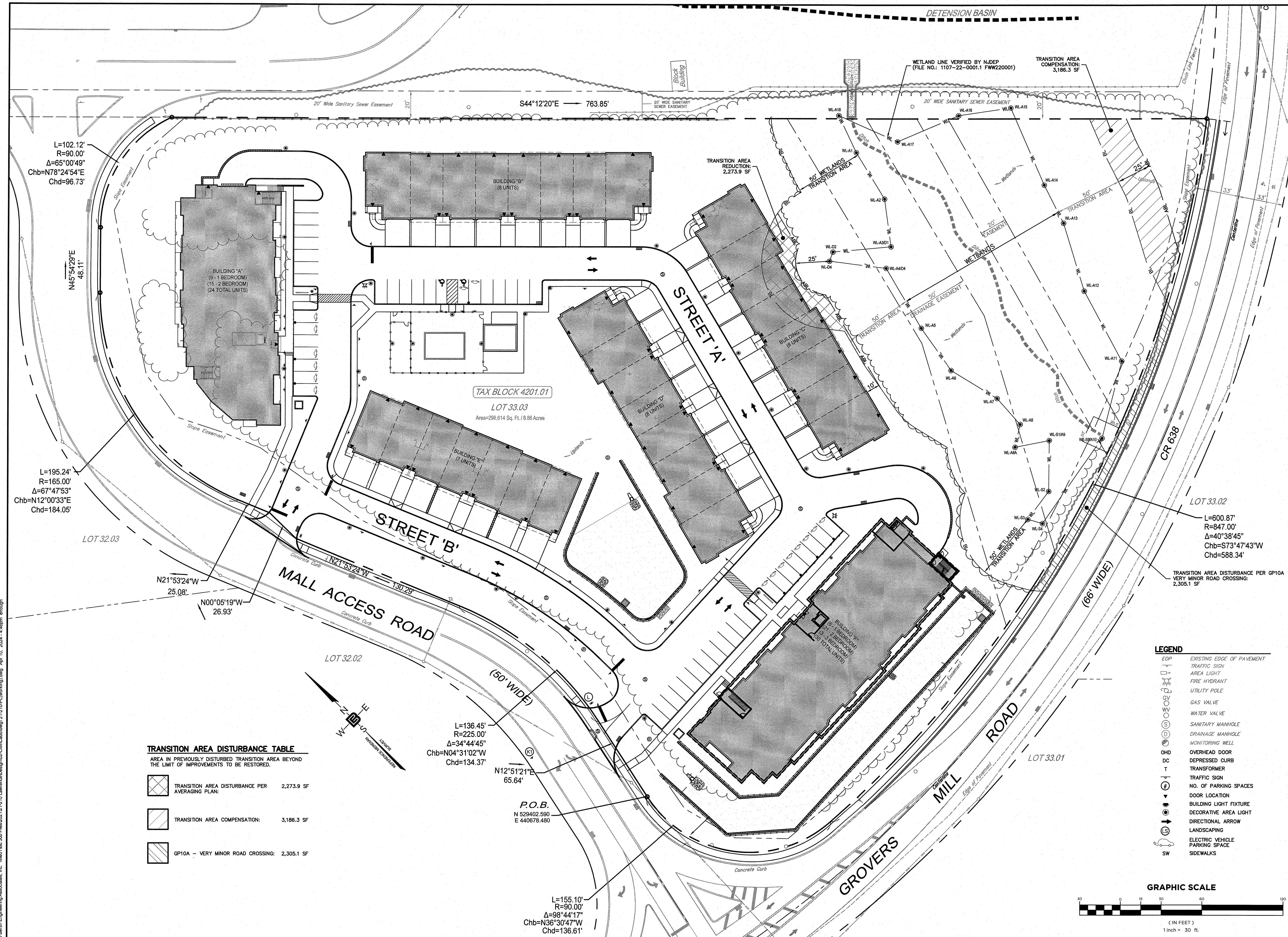
DRAWING TITLE
GRADING & LANDSCAPE PLAN

PROJECT
RESIDENTIAL DEVELOPMENT
 BLOCK 4201.01, LOT 33.03
 GROVERS MILL ROAD & MALL ACCESS ROAD
 TOWNSHIP OF LAWRENCE
 MERCER COUNTY, NEW JERSEY

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DATE 3-19-24	REVISION NO. Q
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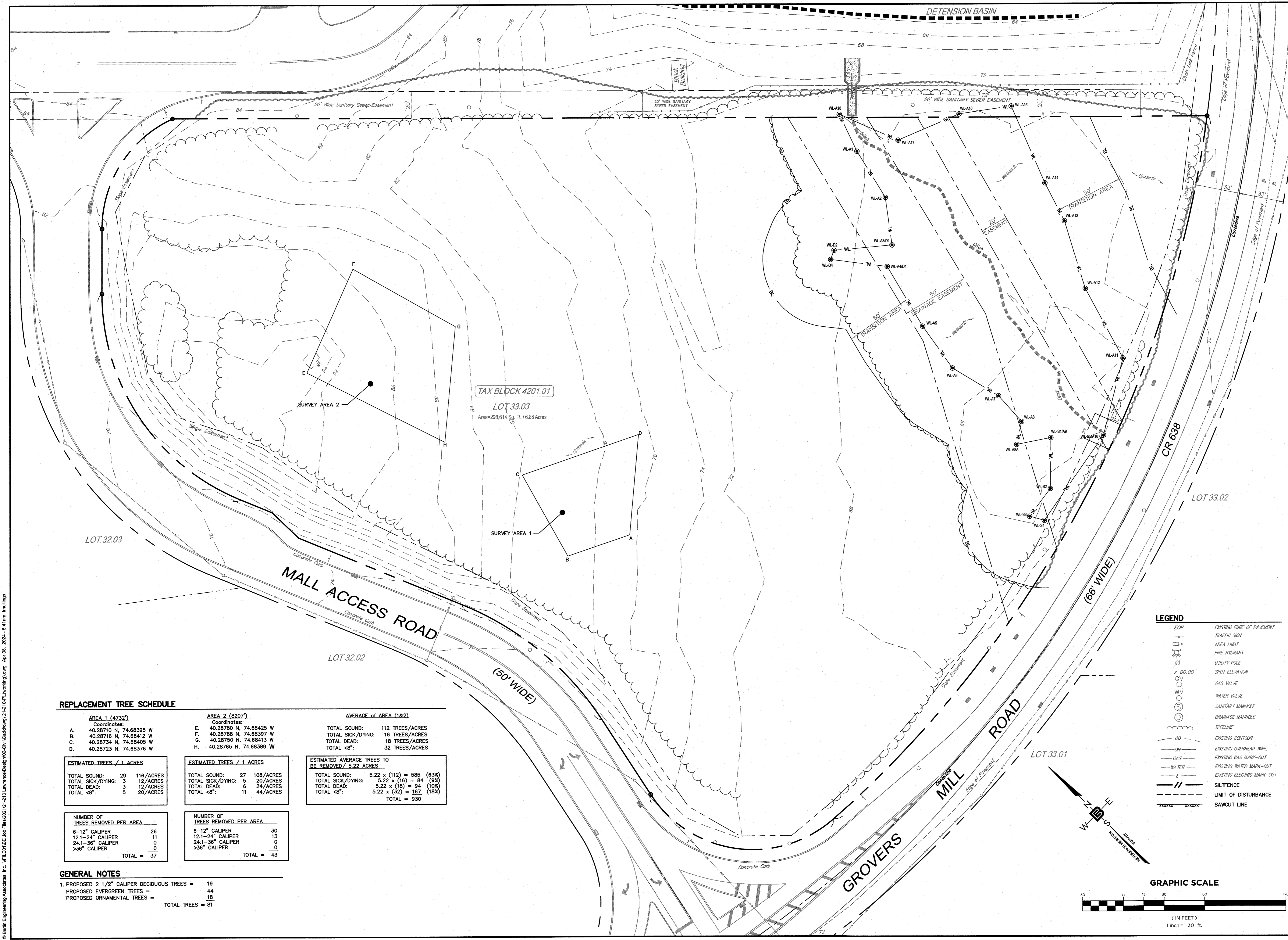
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SCALE: 1" = 30'	PROJECT NO.: 21-210
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TAX BLOCK 4201.01
LOT 33.03
 Area=298,614 Sq. Ft. 16.86 Acres

REPLACEMENT TREE SCHEDULE

AREA 1 (4732')		AREA 2 (8207')		AVERAGE of AREA (1&2)	
Coordinates:		Coordinates:		TOTAL SOUND:	
A.	40.28710 N, 74.68395 W	E.	40.28780 N, 74.68425 W	TOTAL SOUND:	112 TREES/ACRES
B.	40.28716 N, 74.68412 W	F.	40.28788 N, 74.68397 W	TOTAL SICK/DYING:	16 TREES/ACRES
C.	40.28734 N, 74.68405 W	G.	40.28750 N, 74.68413 W	TOTAL DEAD:	18 TREES/ACRES
D.	40.28723 N, 74.68376 W	H.	40.28765 N, 74.68389 W	TOTAL <8":	32 TREES/ACRES

ESTIMATED TREES / 1 ACRES		ESTIMATED AVERAGE TREES TO BE REMOVED / 5.22 ACRES	
TOTAL SOUND:	29 116/ACRES	TOTAL SOUND:	5.22 x (112) = 585 (63%)
TOTAL SICK/DYING:	3 12/ACRES	TOTAL SICK/DYING:	5.22 x (16) = 84 (9%)
TOTAL DEAD:	3 12/ACRES	TOTAL DEAD:	5.22 x (18) = 94 (10%)
TOTAL <8":	5 20/ACRES	TOTAL <8":	5.22 x (32) = 167 (18%)
		TOTAL:	930

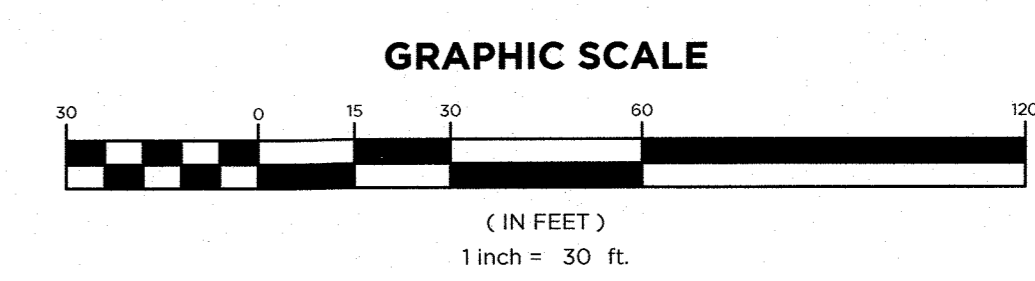
NUMBER OF TREES REMOVED PER AREA		NUMBER OF TREES REMOVED PER AREA	
6-12" CALIPER	26	6-12" CALIPER	30
12.1-24" CALIPER	11	12.1-24" CALIPER	13
24.1-36" CALIPER	0	24.1-36" CALIPER	0
>36" CALIPER	0	>36" CALIPER	0
TOTAL =	37	TOTAL =	43

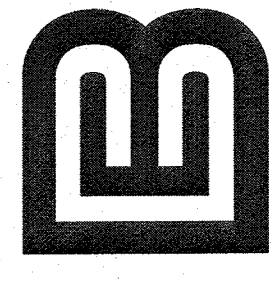
GENERAL NOTES

- PROPOSED 2 1/2" CALIPER DECIDUOUS TREES = 19
 - PROPOSED EVERGREEN TREES = 44
 - PROPOSED ORNAMENTAL TREES = 18
- TOTAL TREES = 81

LEGEND

- EOP
- TRAFFIC SIGN
- AREA LIGHT
- FIRE HYDRANT
- UTILITY POLE
- SPOT ELEVATION
- GAS VALVE
- WATER VALVE
- SANITARY MANHOLE
- DRAINAGE MANHOLE
- TREE LINE
- EXISTING CONTOUR
- OH
- EXISTING OVERHEAD WIRE
- GAS
- EXISTING GAS MARK-OUT
- WATER
- EXISTING WATER MARK-OUT
- E
- EXISTING ELECTRIC MARK-OUT
- SILT FENCE
- LIMIT OF DISTURBANCE
- SAWCUT LINE





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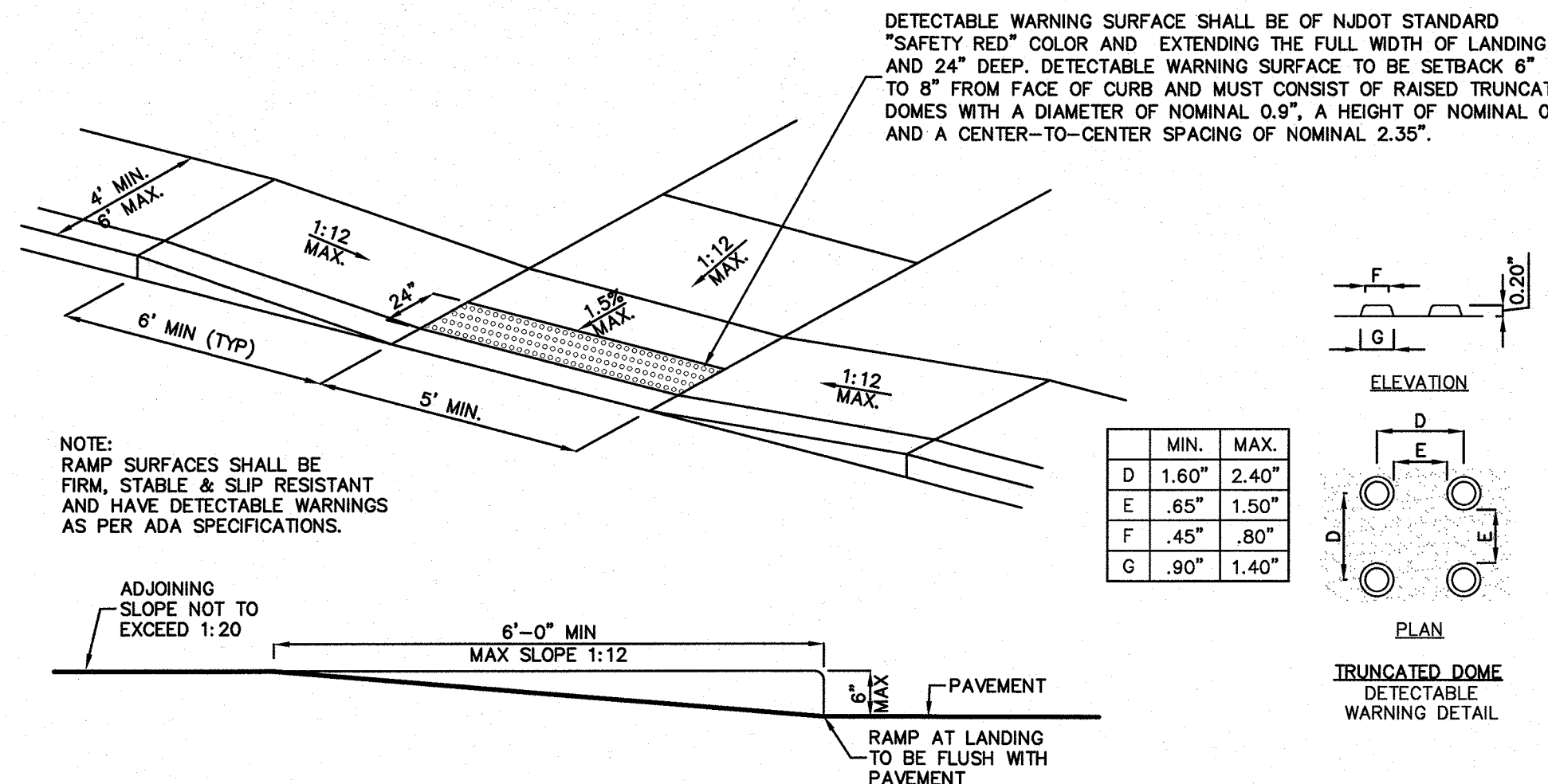
TREE REMOVAL PLAN

PROJECT: **RESIDENTIAL DEVELOPMENT**
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 2525 US-130 SUITE B4
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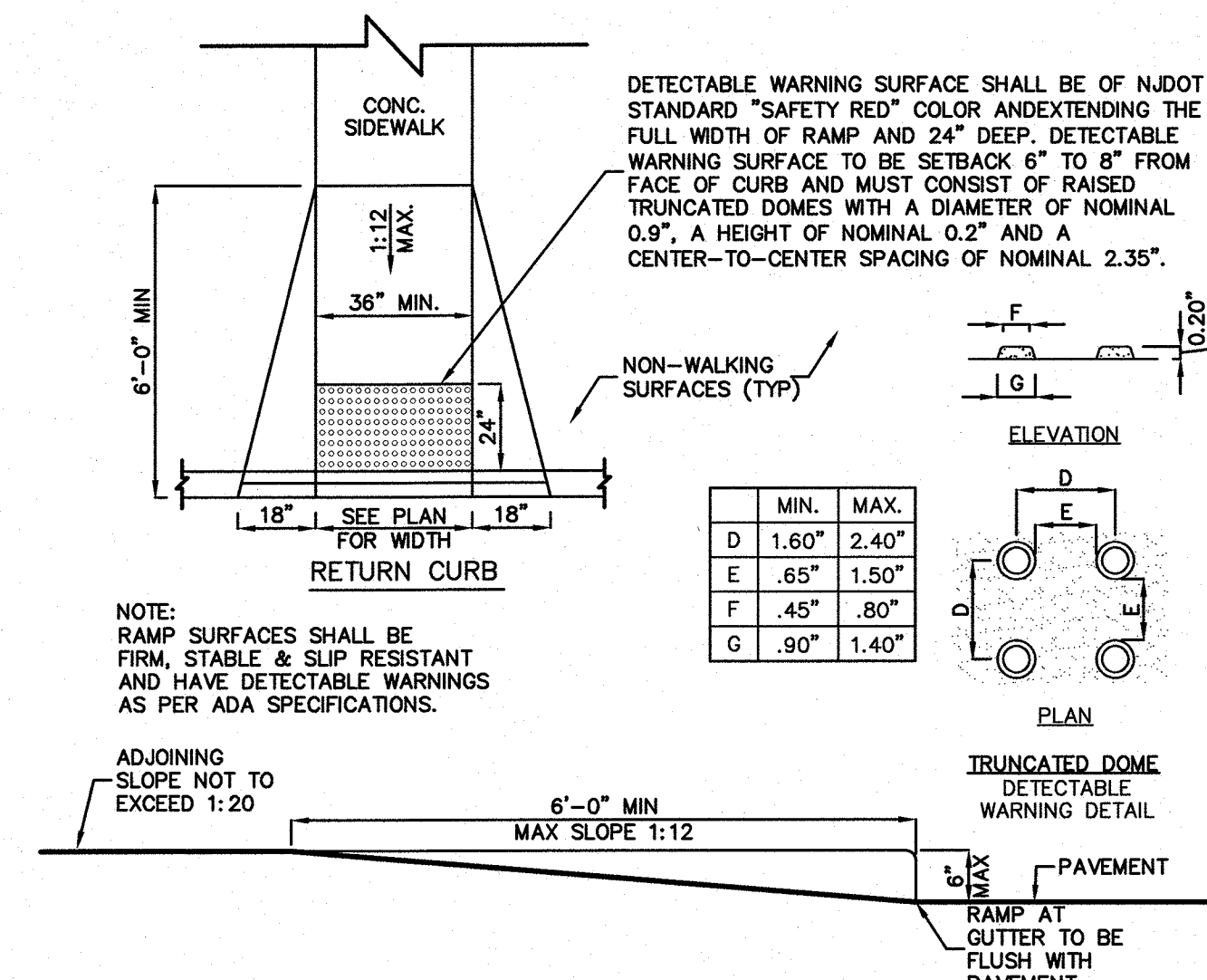
CERTIFICATE OF AUTHORIZATION:
 24GA28068900 / 21MH00002800

DRAWN BY: VL CHECKED BY: C.J.B.
 SCALE: 1" = 30' PROJECT NO.: 21-210
 DATE: 3-19-24 REVISION NO.: 0
 DRAWING NO.: **C2.10**



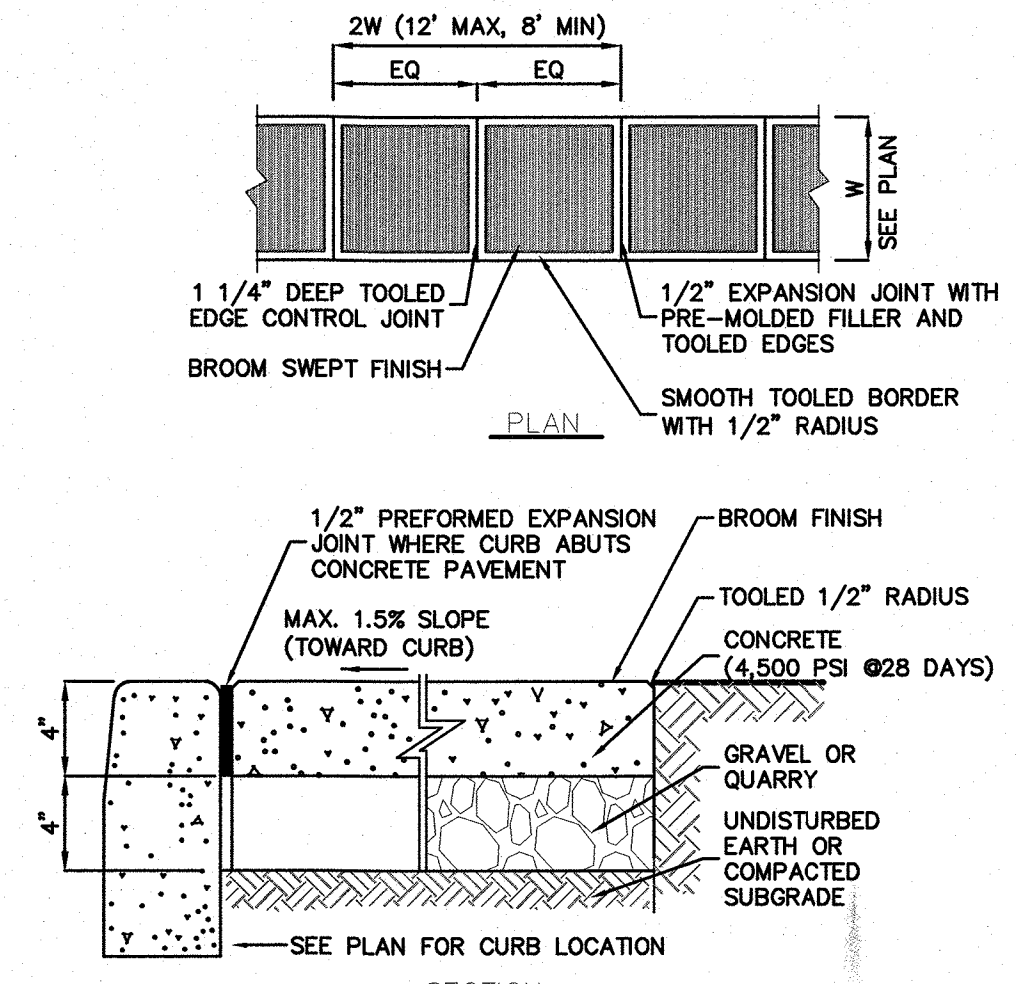
CONCRETE CURB RAMP (ADA REQUIREMENTS)

NOT TO SCALE



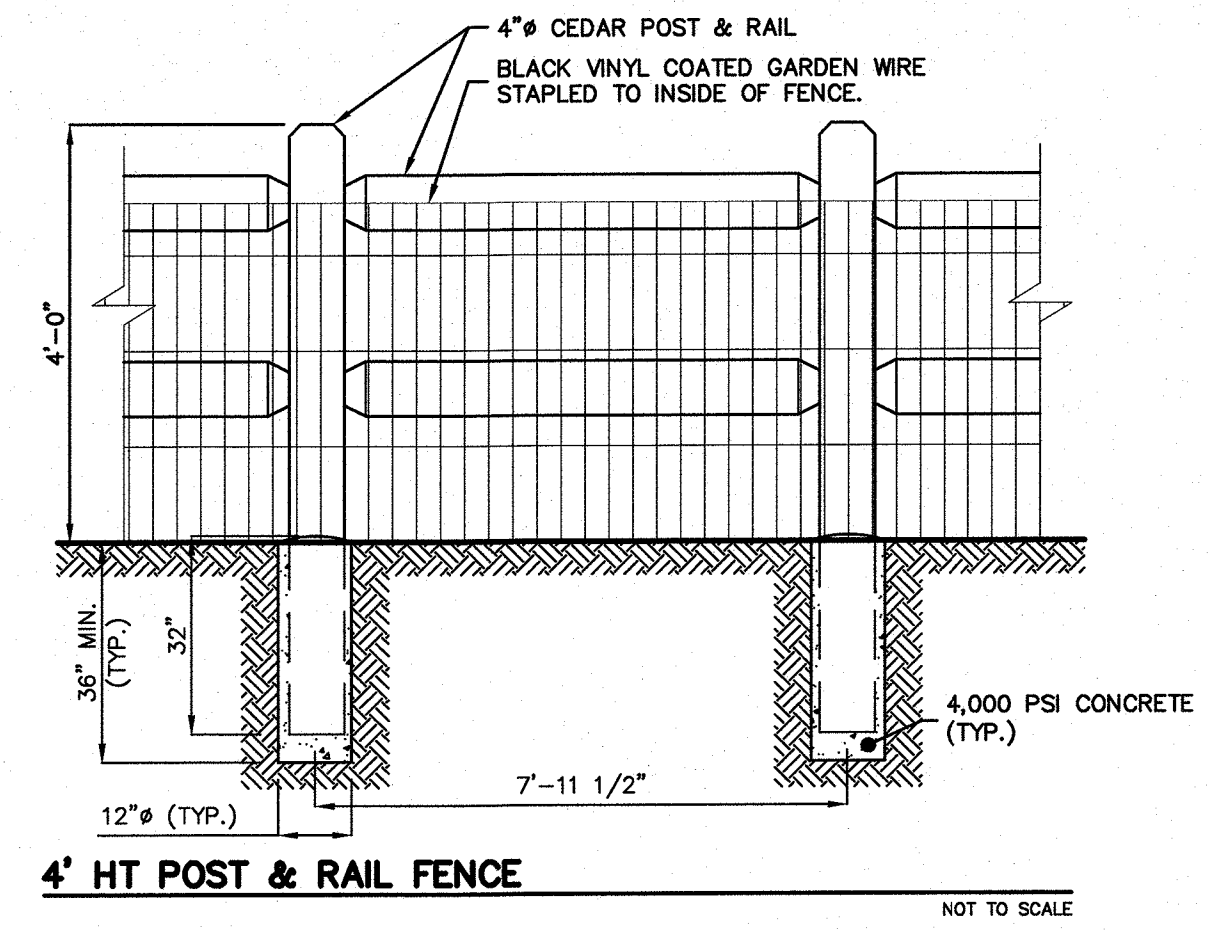
CONCRETE CURB RAMP (ADA REQUIREMENTS)

NOT TO SCALE



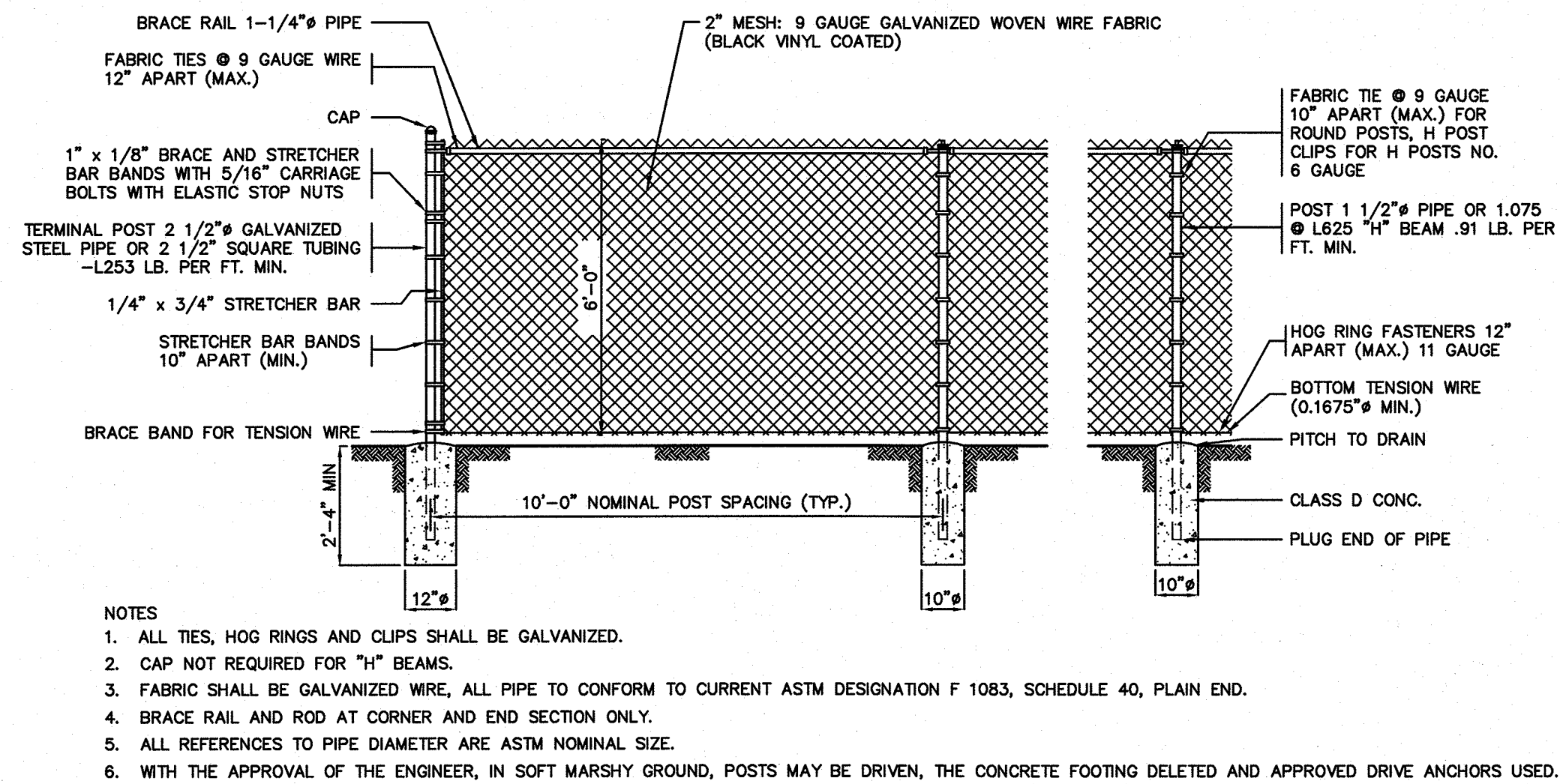
CONCRETE SIDEWALK DETAIL

NOT TO SCALE



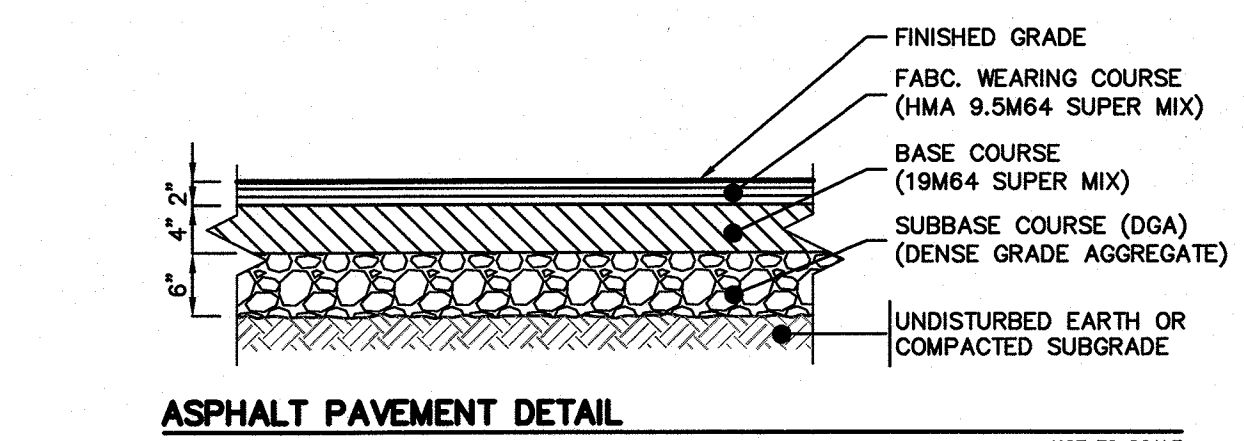
4' HT POST & RAIL FENCE

NOT TO SCALE



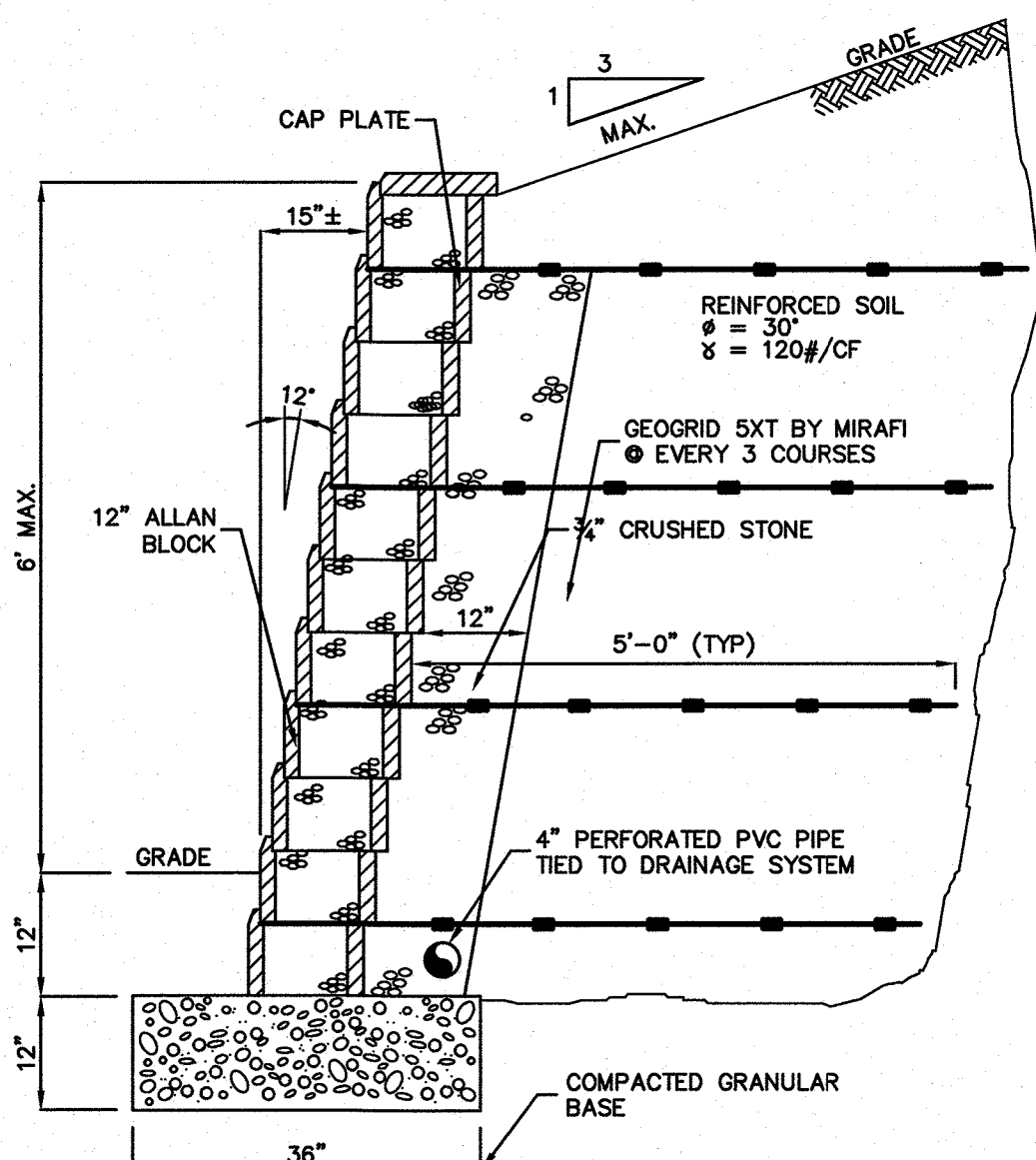
CHAIN LINK FENCE DETAIL

NOT TO SCALE



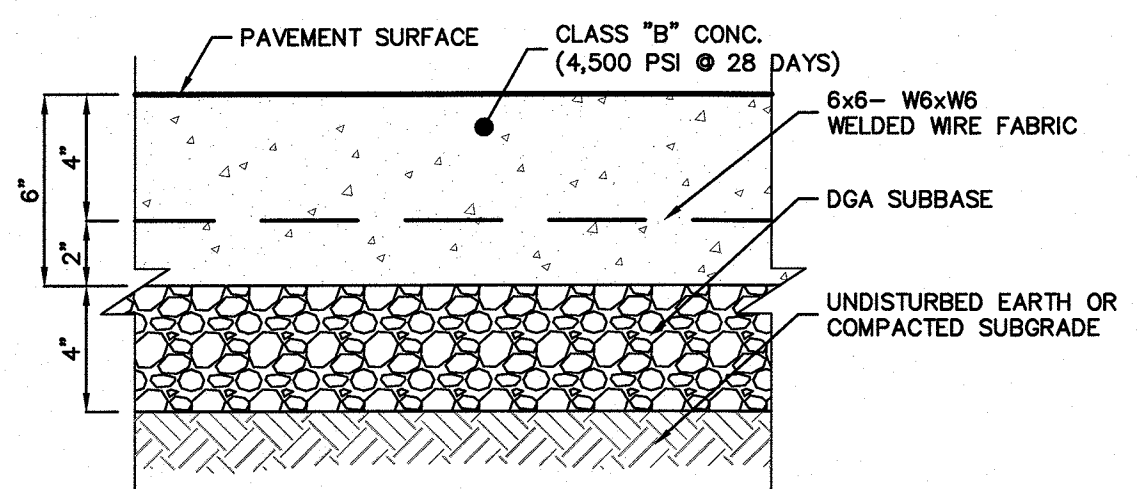
ASPHALT PAVEMENT DETAIL

NOT TO SCALE



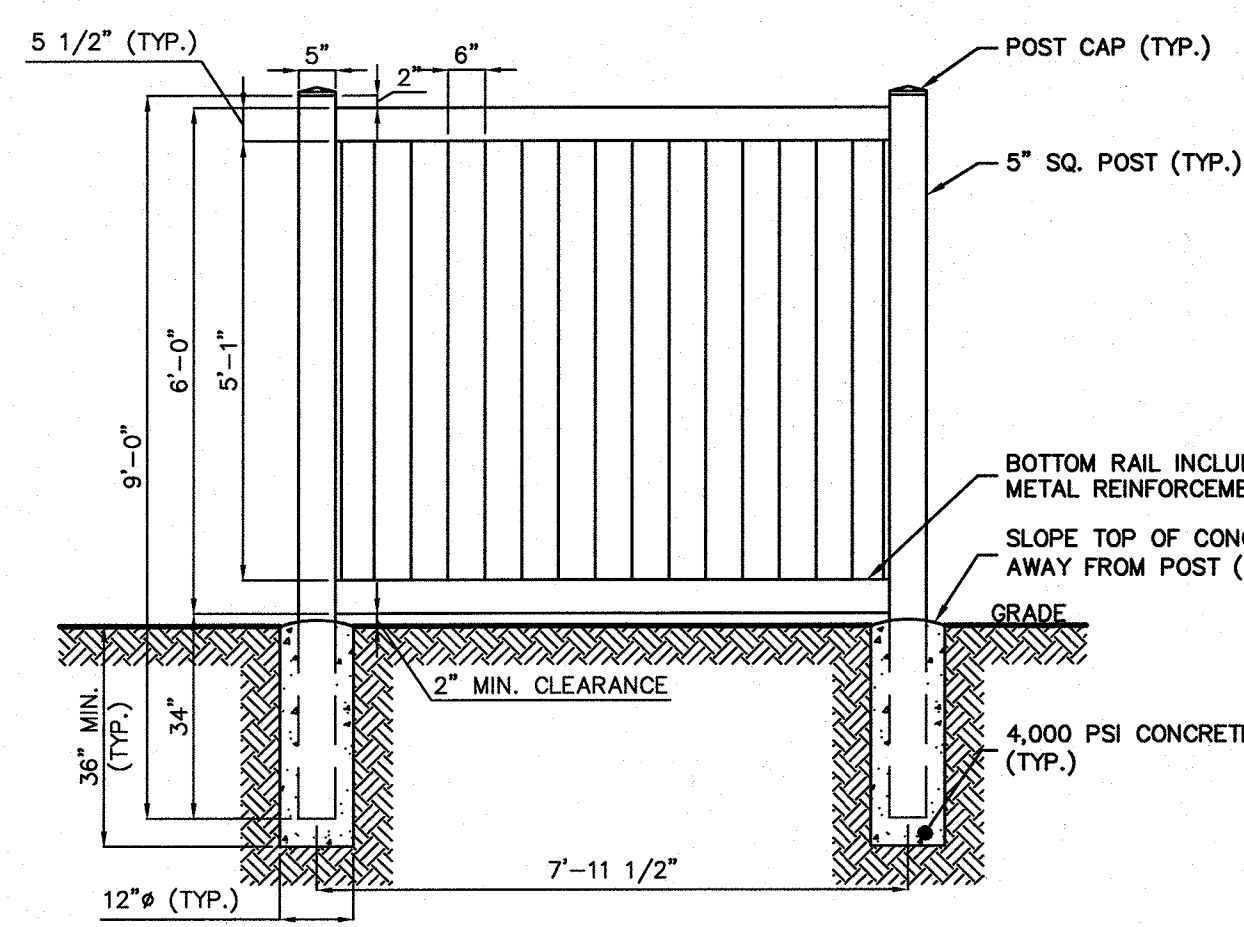
6' RETAINING WALL DETAIL (ALLAN BLOCK)

SCALE: 1/2" = 1'-0"



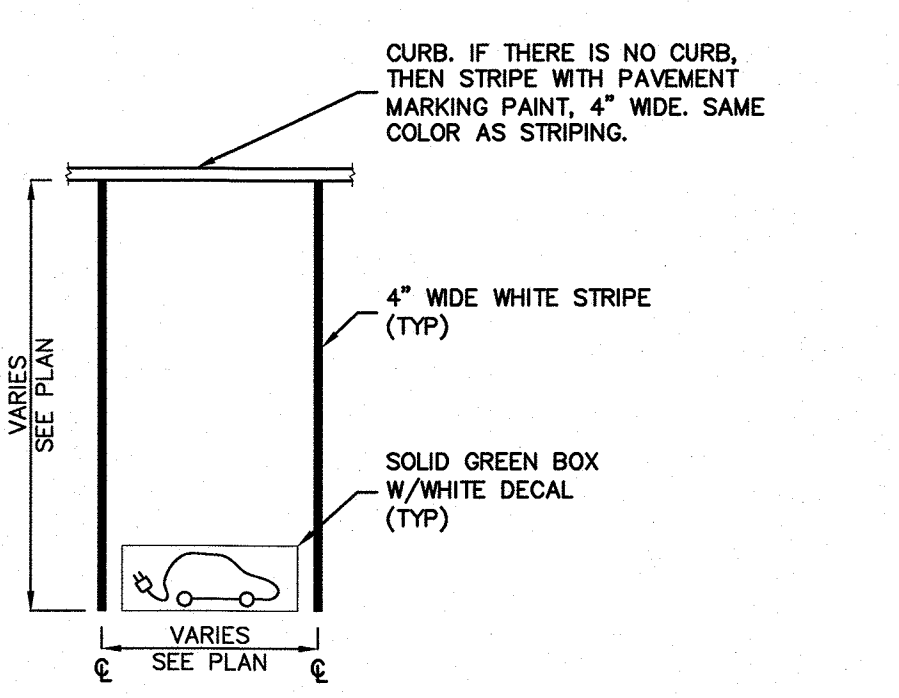
CONCRETE PAVEMENT DETAIL

NOT TO SCALE



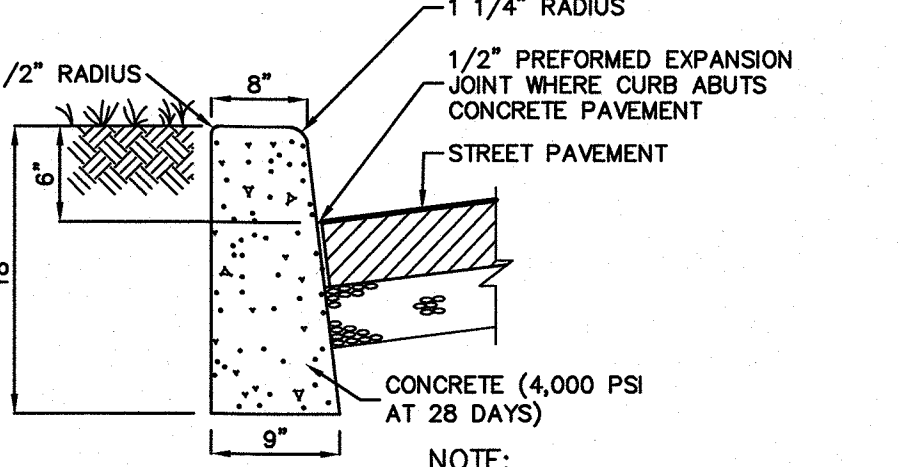
SOLID VINYL TONGUE AND GROOVE FENCE -- 6' HT.

NOT TO SCALE



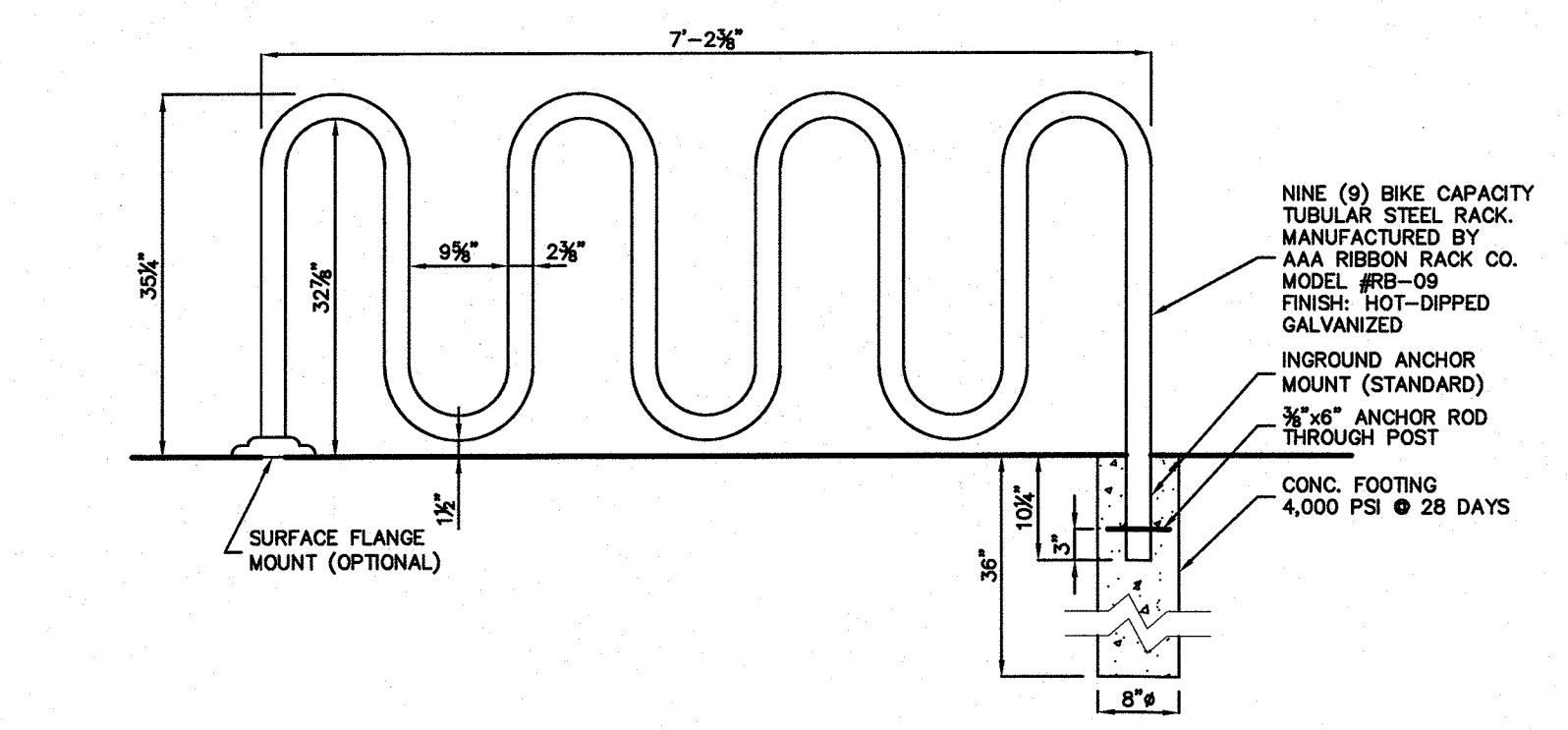
ELECTRIC VEHICLE PARKING SPACE STRIPING

NOT TO SCALE



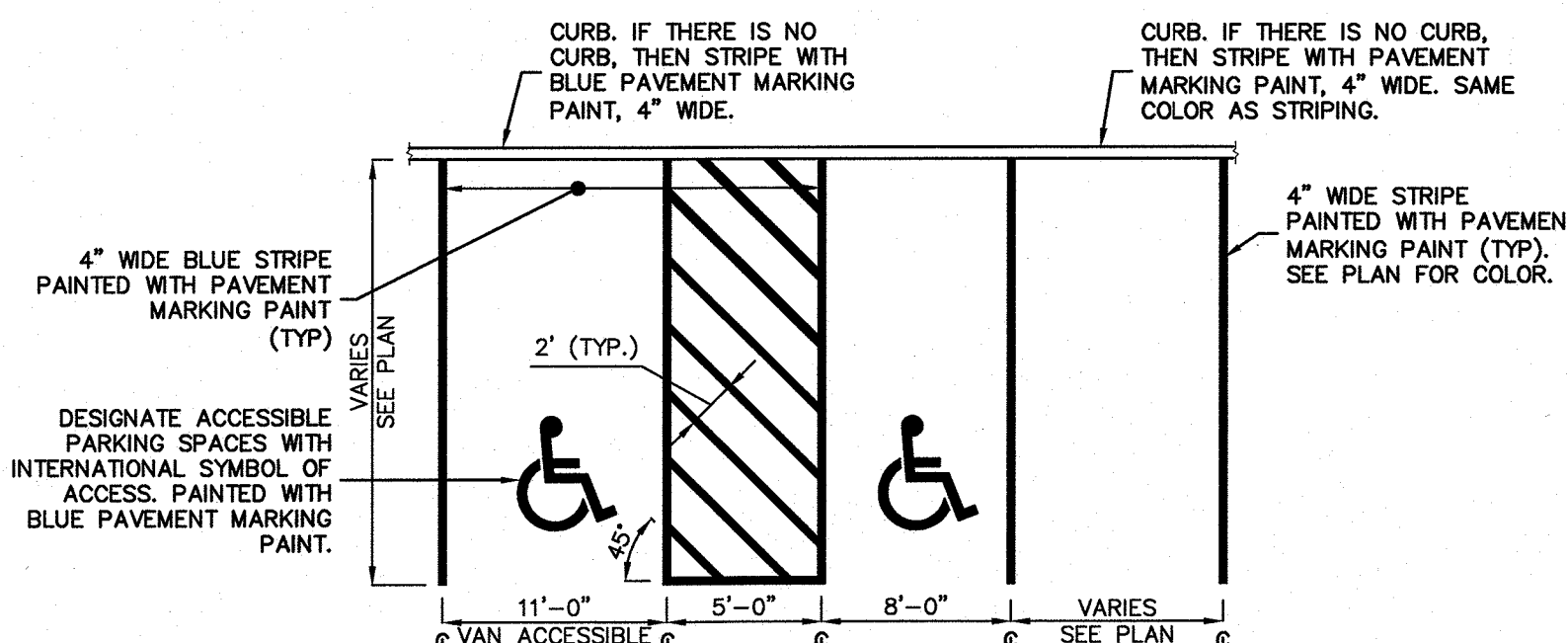
INTERIOR CURB

NOT TO SCALE



BICYCLE RACK

SCALE: NTS



PARKING SPACE STRIPING

NOT TO SCALE

CT4000 Family

ChargePoint® Charging Stations

The CT4000 is the latest generation of ChargePoint charging stations. Refined yet rugged, the CT4000 family sets the industry standard for functionality and aesthetics. A robust cord retraction system comes standard on all CT4000 models to eliminate unsightly cords on the ground, and to keep your drivers from having to touch charging cables.

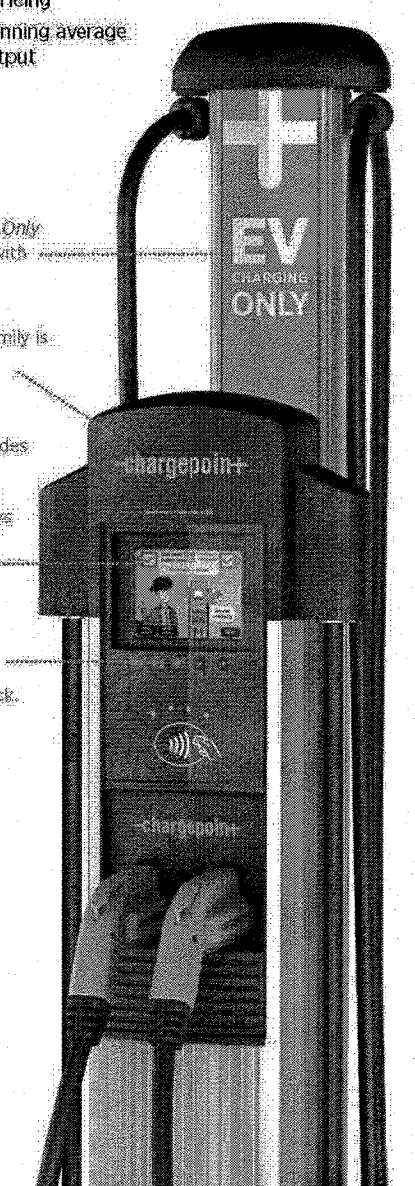
The CT4000 full motion color LCD display instructs drivers while supporting dynamic updates of custom branded videos and advertisements.

The intelligent power sharing feature of the CT4000 doubles the number of parking spaces served by allowing two charging ports to share a single circuit. Sites with single port EV stations can upgrade to dual port stations without requiring additional electrical services.

All CT4000 models offer one or two standard SAE J1772 Level 2 charging ports with locking holders, each port supplying up to 7.2kW.

Available in bollard and wall mount configurations, the CT4000 supports easy installation anywhere. To future-proof your investment, all stations are fully software upgradable over time. All ChargePoint stations are networked and managed through ChargePoint Service Plans and backed by ChargePoint's world class 24/7 in-vehicle support.

- Driver Friendly User Interface
 - Instructional video shows how to use the station
 - Multi-language: English, French, Spanish
 - Touch button interface: works in rain, ice and with gloves
 - Backed by ChargePoint's world class 24/7 driver phone support
- Energy Measurement and Management
 - Real-time energy measurement
 - 15 minute interval recording
 - Time of Day (TOD) pricing
 - Load shed by % of running average or to fixed power output

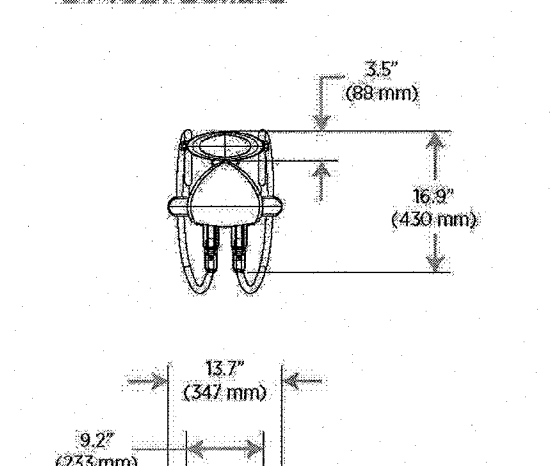


- Corporate Branding and Video Advertising
 - Download full motion color videos to your station
 - Custom replaceable signage to project your brand
 - Custom "cap" printing available
- Clean Cord Technology™
 - Maintenance-free, light-weight, self-retracting cords come standard on all models
 - Keep charging cords off the ground and out of your and drivers' hands
 - Flexible over entire -22°F to +122°F product temperature range

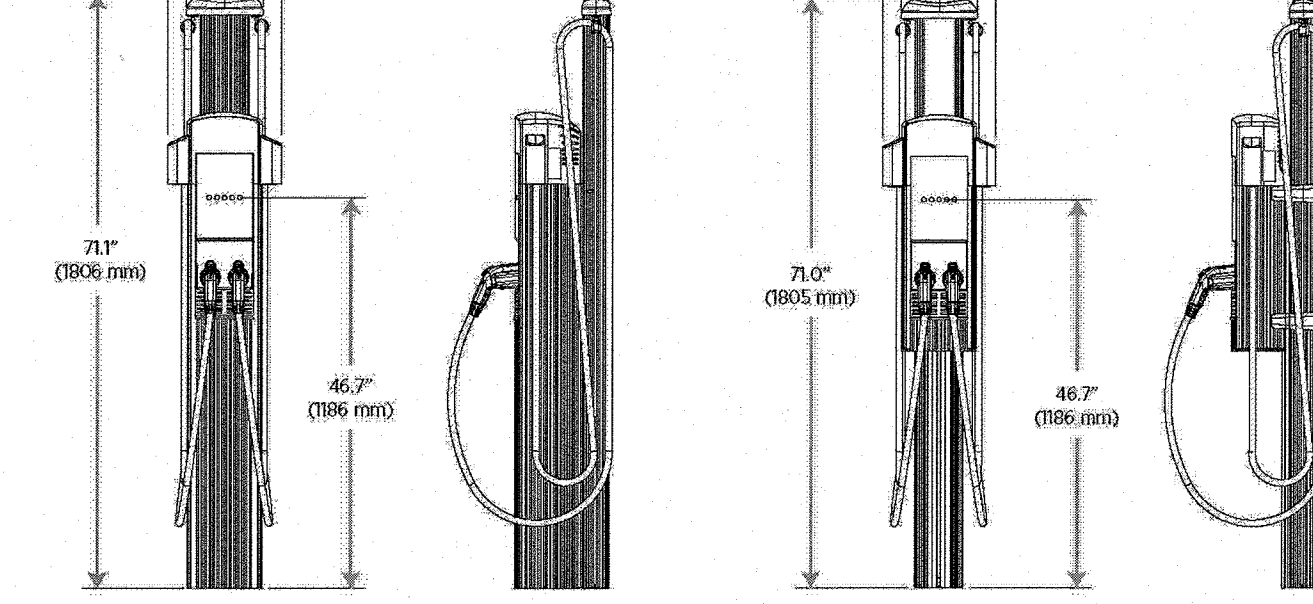
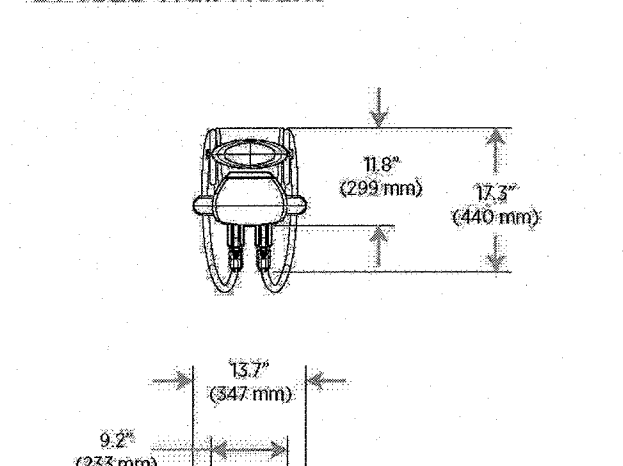
- Intelligent Power Sharing (patent pending)
 - Reduced installation and operating costs
 - Dynamically share one 40A circuit between two parking spaces
 - Double the number of parking spaces for a given site's power capacity
 - Upgrade a single port station to dual port with no electrical upgrade

¹ ChargePoint Service Plans are sold separately.
² Download fees apply.
³ Maximum cable length is 100 feet.

CT4021 Bollard



CT4023 Wall Mount



ELECTRIC VEHICLE CHARGE STATION -- DOUBLE

NOT TO SCALE

66 GLEN AVENUE
GLEN ROCK, NJ 07459
P. 201.670.6888
F. 201.670.9788
www.bertinengineering.com



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MA LIC. NO. 40958 NY LIC. NO. 60022
NH LIC. NO. 9368 RI LIC. NO. 6694

ERIC M. HOUGH, P.E.
PROFESSIONAL ENGINEER
NJ LIC. NO. 51893

NO. DATE

REVISION

NO.	DATE	REVISION
1	1-18-24	ADDED ELECTRIC VEHICLE CHARGE STATION & ELECTRIC PARKING SPACE DETAIL

SITE DETAILS

PROJECT
RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

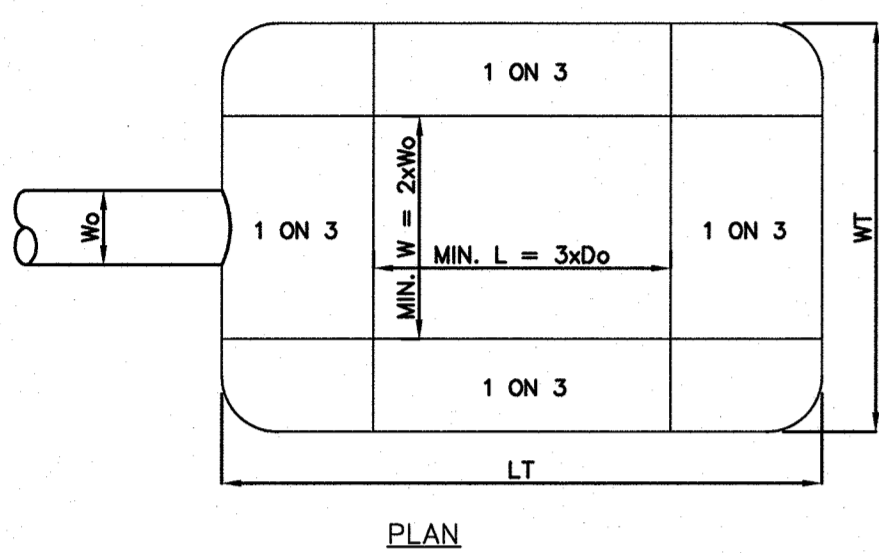
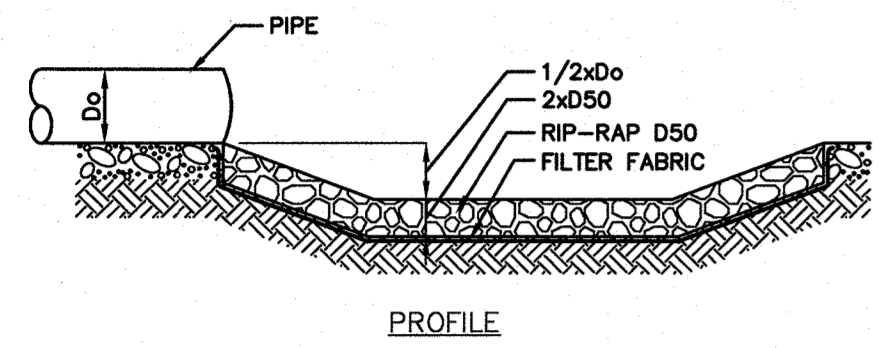
CLIENT
TRICONE
2525 US-130 SUITE B4
CRANBURY, NJ 08512

CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00020800
DRAWN BY: M.B.L. CHECKED BY: C.J.B.
SCALE: AS SHOWN PROJECT NO.: 21-210
DATE: 10-12-23 REVISION NO.: 1

DRAWING NO.
C3.1

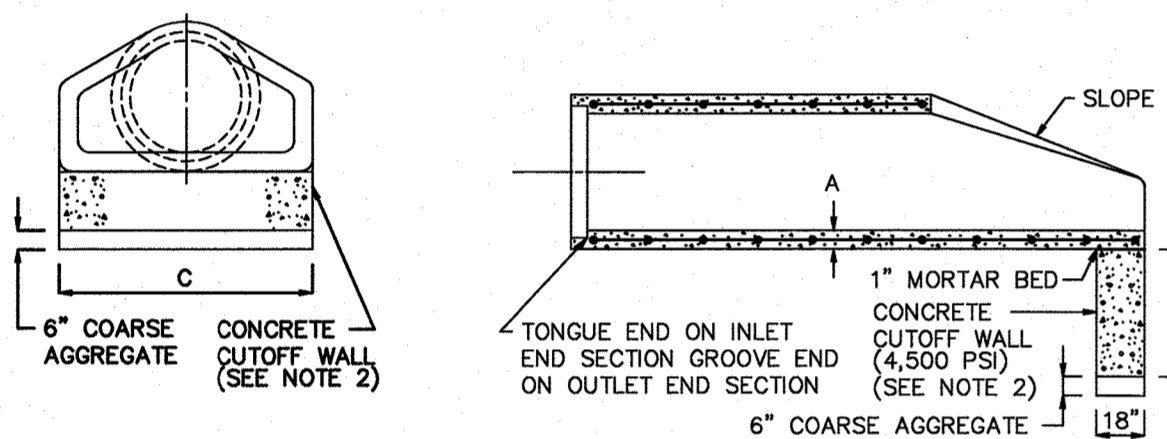
OUTLET SCHEDULE

OUTLET #	D _o	W _o	L	W	LT	WT	D50
#1	15"	15"	3.75'	2.5'	11.25'	10'	6"
#2	15"	15"	3.75'	2.5'	8.75'	7.5'	4"
#3	18"	18"	3.75'	2.5'	8.75'	7.5'	8"
#4	6"	6"	1.5'	1'	6.5'	6'	4"
#5	10"	10"	2.5'	1.67'	7.5'	6.67'	4"



PREFORMED SCOUR HOLE DETAIL

NOT TO SCALE



DIMENSIONS (INCHES)

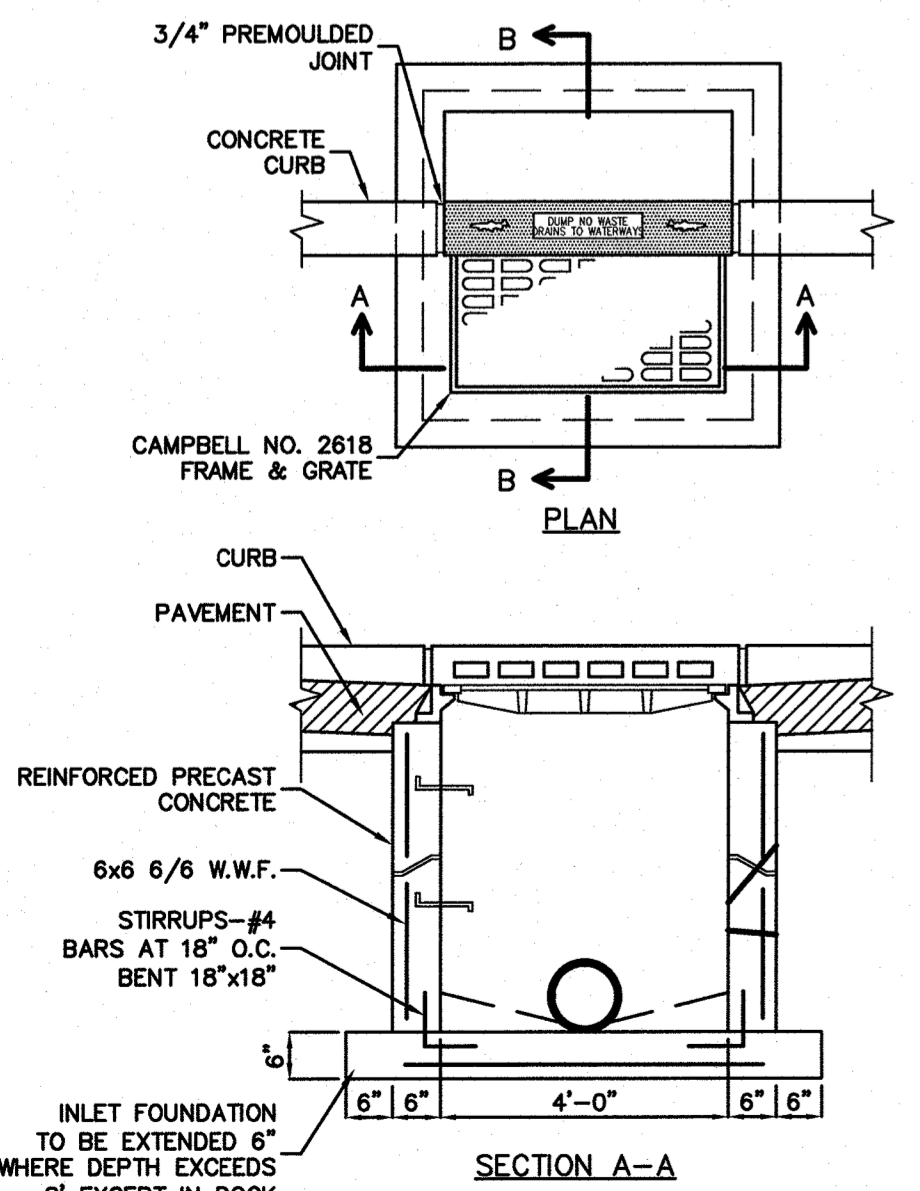
I.D.	12	15	18	21	24	27	30	36	42	48	54	60
A	2	2.25	2.5	2.75	3	3.25	3.5	4	4.5	5	5.5	6
U	72	72	72	72	72	72	72	96	96	96	96	96
C	28	34.5	41	47.5	54	60.5	67	80	87	94	101	108

NOTES:

- MINOR VARIATIONS TO THE ABOVE DIMENSIONS ARE ACCEPTABLE WITH THE EXCEPTION OF THE INSIDE DIAMETER DIMENSION.
- A 1 INCH THICK MORTAR BED AND A 6 INCH DEEP LAYER OF COARSE AGGREGATE ARE REQUIRED WHEN A PRECAST CONCRETE CUTOFF WALL IS USED.
- NO SEPARATE PAYMENT WILL BE MADE FOR THE CONCRETE CUTOFF WALL. THE COST OF THE CONCRETE CUTOFF WALL SHALL BE INCLUDED IN THE COST OF THE END SECTION.
- THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL BE EQUAL TO THE MAXIMUM WIDTH OF THE END SECTION AS INDICATED ON THE DETAIL BY DIMENSION "C". HOWEVER, IF THE ACTUAL MAXIMUM WIDTH EXCEEDS THE CHART VALUE OF "C", THE WIDTH OF THE CONCRETE CUTOFF WALL SHALL EQUAL THE ACTUAL MAXIMUM WIDTH OF THE END SECTION.

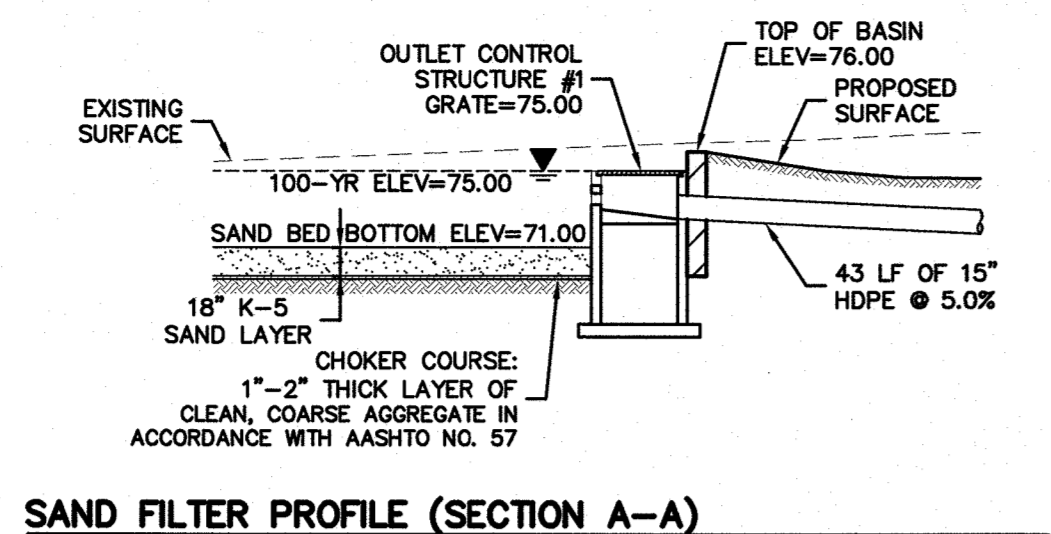
FLARED END SECTION DETAIL

NOT TO SCALE



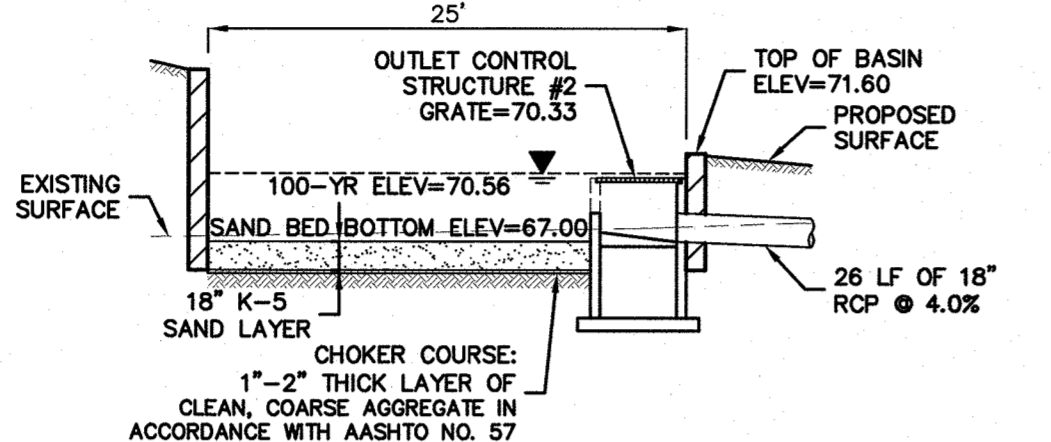
CURB INLET (TYPE B)

NOT TO SCALE



SAND FILTER PROFILE (SECTION A-A)

SCALE: 1"=10'

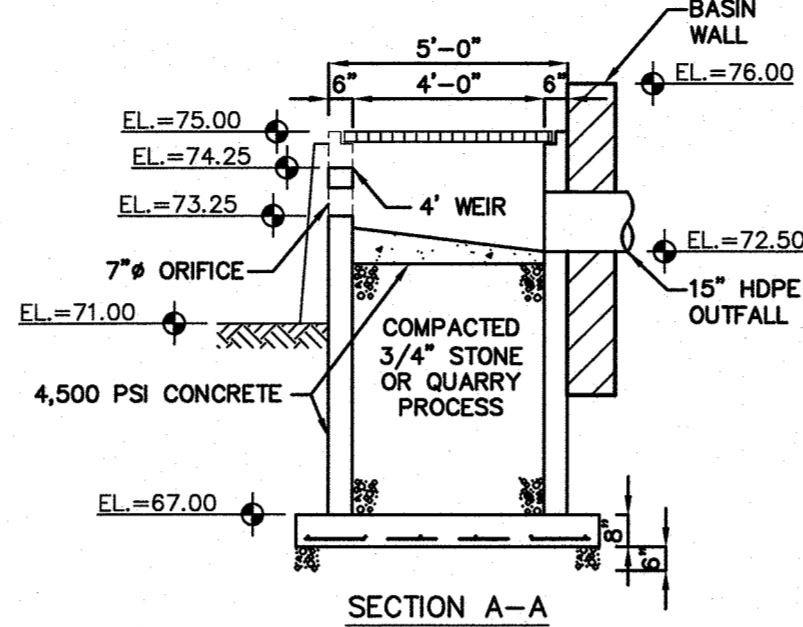


SAND FILTER PROFILE (SECTION B-B)

SCALE: 1"=10'

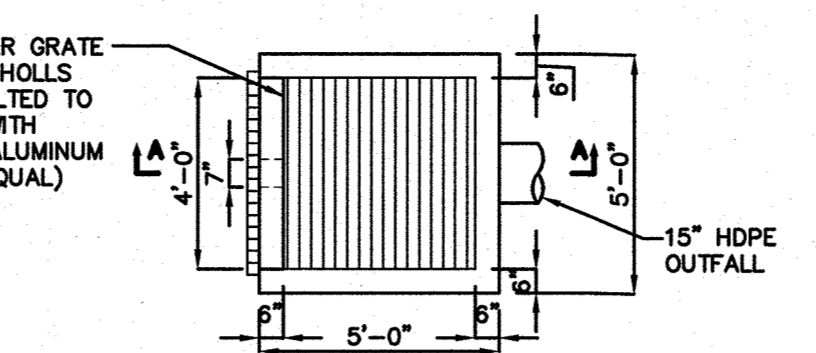
NOTES:

- ALL CONCRETE SHALL BE 4,500 PSI.
- STRUCTURAL CALCULATIONS SHALL BE PROVIDED TO TOWNSHIP ENGINEER PRIOR TO CONSTRUCTION.

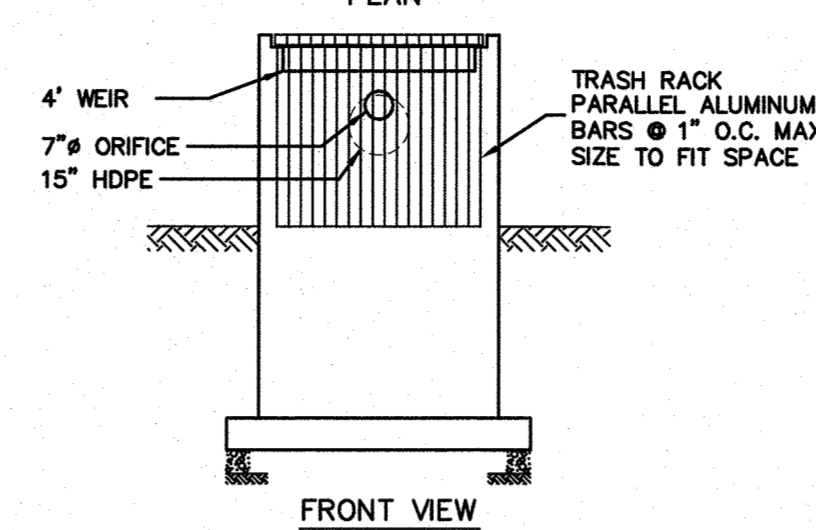


OUTLET CONTROL STRUCTURE #1

NOT TO SCALE



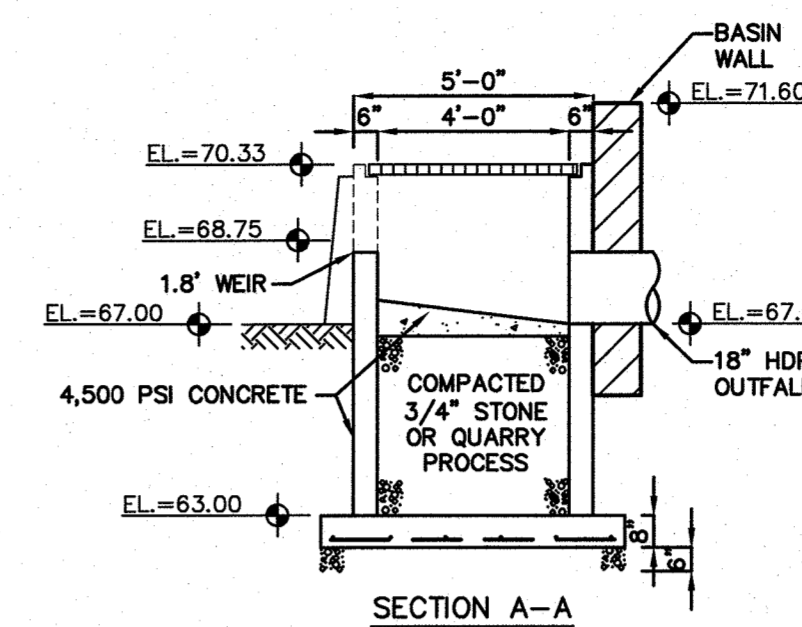
PLAN



FRONT VIEW

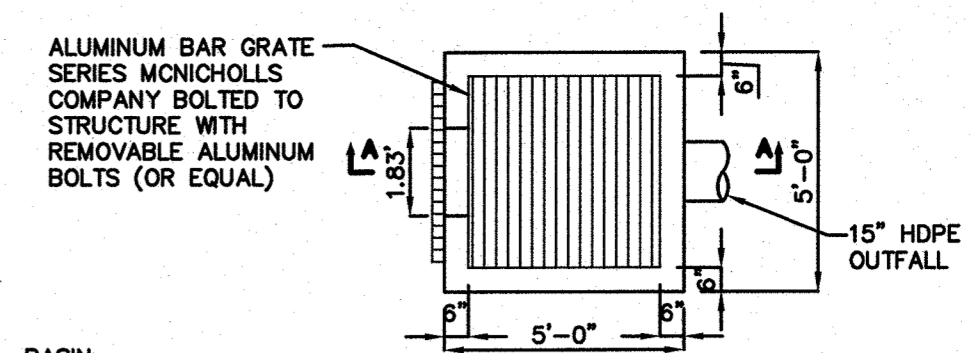
NOTES:

- ALL CONCRETE SHALL BE 4,500 PSI.
- STRUCTURAL CALCULATIONS SHALL BE PROVIDED TO TOWNSHIP ENGINEER PRIOR TO CONSTRUCTION.

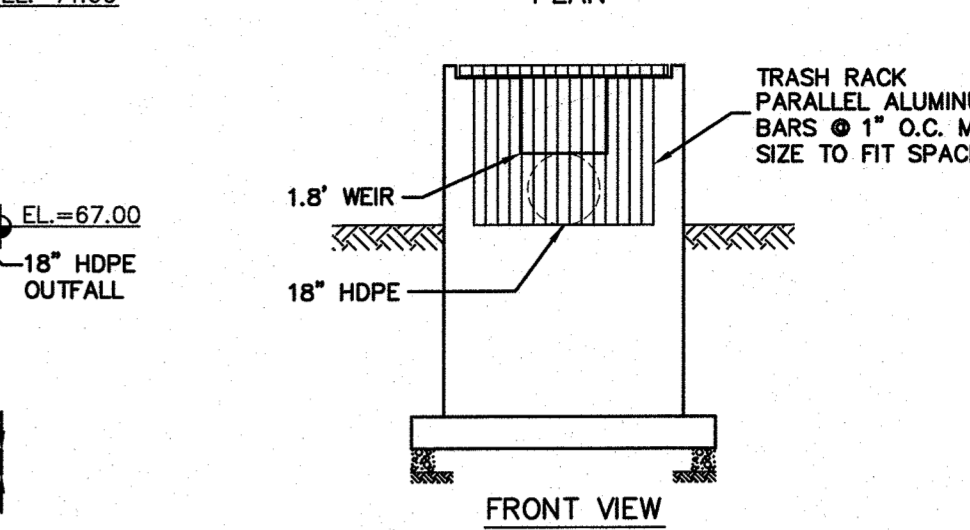


OUTLET CONTROL STRUCTURE #2

NOT TO SCALE



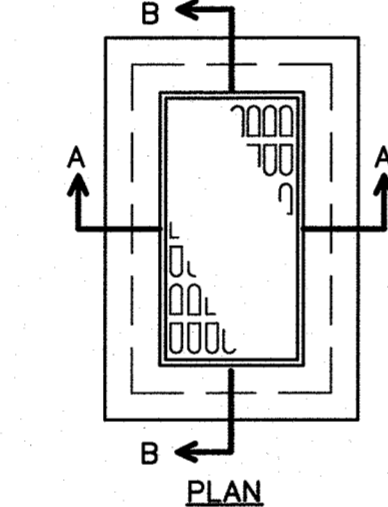
PLAN



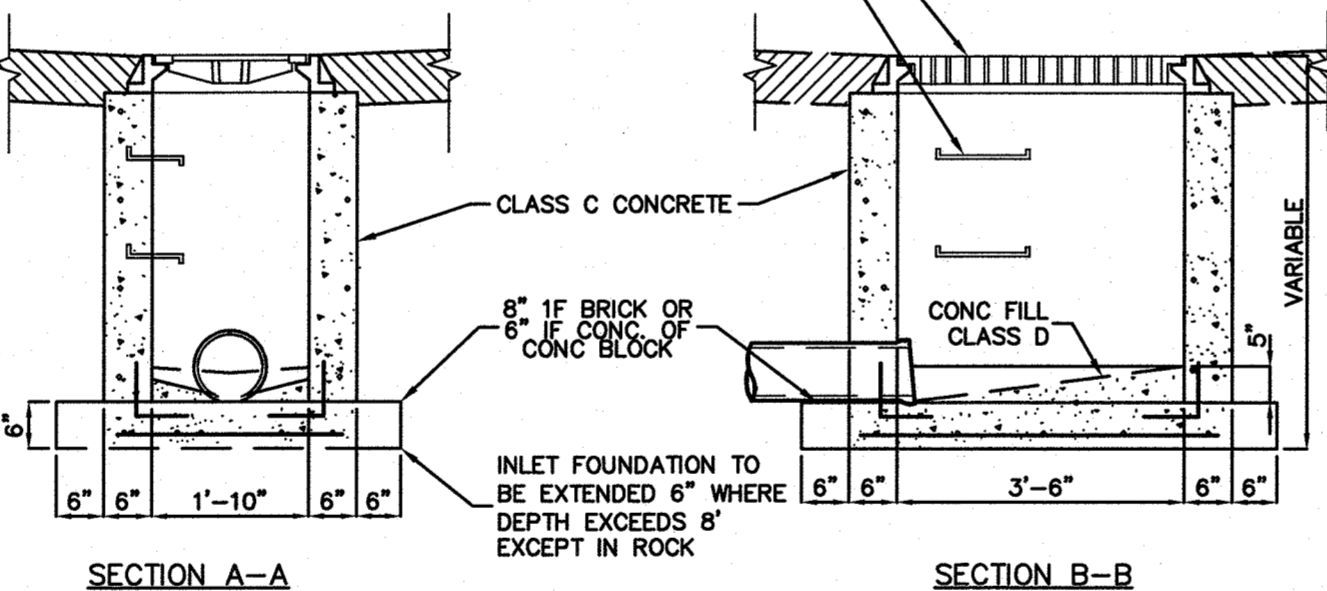
FRONT VIEW

NOTES:

- CONSTRUCT INLET WITH CONCRETE BLOCK. BOTTOM SHALL BE AS SHOWN FOR CONCRETE AND THE OUTSIDE WALL SHALL BE PLASTERED WITH A 1/2" THICK COAT OF F2 CEMENT, SAND MORTAR.
- ALTERNATE CONSTRUCTION OF INLET TO BE PRECAST REINFORCED 4,000 PSI CONCRETE.
- THE INTERIOR WALL AND FLOOR OF ALL INLETS SHALL BE COATED WITH LIQUID ASPHALT.
- SEE GRADING OR UTILITY PLAN FOR DEPTH OF INLETS, PIPE LOCATION AND PIPE SIZE.

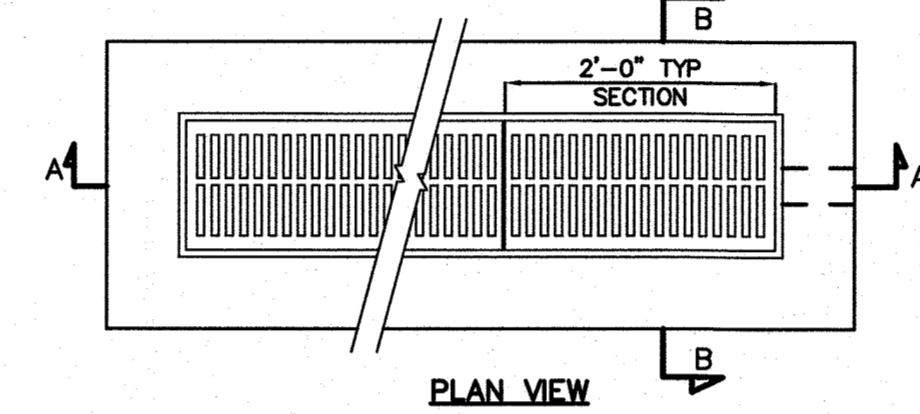


PLAN

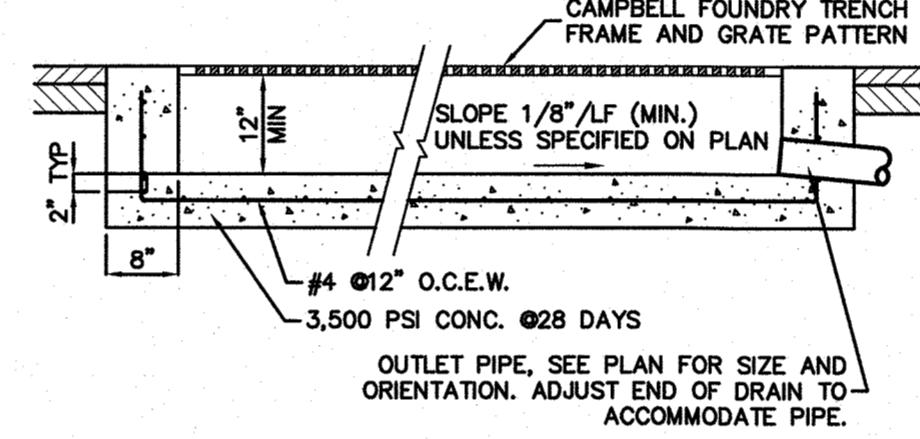


CATCH BASIN, TYPE A

NOT TO SCALE



PLAN VIEW



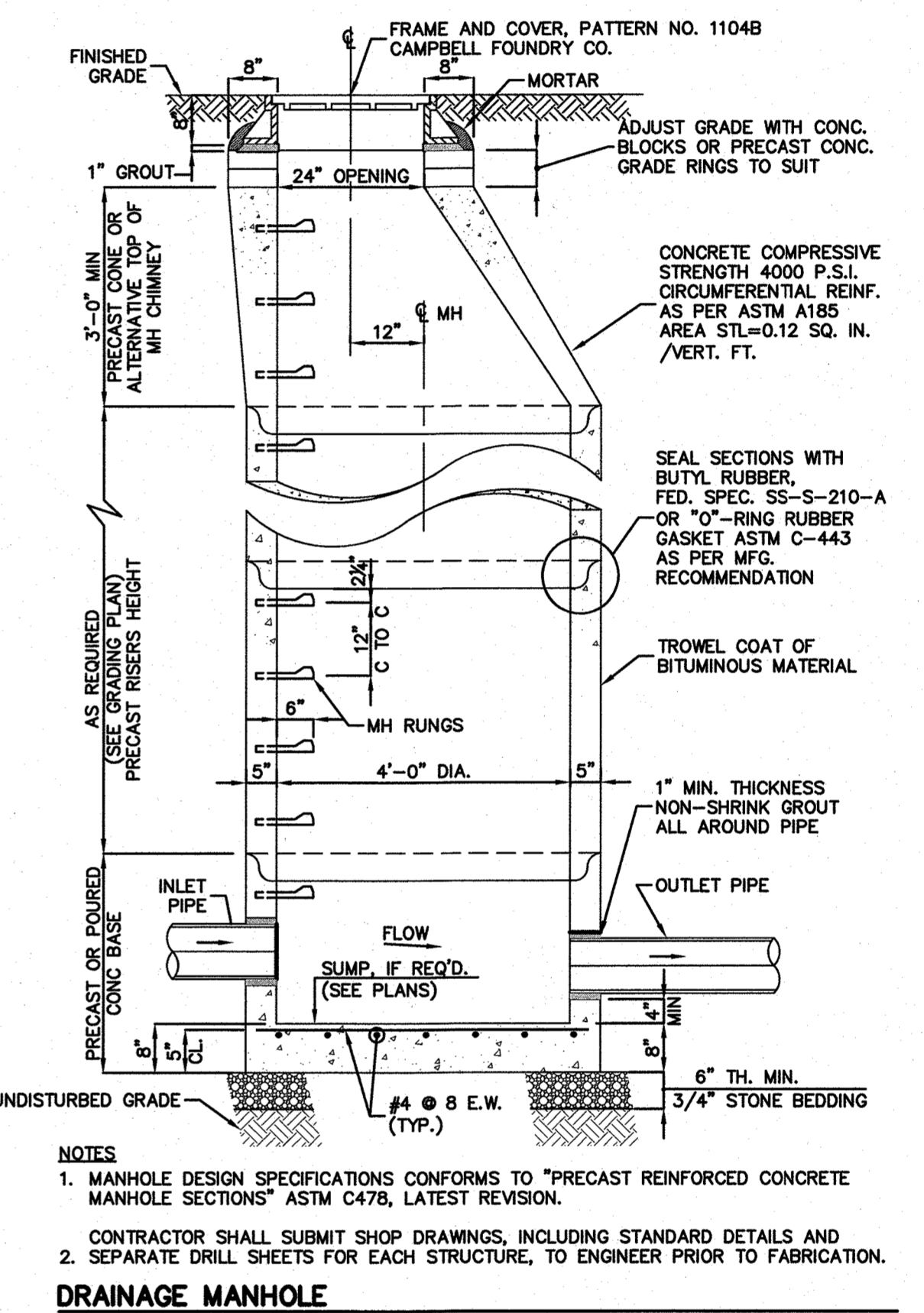
TRENCH DRAIN DETAIL

SECTION B-B

NOT TO SCALE

INSPECTION PORT DETAIL

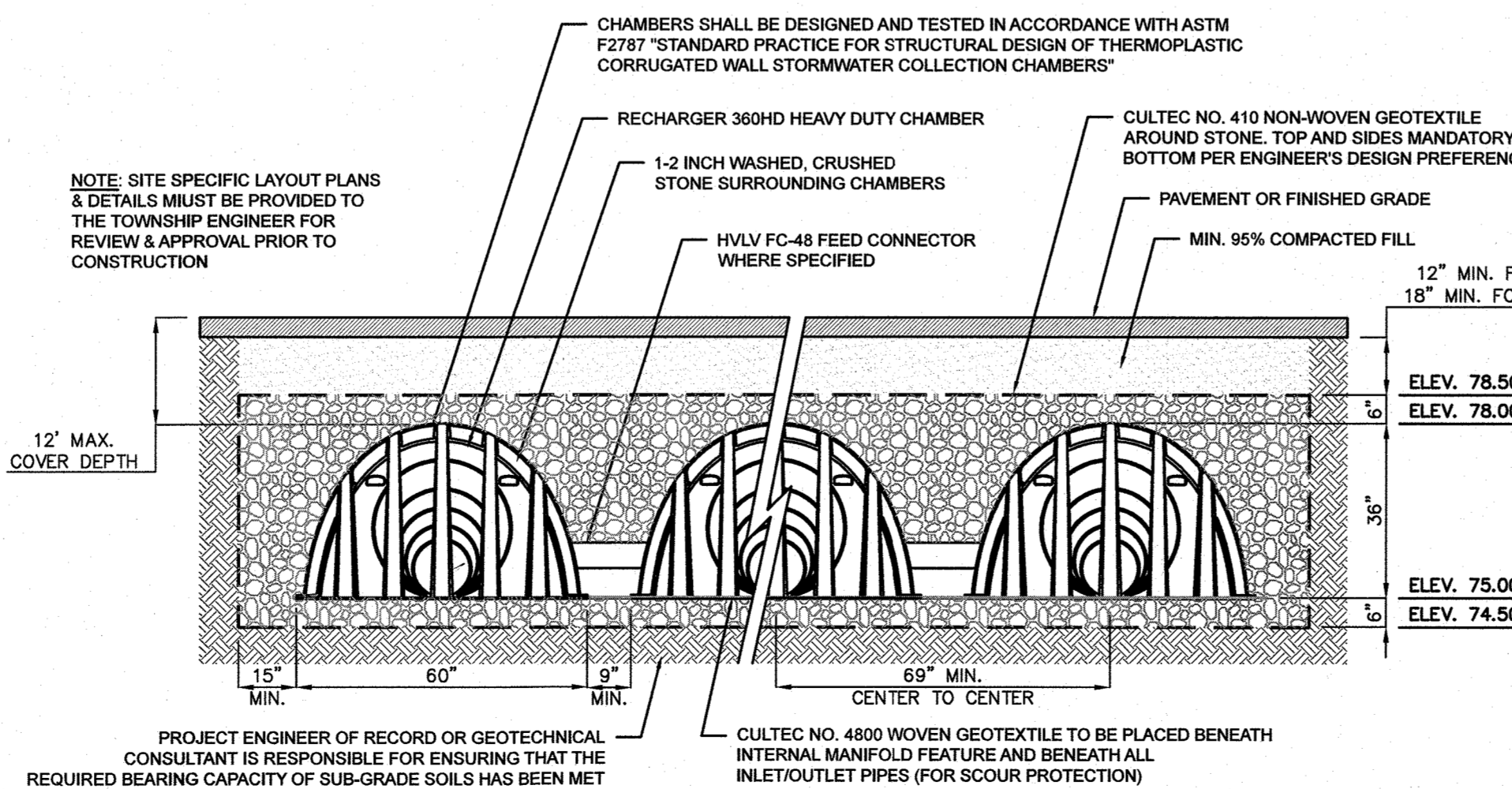
NOT TO SCALE



DRAINAGE MANHOLE

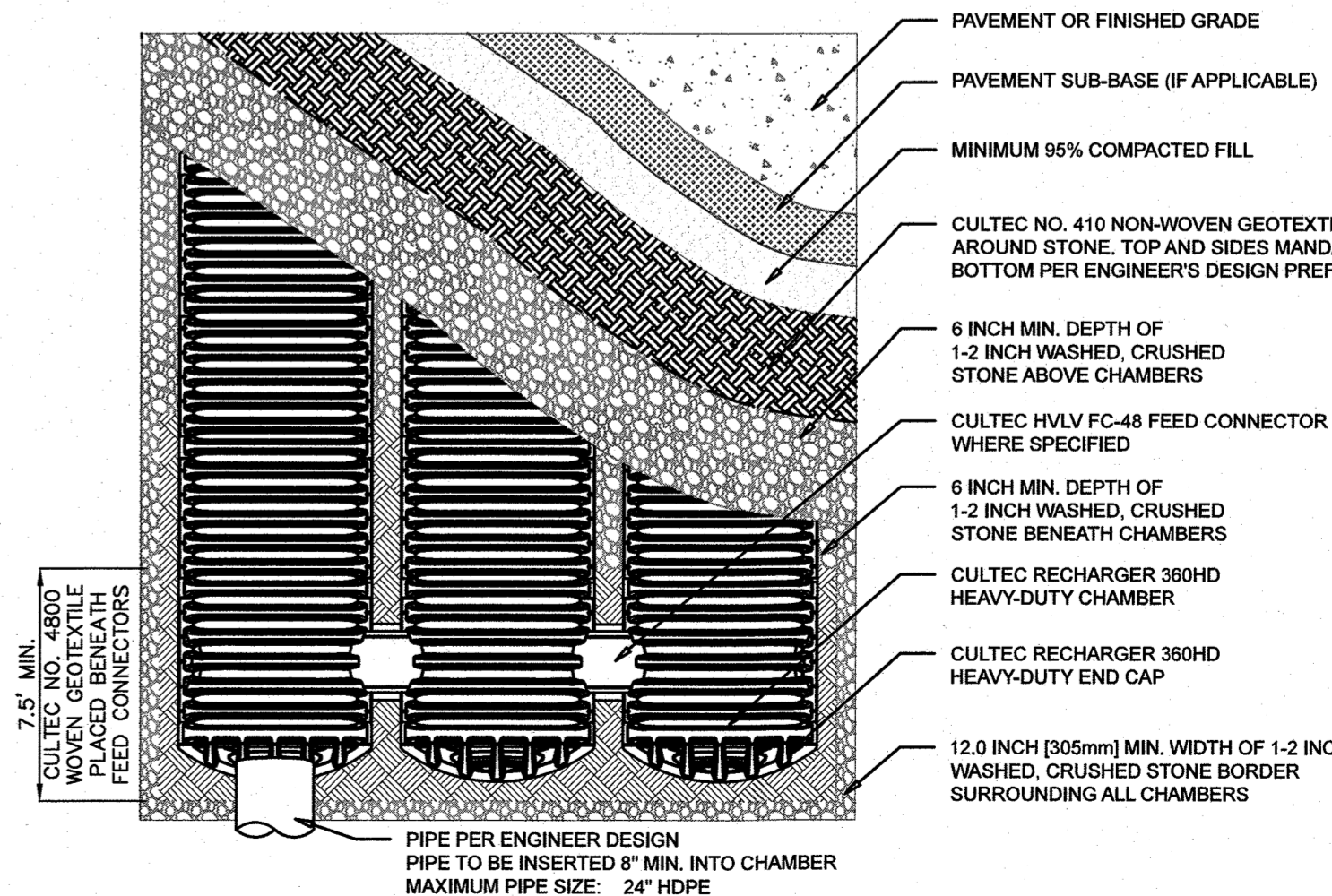
NOT TO SCALE

- NOTES**
- MANHOLE DESIGN SPECIFICATIONS CONFORMS TO "PRECAST REINFORCED CONCRETE MANHOLE SECTIONS" ASTM C478, LATEST REVISION.
 - CONTRACTOR SHALL SUBMIT SHOP DRAWINGS, INCLUDING STANDARD DETAILS AND SEPARATE DRILL SHEETS FOR EACH STRUCTURE, TO ENGINEER PRIOR TO FABRICATION.



CULTEC RECHARGER 360HD TYPICAL CROSS SECTION

NOT TO SCALE



CULTEC RECHARGER 360HD PLAN VIEW

NOT TO SCALE

BERTIN ENGINEERING

66 GLEN AVENUE
GLEN ROCK, NJ 07452
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MA LIC. NO. 40595 NY LIC. NO. 60022
NH LIC. NO. 9368 RI LIC. NO. 6694

ERIC M. HOUGH, P.E.
PROFESSIONAL ENGINEER
NJ LIC. NO. 51993

DRAINAGE DETAILS

RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

TRICONE
2525 US-130 SUITE B4
CRANBURY, NJ 08512

DRAWN BY	C.J.B.	CHECKED BY	C.J.B.
SCALE	AS SHOWN	PROJECT NO.	21-210
DATE	10-12-23	REVISION NO.	1
DRAWING NO.			

UTILITY NOTES

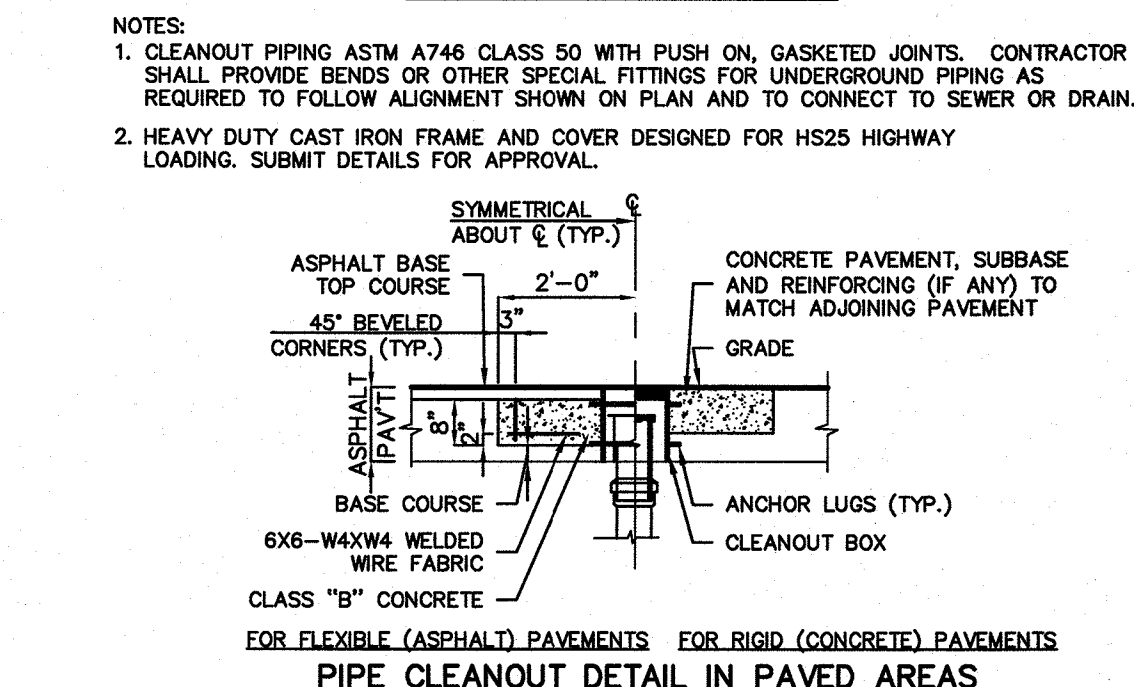
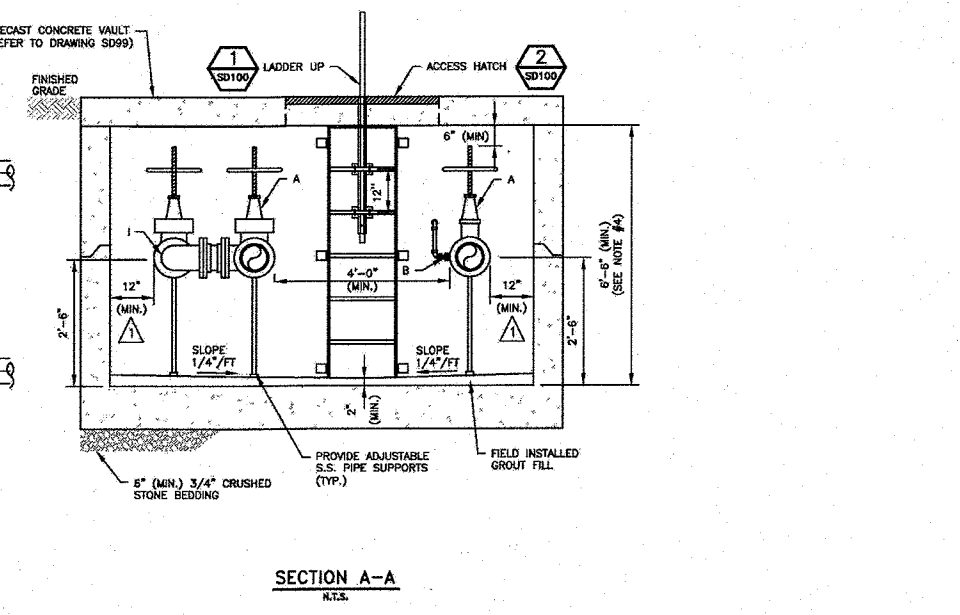
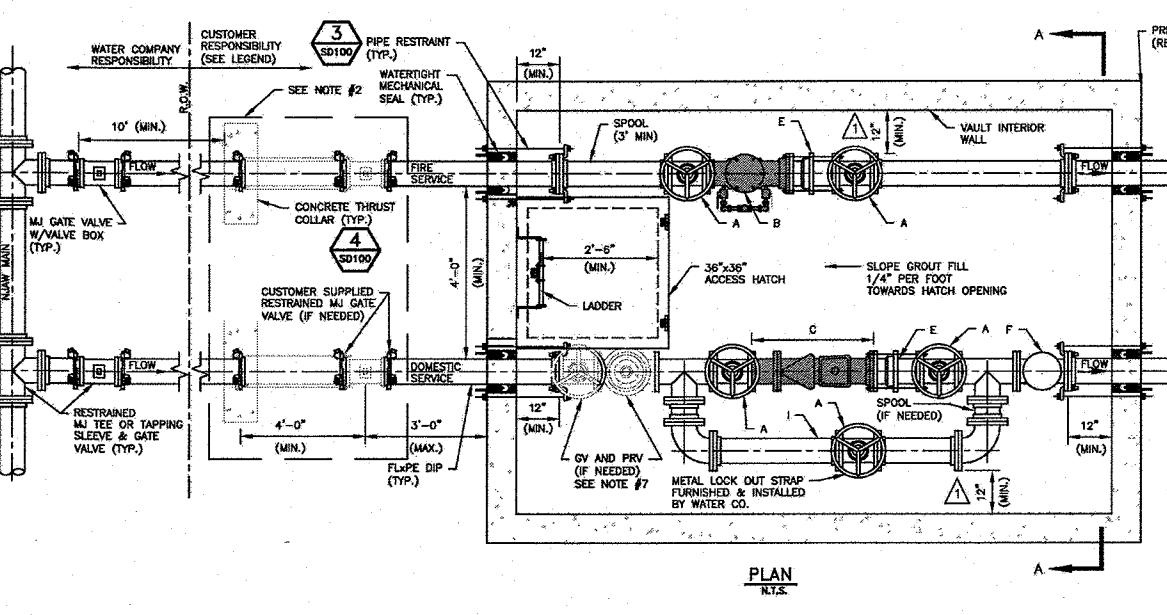
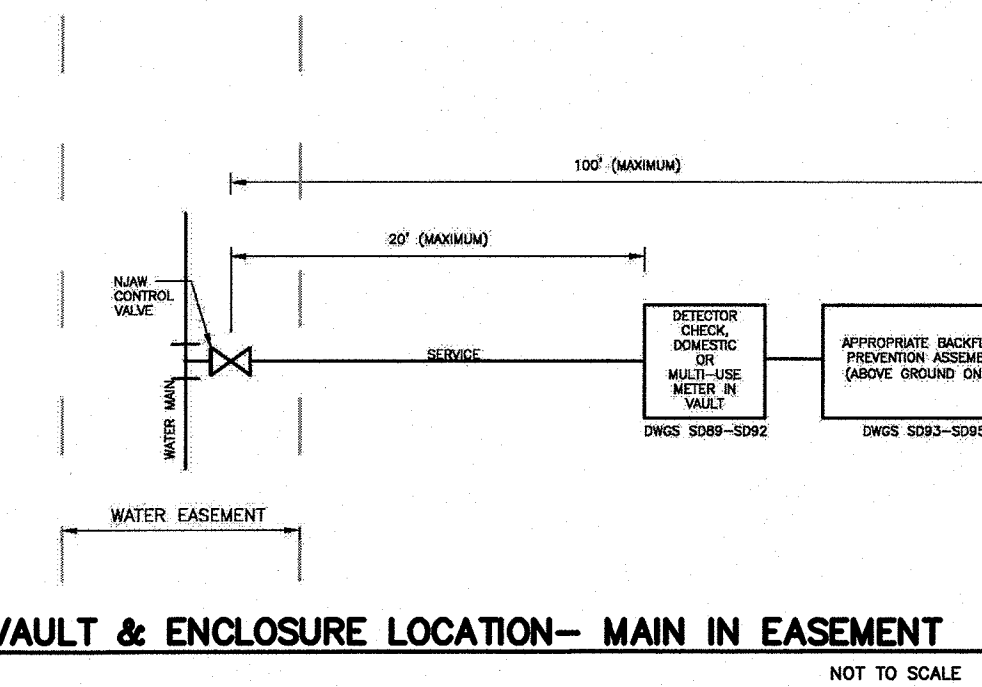
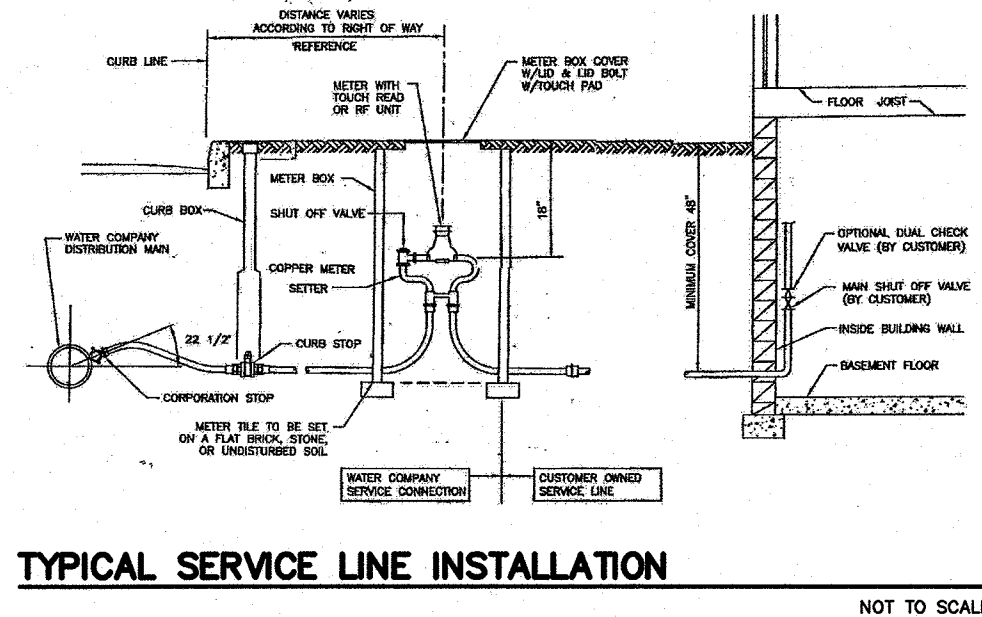
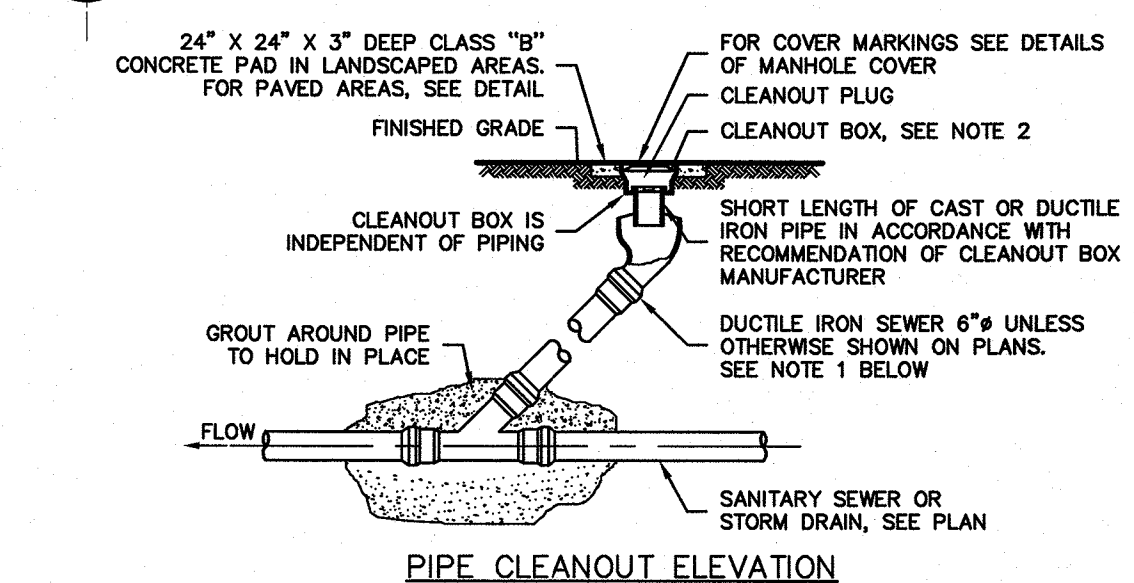
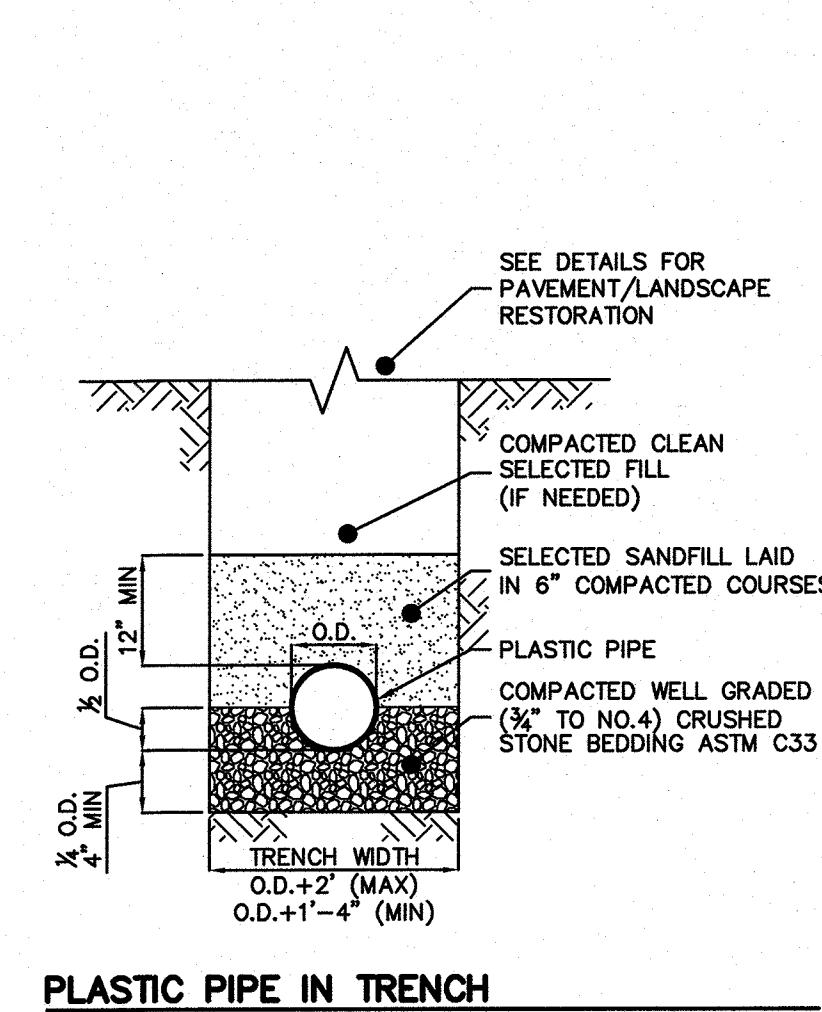
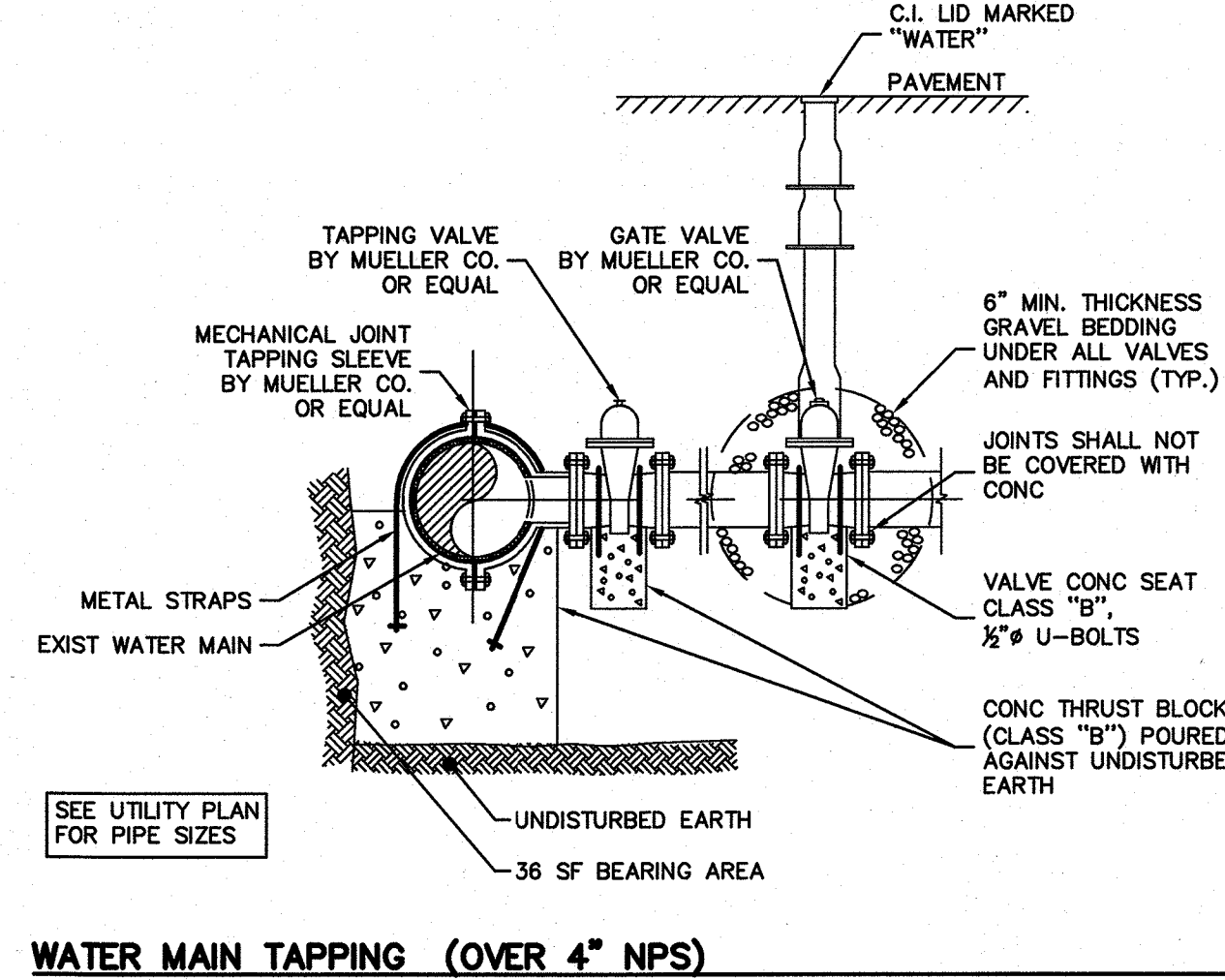
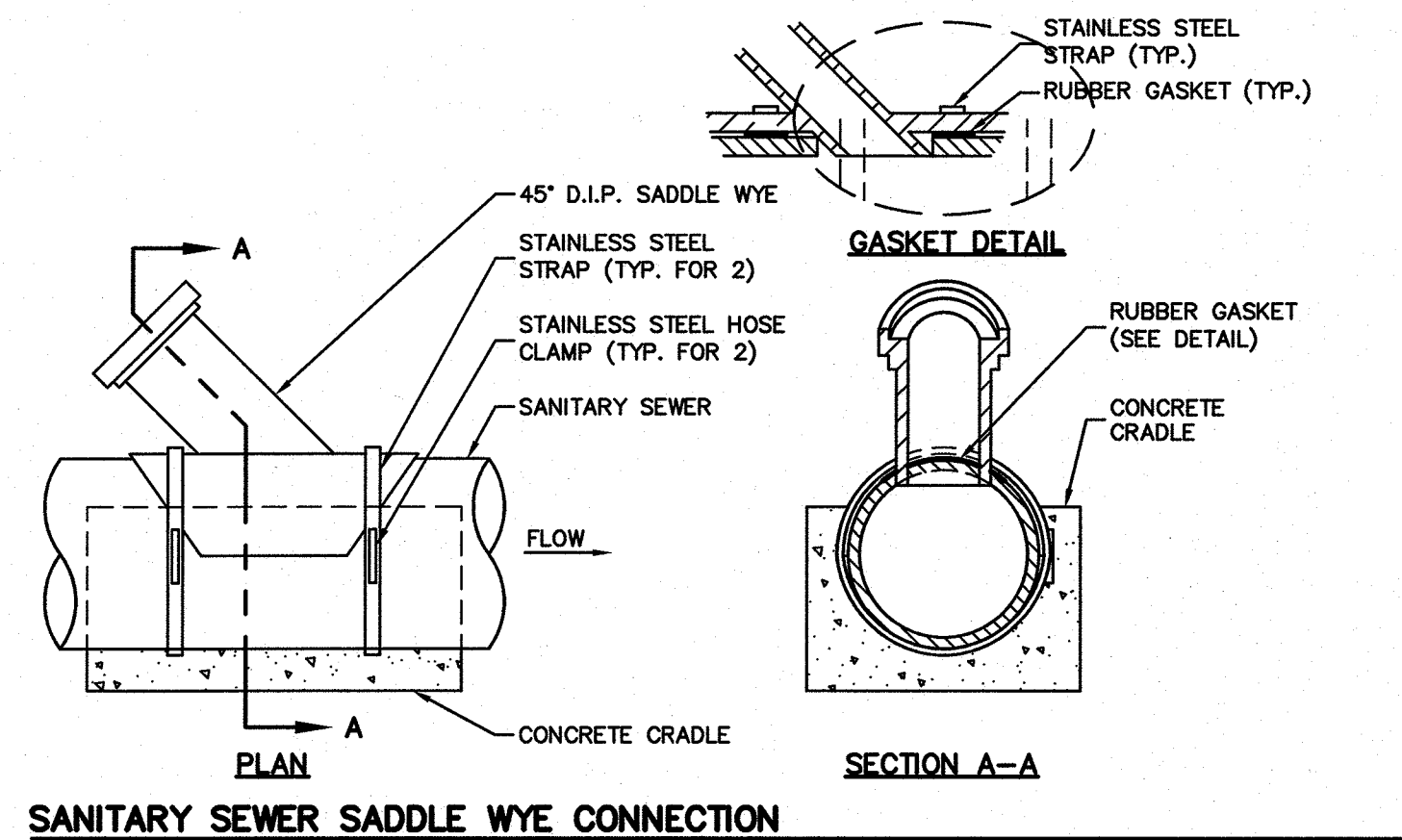
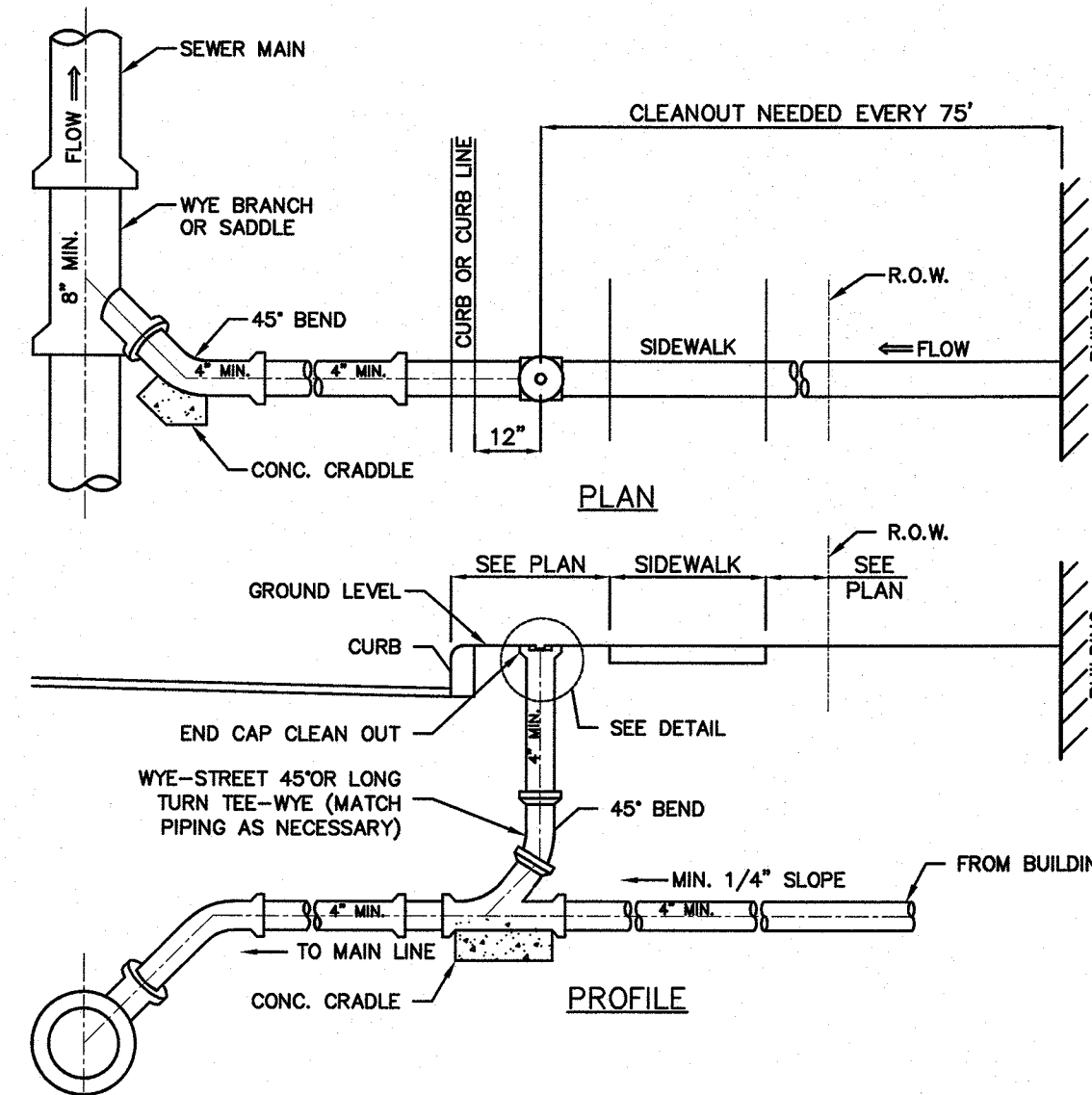
- 1.0 GENERAL**
- EXISTING UTILITY LOCATIONS AREA APPROXIMATE AND ALL PROPOSED CONNECTION CONDITIONS MUST BE VERIFIED PRIOR TO CONSTRUCTION OF ANY ON-SITE UTILITIES.
 - ALL UTILITIES TO BE INSTALLED IN ACCORDANCE WITH UTILITY COMPANY REQUIREMENTS.
 - METER LOCATIONS SHOWN HERE ARE SCHEMATIC. ACTUAL LOCATIONS TO BE DETERMINED BY UTILITY & ARCHITECT.
 - CONCRETE SUPPORT BLOCKS SHALL BE CONSTRUCTED AT ANY CROSSING WHERE THE SEPARATION BETWEEN THE UTILITIES IS LESS THAN EIGHTEEN (18) INCHES OR AS DIRECTED BY THE ENGINEER. CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE DETAIL AS SHOWN HEREIN.
 - THE CONTRACTOR SHALL DIG TEST PITS AT ALL CROSSINGS TO VERIFY EXISTING UTILITY LOCATIONS AND ELEVATIONS PRIOR TO THE START OF CONSTRUCTION. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
 - TRENCH DEPTHS FOR ALL UTILITIES SHALL MEET THE MINIMUM REQUIREMENT OF THE DEPTH SPECIFIED BY THE GOVERNING UTILITY COMPANY OR AUTHORITY. IF DEPTHS TO TOP OF UTILITIES DUE TO PROPOSED GRADING DO NOT MEET GOVERNING UTILITY COMPANY/AUTHORITY DEPTH REQUIREMENT, IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO RELOCATE THE UTILITY.
 - IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REMOVE ALL EXISTING UTILITIES WITHIN THE PROPOSED BUILDING FOOTPRINT.
 - REFER TO PLUMBING PLANS FOR LOCATION OF DOWNSPOUTS, SANITARY LATERALS & UTILITY SERVICE ENTRANCES
 - ALL UTILITY & SEWER RISERS IN PARKING LOT ARE TO BE PROTECTED FROM IMPACT.
 - CONTRACTOR IS TO OBTAIN NECESSARY ROAD/UTILITY OPENING PERMITS.
- 2.0 WATER**
- BUILDING SHALL BE SPRINKLERED.
 - WHERE WATER MAIN IS LOCATED WITHIN 10' HORIZONTALLY OF THE SEWER MAIN, IT SHALL BE AT LEAST 18" HIGHER OR CONCRETE ENCASED.
 - ALL EXPOSED WATER LATERALS SHALL BE INSULATED AND HEAT TRACED.
 - SITUATIONS WHERE THE PROPOSED WATER SERVICE CONFLICTS WITH OTHER UTILITIES, THE CONTRACTOR WILL BE DIRECTED BY THE ENGINEER TO LOOP OVER OR UNDER THE UTILITY AS THE CASE MAY BE. IN ADDITION, THE CONTRACTOR SHALL CONTACT THE OWNER, CITY ENGINEER, AND UTILITY COMPANIES TO ARRANGE FOR PROPER REMOVAL, RELOCATION, AND / OR REPAIRS OF ANY UNDERGROUND OR ABOVE GROUND UTILITIES AND OTHER SERVICES, WHICH MAY INTERFERE THROUGHOUT THE COURSE OF CONSTRUCTION.
 - PRIOR TO CONSTRUCTION, A FLOW TEST SHALL BE PERFORMED TO CONFIRM THE FLOW AND/OR PRESSURE AVAILABLE IN THE MAIN TO WHICH THE PROPOSED BUILDING WILL CONNECT.
 - THRUST BLOCKS SHALL BE INSTALLED FOR PROPOSED WATER LINES AND SHALL BE PROVIDED AT ALL TEES, ELBOWS, BENDS, AND PLUGS. IN ADDITION, WATER SERVICE LINES SHALL BE SEPARATED FROM SANITARY SEWERS AND STORMWATER CONVEYANCE LINES BY EITHER 10 FEET HORIZONTALLY (MINIMUM) OR 1.5 FEET VERTICALLY (MINIMUM). IF THIS SEPARATION CAN NOT BE PROVIDED, THE WATER LINE SHALL BE ENCASED IN CONCRETE AS PER THE WATER COMPANY SPECIFICATIONS.
 - VALVES FOR WATER LATERALS TO BE LOCATED IN LANDSCAPE AREA BETWEEN SIDEWALK AND BUILDING
 - WATER LATERALS TO BE SIZED BY MECHANICAL ENGINEER.
 - PROPOSED LOCATION OF HYDRANT ALONG RIVER ROAD TO BE DETERMINED BY FIRE DEPARTMENT & WATER COMPANY
 - CONTRACTOR TO DETERMINE LOCATION OF EXISTING WATER MAIN IN RIVER ROAD BEFORE CONSTRUCTION.

3.0 STORM & SANITARY SEWER

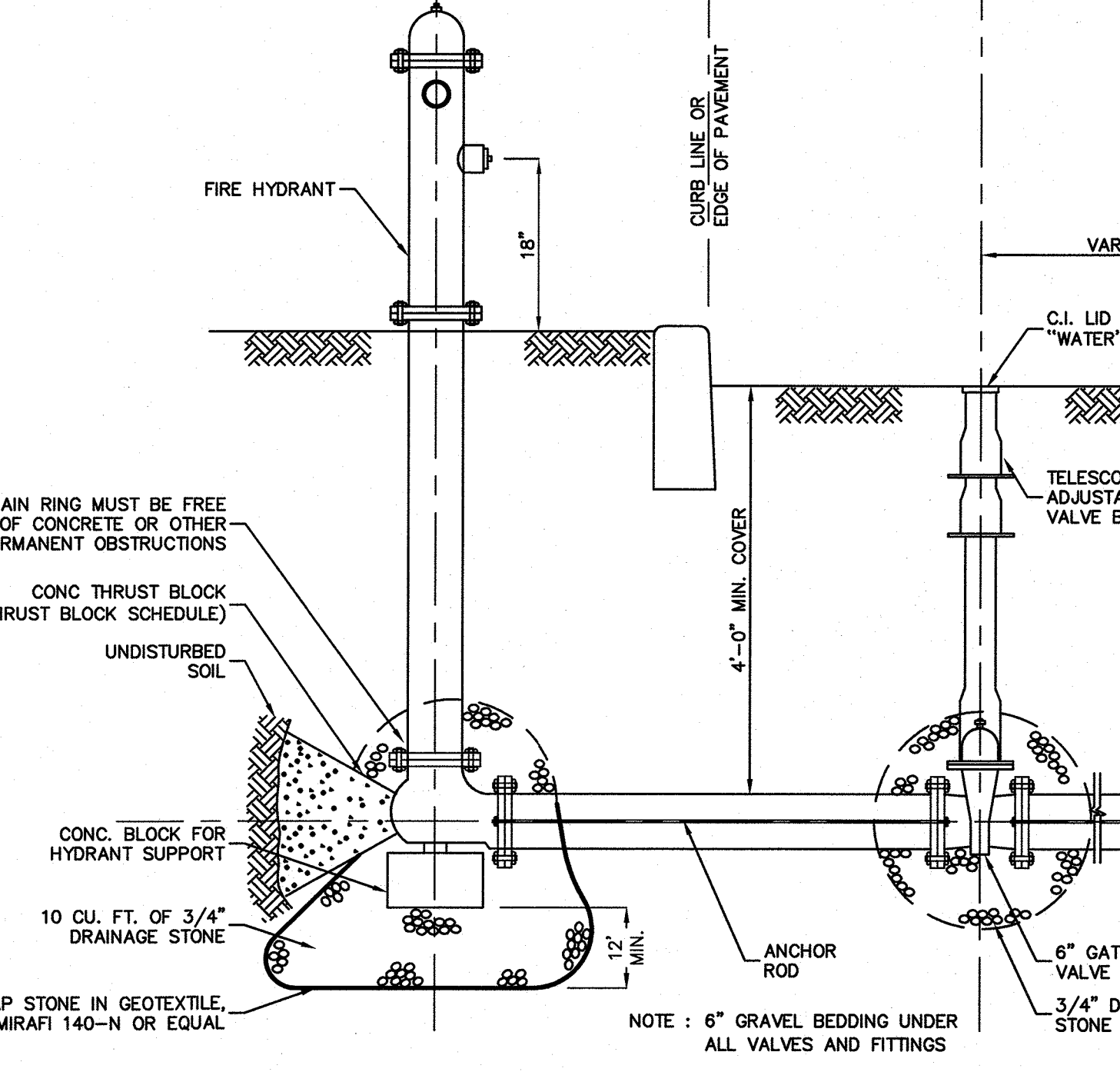
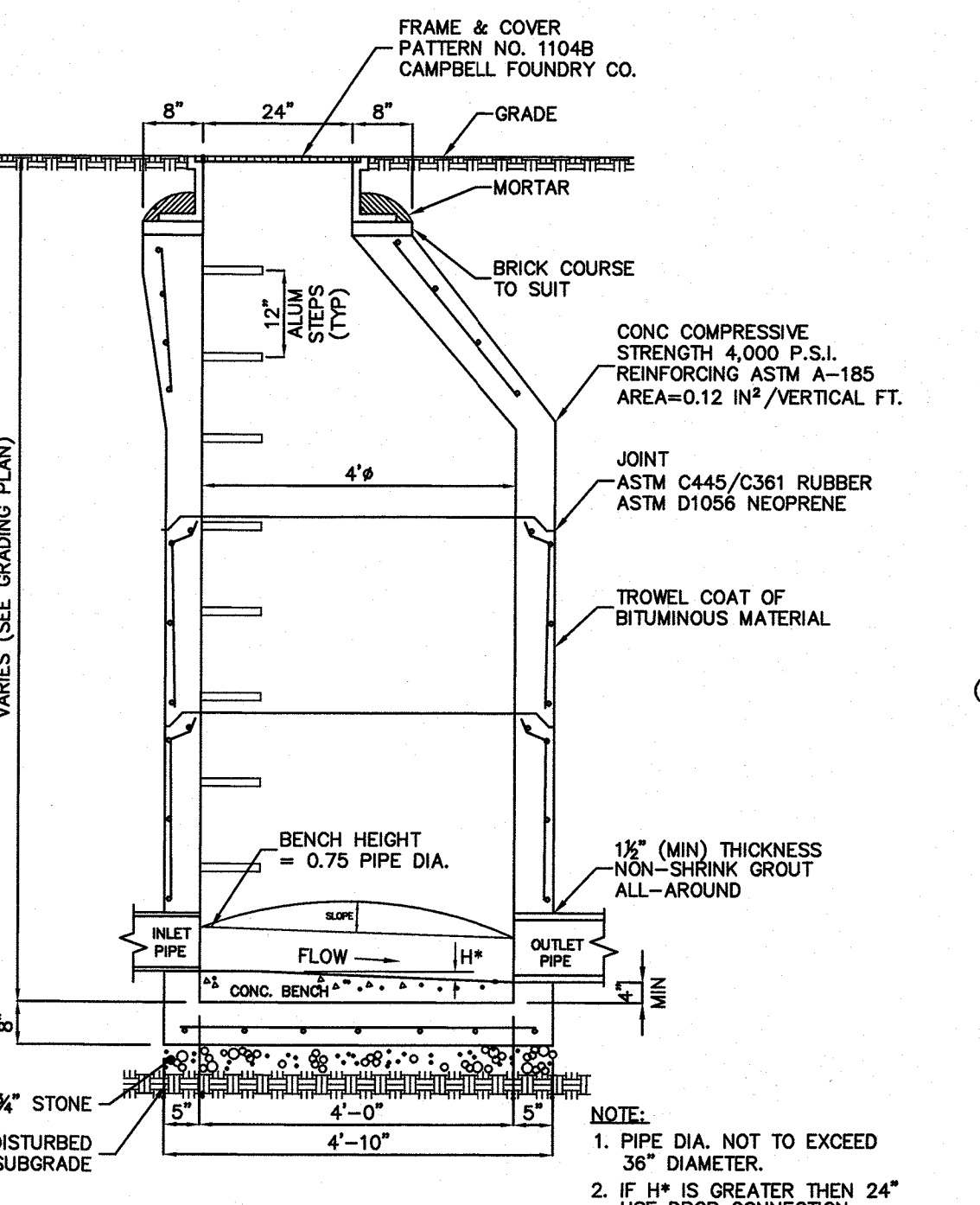
- COORDINATE SEWER CONNECTIONS WITH PLUMBING PLANS.
- ROOF LEADERS ARE SHOWN ON ARCHITECTURAL PLANS, THE CONNECTIONS TO DRAINAGE SYSTEM SHALL BE COORDINATED BETWEEN CONTRACTOR AND ENGINEER PRIOR TO CONSTRUCTION.
- SANITARY PIPES SHALL BE AS NOTED.
- ALL WORK TO BE IN CONFORMANCE WITH THE GUIDELINES OF THE JERSEY CITY PLUMBING SUBCODE.
- THE MUNICIPAL AUTHORITY SHALL BE NOTIFIED AT THE COMMENCEMENT OF WORK AND 24 HOURS PRIOR TO FINAL CONNECTION TO THE COLLECTION SYSTEM AND BACKFILL. THE APPLICANT SHALL SUBMIT A SANITARY SEWER CONNECTION APPLICATION TO THE JERSEY CITY MUNICIPAL UTILITIES AUTHORITY.
- THE APPLICANT/OWNER SHALL BE RESPONSIBLE FOR THE PROPOSED SEWER UP TO THE POINT OF CONNECTION TO THE MUNICIPAL SYSTEM.
- MANHOLE SECTIONS TO CONFORM TO ASTM C-478
- THE CONDITION OF THE EXISTING SANITARY MANHOLE SHALL BE INSPECTED AND RECONDITIONED TO THE SATISFACTION OF THE MUNICIPAL ENGINEER. THE EXISTING BENCH SHALL BE MODIFIED AS NECESSARY FOR THE INSTALLATION OF THE NEW GRAVITY CONNECTION.

4.0 NATURAL GAS & ELECTRIC

- NATURAL GAS PIPES TO BE SIZED BY GAS COMPANY.
- THE CONTRACTOR SHALL INSTALL PROTECTIVE BLOCKING, BRACING OR SHEETING TO SUPPORT ANY EXPOSED GAS UTILITIES IN ACCORDANCE WITH THE GOVERNING GAS COMPANY REGULATIONS.
- TELEPHONE, ELECTRIC, GAS, AND CABLE LINES AND STRUCTURE LOCATIONS SHOWN ON THE PLANS ARE TENTATIVE AND MAY CHANGE PER UTILITY COMPANY DIRECTION. THE CONTRACTOR SHALL COORDINATE FINAL LOCATIONS AND INSTALLATION REQUIREMENTS WITH THE APPLICABLE UTILITY COMPANIES.
- PRIOR TO CONSTRUCTION ALL UTILITY POLE RELOCATIONS AND BUILDING CONNECTIONS TO BE COORDINATED BY THE CONTRACTOR AND GOVERNING UTILITY AUTHORITY.
- SERVICES TO BE RUN OVERHEAD FROM UTILITY POLE.
- RELOCATION OF UNDERGROUND ELECTRIC SERVICE THAT IS NECESSITATED BY ANY MODIFICATIONS/REMOVAL/RELOCATION OF UTILITY POLES IS THE RESPONSIBILITY OF THE PROPERTY OWNER.



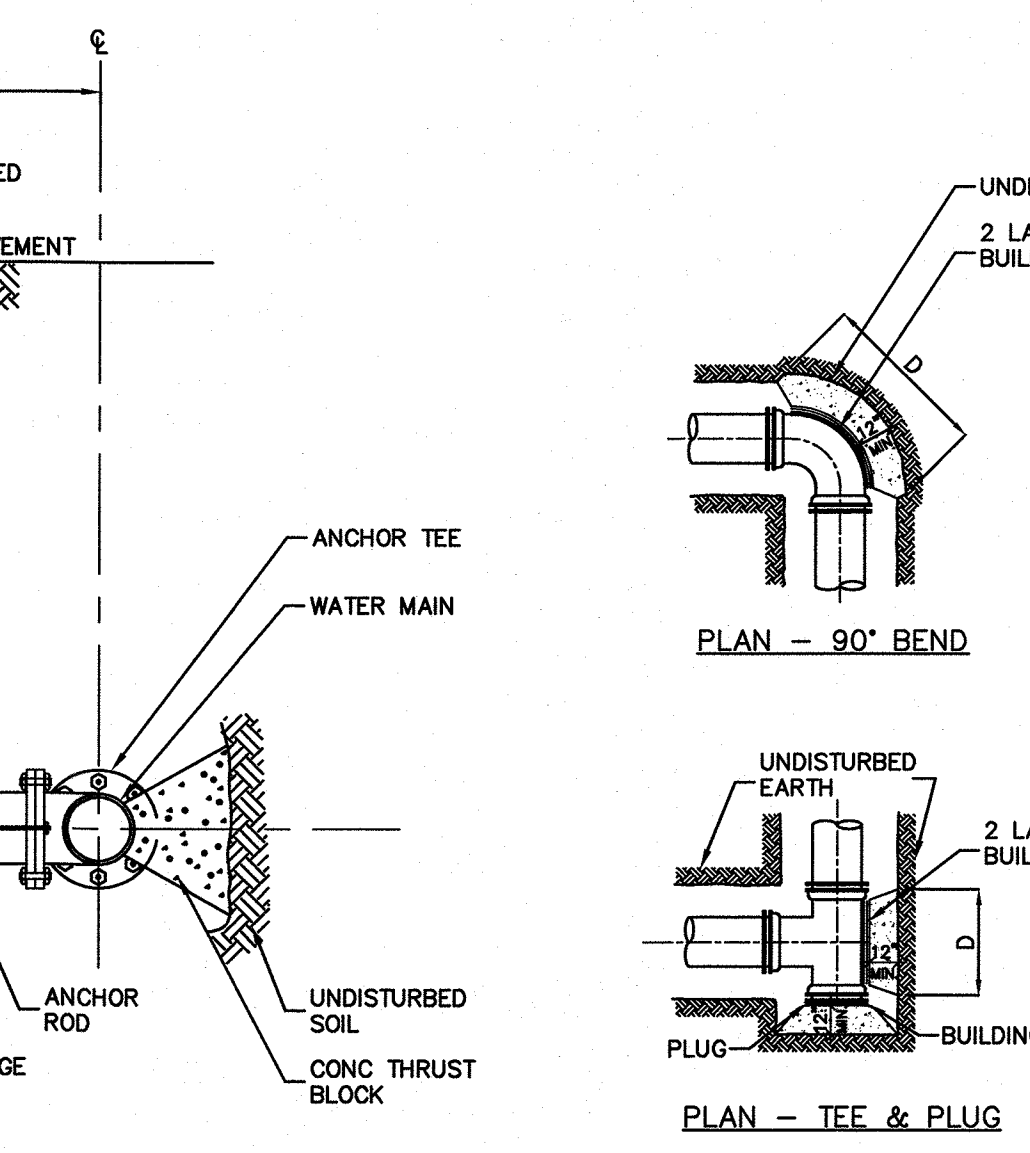
- NOTES:**
- SEE PLAN FOR PIPE SIZES, SLOPE AND LOCATIONS.
 - MAINTAIN 1% MIN SLOPE. USE 2% SLOPE UNLESS OTHERWISE SPECIFIED ON PLAN.
 - CLEANOUTS TO BE AS SHOWN ON PLAN, BUT NOT GREATER THAN 75' O.C. FOR 4\"/>
- BUILDING SEWER CONNECTION AND CLEANOUT DETAIL**
NOT TO SCALE



STANDARD DETAIL DOMESTIC & FIRE SERVICE METER VAULT

PIPE DIAMETER (ø)	5\"/>					
4"	0.5	1.4	2.6	1.8	2.2	2.0
6"	1.5	3.0	6.0	4.0	4.5	4.5
8"	2.5	5.0	9.5	6.5	9.5	8.0
10"	4.1	8.0	13.0	9.5	12.5	12.5
12"	5.5	11.5	19.0	13.5	16.0	18.0
16"	9.0	18.0	33.0	23.0	27.0	32.0
20"	14.0	28.0	51.0	36.0	42.0	50.5

THRUST BLOCK SCHEDULE



CONCRETE/METAL PIPE IN TRENCH DETAIL
NOT TO SCALE

STANDARD SANITARY MANHOLE
NOT TO SCALE

TYPICAL FIRE HYDRANT INSTALLATION
NOT TO SCALE

THRUST BLOCK DETAILS
NOT TO SCALE

PLUGGED TEE
NOT TO SCALE

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ERIC M. HOUGH, P.E.
PROFESSIONAL ENGINEER
NJ LIC. NO. 51855

NO.	DATE	REVISION
1	1-18-24	ADDED UTILITY NOTES & WATER DETAILS

DRAWING TITLE
UTILITY DETAILS

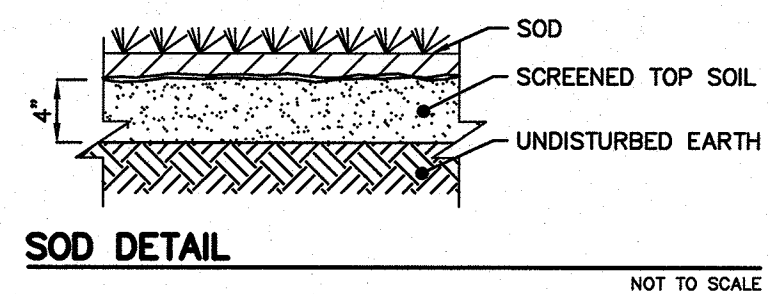
PROJECT
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GROVERS MILL ROAD & MALL ACCESS ROAD
TOWNSHIP OF LAWRENCE
MERCER COUNTY, NEW JERSEY

CLIENT
TRICONE
2525 US-130 SUITE B4
CRANBURY, NJ 08512

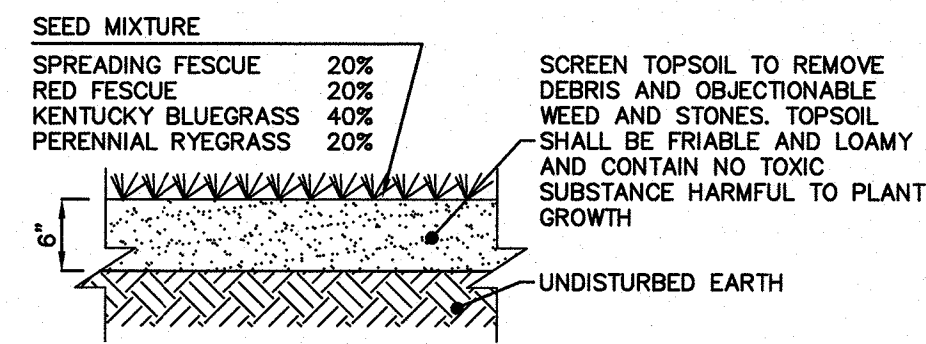
CERTIFICATE OF AUTHORIZATION
24GA28068900 / 21MH00002800

DRAWN BY: V.L. CHECKED BY: C.J.B.
SCALE: AS SHOWN PROJECT NO.: 21-210
DATE: 10-12-23 REVISION NO.: 1

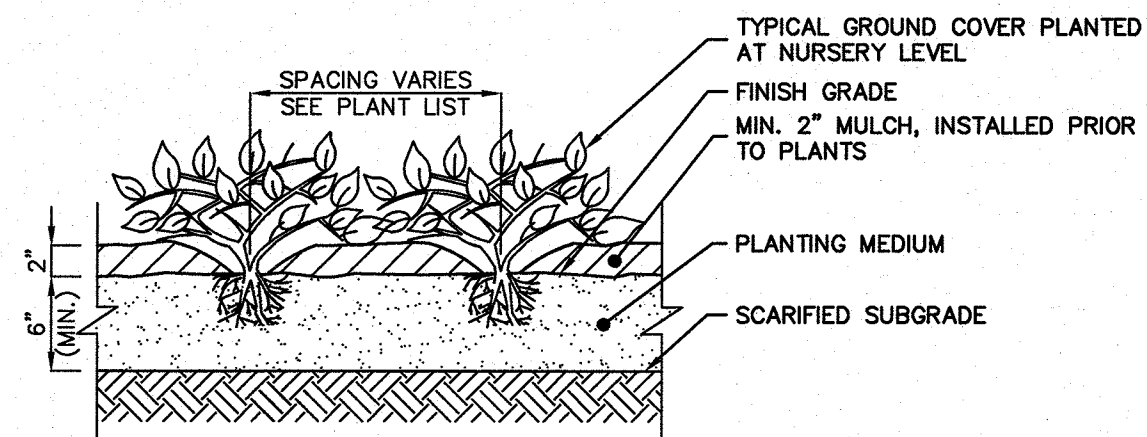
C3.3



SOD DETAIL
NOT TO SCALE

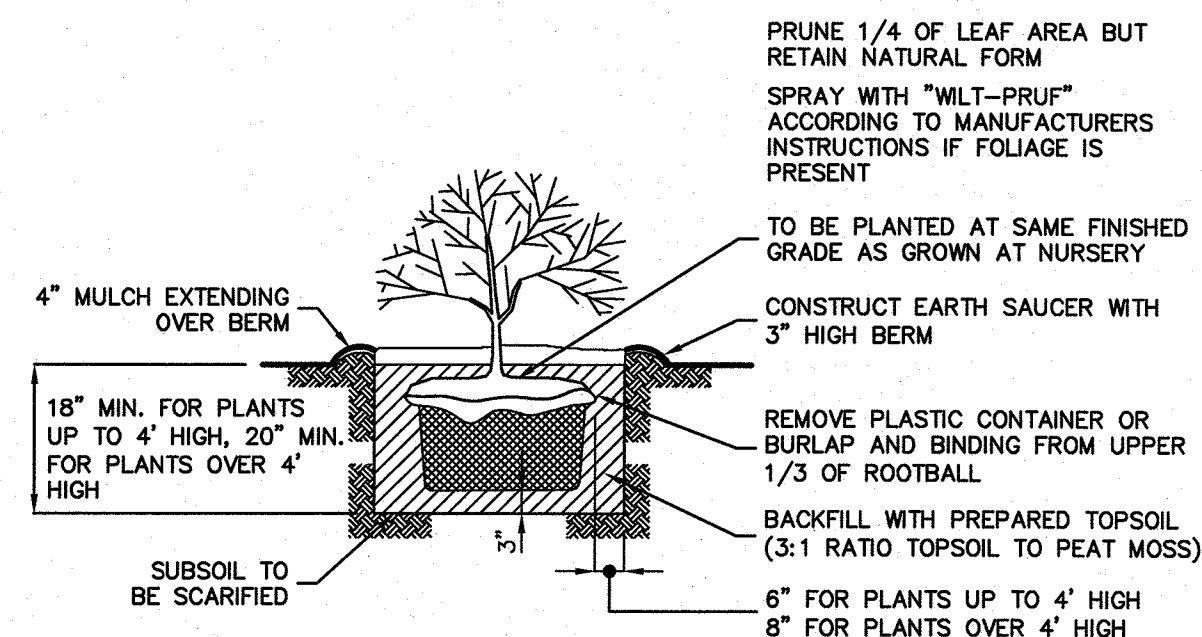


TOP SOIL & GRASS DETAIL
NOT TO SCALE

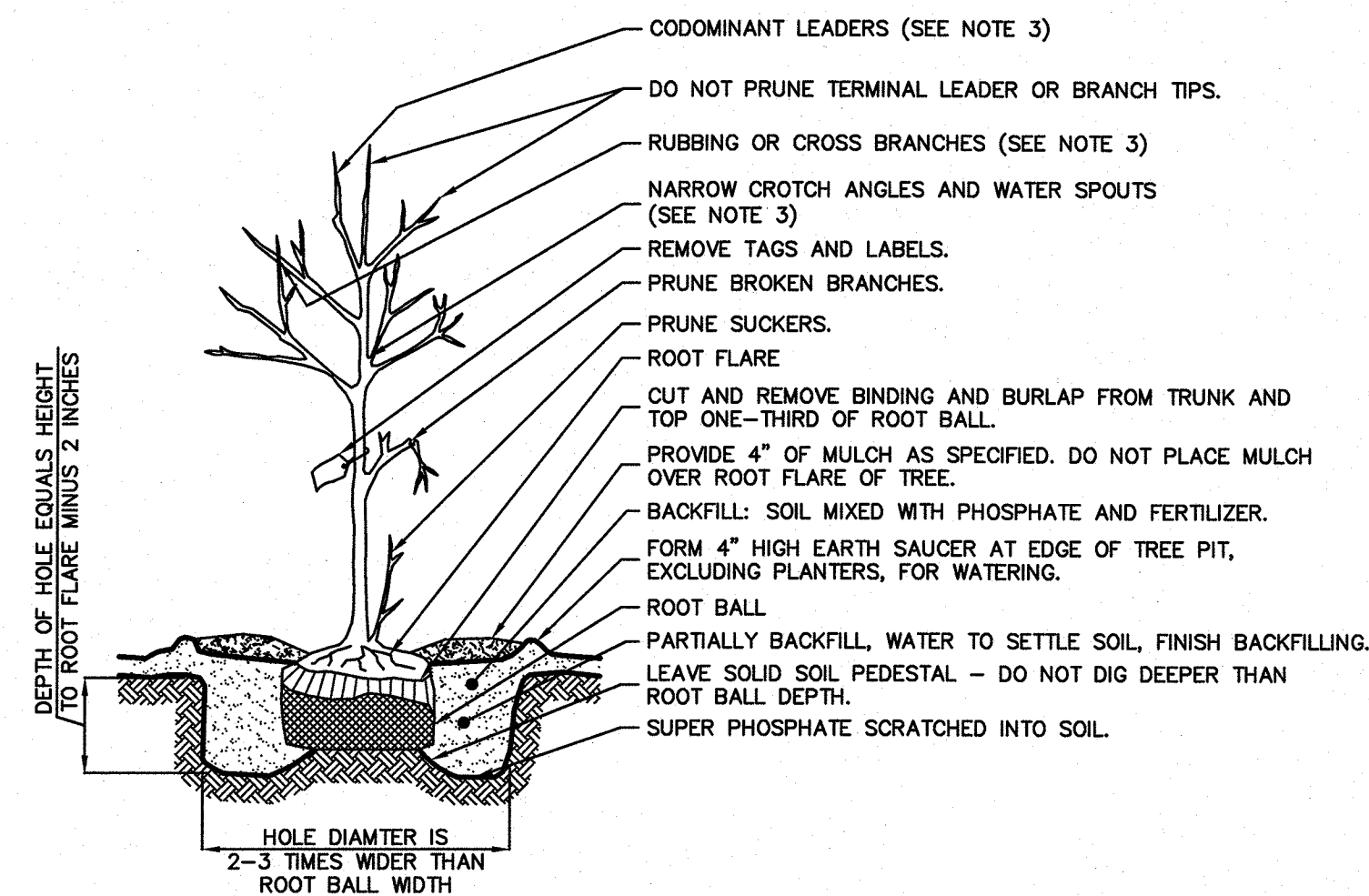


- NOTES:**
1. PLANTING MEDIUM SHALL BE PLANTING SOIL MIXED 50/50 WITH NATIVE SOIL OR NATIVE SOIL AMENDED WITH 25% MIN. DECOMPOSED ORGANIC MULCH AMENDMENT.
 2. ALL GROUND COVER SHALL BE PLANTED AT EQUAL TRIANGULAR SPACING OR ON CENTER SPACING AS SPECIFIED ON LANDSCAPING PLAN.
 3. LOCATE GROUND COVER ONE-HALF OF SPECIFIED SPACING DISTANCE FROM ANY CURB, SIDEWALK OR OTHER HARD SURFACE, UNLESS OTHERWISE SPECIFIED.

GROUNDCOVER PLANTING
NOT TO SCALE

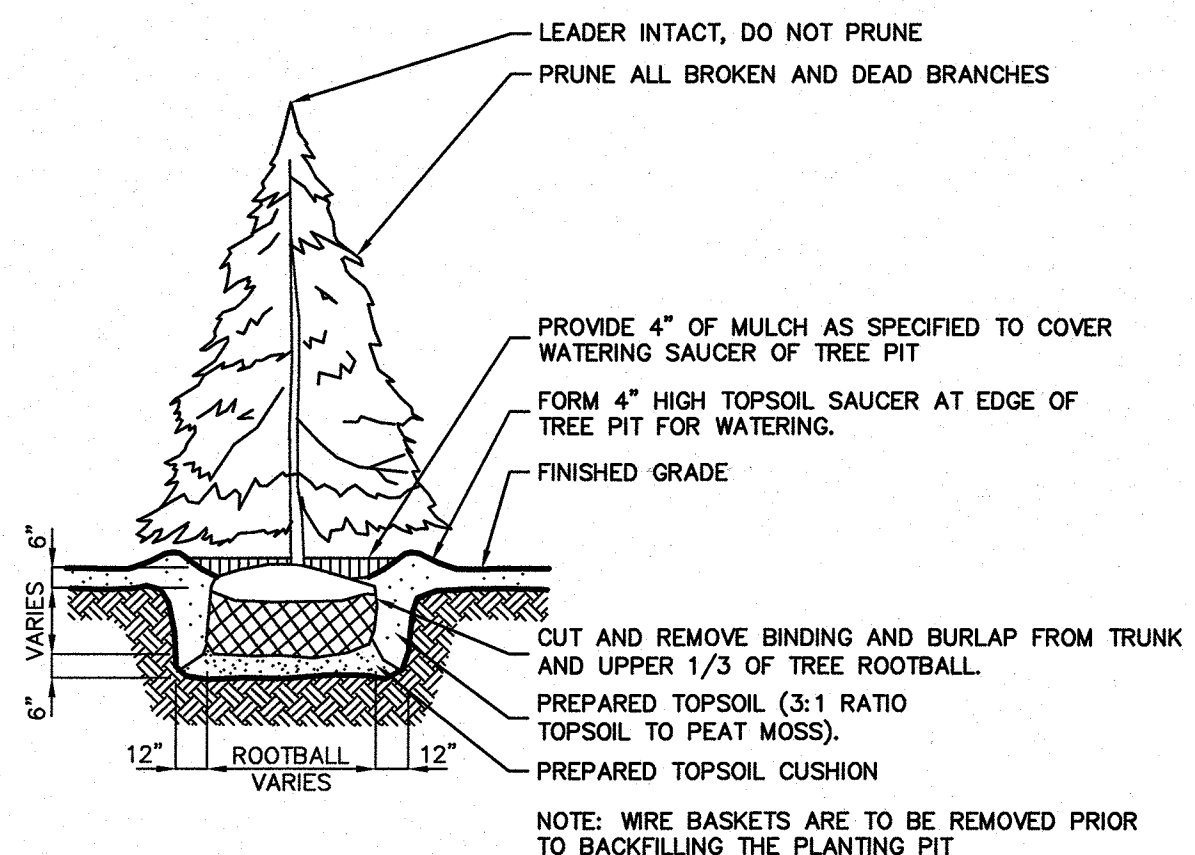


SHRUB PLANTING DETAIL
NOT TO SCALE

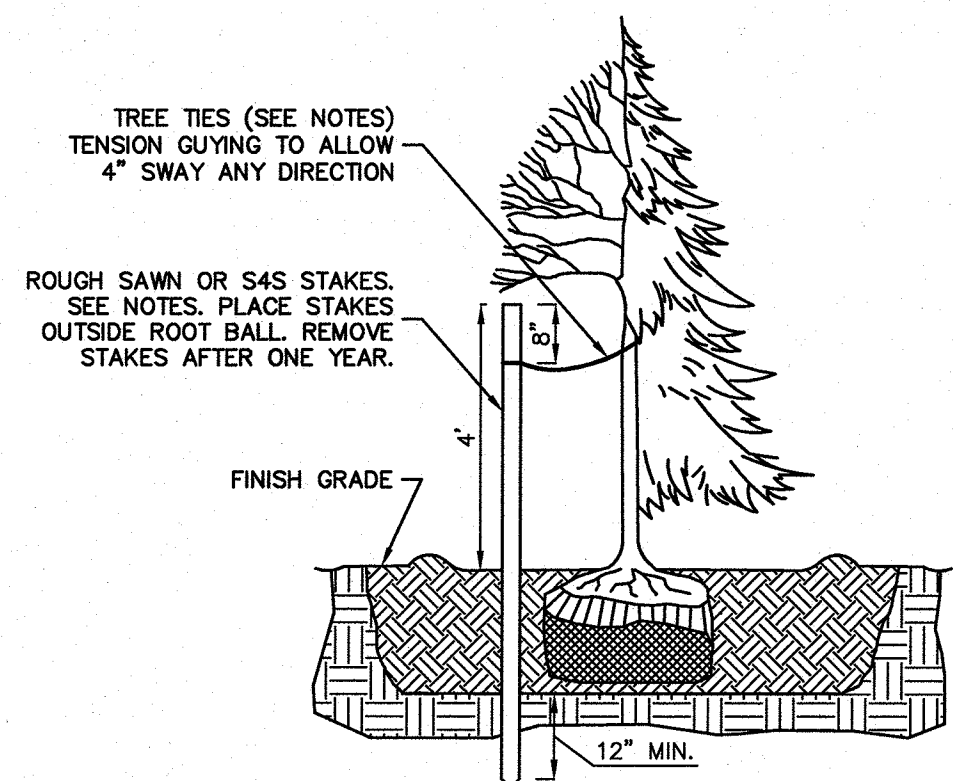


- NOTES:**
1. WIRE BASKETS ARE TO BE REMOVED PRIOR TO BACKFILLING THE PLANTING PIT.
 2. DO NOT STAKE TREE OR WRAP TRUNK UNLESS SPECIFIED ON PLANS OR REQUIRED BY A REVIEWING ENGINEER OR INSPECTOR. IF STAKING IS REQUIRED, A DETAIL WILL BE PROVIDED. IF TRUNK WRAPPING IS REQUIRED USE A WATERPROOF, BIODEGRADABLE TREE WRAP WITH 50% OVERLAP SECURED WITH HEMP CORD TO FIRST BRANCHING.
 3. AT TIME OF PLANTING, ONLY PRUNE DEAD OR BROKEN BRANCHES, ANY SUCKERS AND ANY BRANCHES THAT MAY BE A HAZARD TO PEDESTRIANS. AT 2-3 YEARS AFTER PLANTING, PRUNE THE FOLLOWING: CODOMINANT LEADERS, RUBBING OR CROSS BRANCHES, WATER SPOUTS AND BRANCHES WITH NARROW CROTCH ANGLES.

TYPICAL TREE PLANTING DETAIL
NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL
NOT TO SCALE



TREE STAKING DETAIL
NOT TO SCALE

- TREE STAKING NOTES:**
1. STAKES TO BE CONSTRUCTION GRADE, ROUGH SAWN OR FINISHED DOUGLAR FIR OR PINE. STAKE SIZE TO BE 1 1/2" X 1 1/2" BY THE FOLLOWING LENGTHS:
- TREES 36" AND SHORTER - USE ONE 6 FT (APPROX.) STAKE
- TREES TALLER THAN 36" - USE TWO 8 FT (APPROX.) STAKES
 2. DRIVE STAKES VERTICALLY AND AT LEAST 12" INTO UNDISTURBED SOIL. DO NOT DRIVE STAKES THROUGH ROOT BALL. LOCATE STAKES TO BEST RESIST PREVAILING WINDS WHERE POSSIBLE.
 3. TREE TIES TO BE EITHER:
PLASTIC CHAIN TYPE, APPROX. 1" WIDTH BY 1/8" DEPTH. WHERE TWO STAKES ARE REQUIRED, CROSS THE TIES BETWEEN STAKES AND WRAP TIE ONCE AROUND TREE. FASTEN SECURELY TO STAKE.
2 STRANDS #12 GAUGE GALV. ANNEALED STEEL WIRE TWSTED. PORTION OF WIRE THAT GOES AROUND TREE TO BE ENCLOSED IN NEW BLACK REINFORCED RUBBER HOSE. WIRE IS TO BE DOUBLE WRAPPED AROUND STAKE AND TWISTED TO TIGHTEN.

LANDSCAPE MAINTENANCE NOTES

1. PROPERTY OWNER WILL BE RESPONSIBLE FOR MAINTENANCE OF ALL LANDSCAPING.
2. TREES AND SHRUBS: MAINTAIN FOR THE FOLLOWING MAINTENANCE PERIOD BY PRUNING, CULTIVATING, WATERING, WEEDING, FERTILIZING, RESTORING PLANTING SAUCERS, TIGHTENING AND REPAIRING STAKES AND GUY SUPPORTS, AND RESETTling TO PROPER GRADES OR VERTICAL POSITION, AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS. SPRAY AS REQUIRED TO KEEP TREES AND SHRUBS FREE OF INSECTS AND DISEASE. RESTORE OR REPLACE DAMAGED TREE WRAPPINGS.
3. GROUND COVER AND PLANTS: MAINTAIN FOR THE FOLLOWING MAINTENANCE PERIOD BY WATERING, WEEDING, FERTILIZING, AND OTHER OPERATIONS AS REQUIRED TO ESTABLISH HEALTHY, VIABLE PLANTINGS.
4. THOSE PERFORMING SUCH WORK BE PROFESSIONALS CERTIFIED IN SUCH WORK. (ISA CERTIFIED, CERTIFIED TREE EXPERT CERTIFICATION AND/OR SHOW PROOF OF NOT LESS THAN 5 YEARS EXPERIENCE IN SUCH HORTICULTURAL WORK HAS BEEN OBTAINED).
5. MAINTENANCE PERIOD: 24 MONTHS FROM DATE OF SUBSTANTIAL COMPLETION AS DETERMINED BY THE BOROUGH'S LANDSCAPE ARCHITECT AND/OR BOROUGH OFFICIAL HAVING JURISDICTION.
6. NORMAL MAINTENANCE AND CARE OF ALL PLANT MATERIAL (WATERING, ETC.) SHALL TAKE PLACE PRIOR TO THE DETERMINATION OF SUBSTANTIAL COMPLETION AS WELL IN ORDER TO PLANTED MATERIAL HEALTHY.

LANDSCAPE NOTES

1. ALL LANDSCAPED AREAS TO RECEIVE A TWELVE INCH (12") LAYER OF COMPACTED TOPSOIL.
2. ALL PLANT MATERIAL TO BE BALLED & BURLAPPED AND CONFORM TO U.S.A. STANDARD FOR NURSERY STOCK U.S.A. Z 60.1-1989.
3. SHRUBS SHALL BE PLANTED IN PITS WITHIN THE BED ONE FOOT GREATER THAN THE SPREAD OF THE ROOTS AND 18" DEEP BELOW FINISH GRADE OR AS DEEP AS IS NECESSARY TO PROPERLY SET THE PLAN AT FINISH GRADE. THE DEPTH OF THE PLANTING PIT SHALL BE ADJUSTED AS NECESSARY TO PERMIT A MINIMUM OF (3") THREE INCHES OF TOPSOIL UNDER BALL OF ALL PLANTS.
4. TOP SOIL USED FOR PLANTING SHALL BE A MIXTURE OF THREE PARTS TOP SOIL TO ONE PART PEAT.
5. IMMEDIATELY AFTER PLANTING OPERATIONS ARE COMPLETED, ALL TREE & SHRUB PITS SHALL BE MULCHED WITH A (4") FOUR INCH LAYER OF ROOT MULCH. THE LIMIT OF THIS MULCH FOR TREES SHALL BE AREA OF THE PIT & FOR SHRUBS IN BEDS, THE ENTIRE AREA OF SHRUB BED.
6. CUT AND REMOVE BURLAP FROM TOP 1/3 OF BALL. NYLON ROPE AND OR NYLON BALLING MATERIAL IS NOT ACCEPTABLE.
7. IF THERE IS A DISCREPANCY BETWEEN THE PLANT COUNT SHOWN IN THE PLANT LIST AND THE PLANTING GRAPHIC, THE GRAPHIC SHALL TAKE PRECEDENCE.
8. IF THE CONTRACTOR FINDS QUESTIONABLE SUBGRADE MATERIAL/SOIL CONDITIONS THAT ARE DELETERIOUS TO PLANT SURVIVAL AND GROWTH OR INHIBIT DRAINAGE HE SHALL NOTIFY THE BOROUGH LANDSCAPE ARCHITECT AND OWNER'S LANDSCAPE ARCHITECT IMMEDIATELY AND PRIOR TO INSTALLATION OF PLANT MATERIALS UPON FINDINGS OF SUCH QUESTIONABLE MATERIAL.
9. PLANT GROUNDCOVERS IN 8" DEEP TOPSOIL BED CONSISTING OF 3 PARTS TOPSOIL AND 1 PART HUMUS. PLANT BULBS IN NATURALIZED DRIFTS.
10. TOPSOIL AND SEED ALL AREAS DISTURBED AS A RESULT OF ANY AND ALL CONSTRUCTION DISTURBANCES, OR STORAGE OF EQUIPMENT, WHETHER SUCH AREAS ARE SHOWN ON THE PLANS OR NOT. CONTRACTOR TO FIELD VERIFY AREAS OF SEED AND OF SOD PRIOR TO SUBMITTING BID.
11. CONTRACTOR SHALL REVIEW THE "PROTECTION AGAINST AND REMEDIATION OF EXCESS SOIL COMPACTION".
12. CONTRACTOR SHALL REVIEW AND COORDINATE HIS WORK WITH THAT OF THE WORK SHOWN ON THE LANDSCAPING PLAN DEVELOPED BY THE APPLICANT'S LANDSCAPE ARCHITECT.
13. UTILITIES/STRUCTURES, CONDUITS ARE TO BE PLACED ALONG THE INSIDE OF CURBING, BOTH EXISTING AND PROPOSED TO ENSURE THAT THEY DO NOT INTERFERE WITH THE INSTALLATION/PLANTING OF PROPOSED CANOPY TREES, EVERGREEN TREES, SHRUBS AND GROUND COVER. ANY CONDUITS, LINES, STRUCTURES FOUND TO BE IN INTERFERENCE OF PROPOSED PLANTINGS SHALL BE REARRANGED, REMOVED AND REPLACED AT CONTRACTOR'S EXPENSE.
14. AT ALL AREAS PROPOSED FOR PLANTINGS AND LANDSCAPING THE CONTRACTOR SHALL REMOVE ALL EXISTING DRIVEWAY/ASPHALT PAVEMENT AND STRUCTURE MATERIALS TO FULL DEPTH INCLUDING ALL SUBBASE MATERIAL. SUBGRADE SHALL BE TILLED/RIPPED TO SOFTEN SUBGRADE. ENTIRE AREA SHALL BE BACK FILLED WITH UP TO NOT LESS THAN 12" OF TOPSOIL.
15. FURNISH AN IRRIGATION SYSTEM AT ALL LANDSCAPED AREAS. IRRIGATION SYSTEM TO BE DESIGNED BY A PERSON LICENSED IN THE STATE OF NEW JERSEY.

LAWNS: SODDING AND SOIL PREPARATION NOTES

1. CONTRACTOR TO FINE GRADE AND PREPARE ALL SITE AREAS TO RECEIVE SOD. MAKE SITE SMOOTH TO FINAL GRADING PLAN ELEVATIONS, FILL IN DEPRESSIONS, LOW SPOTS AND GRADE SMOOTH.
2. ALL LAWN AREAS WITHIN LAWN LIMIT LINES TO RECEIVE 6" OF TOPSOIL PRIOR TO SODDING OPERATIONS. ONCE TOPSOIL HAS BEEN PLACED, CONSTRUCTION ACTIVITY OF ANY KIND (EXCLUDING LANDSCAPING) SHALL NOT BE PERMITTED ON OR ACROSS ANY PLANTING AREA. CONTRACTOR SHALL FULLY EXCAVATE ANY PLANTING AREA THAT IS DISTURBED AND REPLACE WITH TOPSOIL. SCARIFY SOIL TO DEPTH OF 3- INCHES PRIOR TO APPLICATION.
3. LAWNS SHALL BE SODDED FOLLOWING SCARIFYING, FINAL GRADING, FERTILIZING, AND RAKING. LAWN SHALL BE FERTILIZED WITH 12-12-12 ANALYSIS FERTILIZER AT A RATE OF 10 LBS/1,000 SF.
4. WATER AND MAINTAIN GRASS UNTIL STAND IS ESTABLISHED AND READY FOR MOWING AT MINIMUM 4 INCH HEIGHT. CONTINUE TO WATER FOR A MINIMUM 30 DAYS OR UNTIL ACCEPTED BY OWNER.
5. FOLLOWING SODDING OPERATIONS, CLEAN UP EXCESS MATERIALS, AND CLEAN ALL BARK MULCHED AND PAVED AREAS. ALL LAWNS SHALL BE GUARANTEED TO HAVE A UNIFORM STAND OF ACCEPTABLE GRASS AT THE END OF THE ONE YEAR GUARANTEE PERIOD WITH NO BARE SPOTS COMPRISING MORE THAN 2% OF ANY LAWN AREA. ANY AREA SO NOTED WILL BE SODDED UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED.
6. ALL DISTURBED LAWN AREAS SHALL BE SODDED AS NOTED AND AS APPROVED BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.

LAWNS: SEEDING AND SOIL PREPARATION NOTES

1. CONTRACTOR TO FINE GRADE AND PREPARE ALL SITE AREAS TO RECEIVE SEED. MAKE SITE SMOOTH TO FINAL GRADING PLAN ELEVATIONS, FILL IN DEPRESSIONS, LOW SPOTS AND GRADE SMOOTH.
2. ALL LAWN AREAS WITHIN LAWN LIMIT LINES TO RECEIVE 6" OF TOPSOIL PRIOR TO SEEDING OPERATIONS. ONCE TOPSOIL HAS BEEN PLACED, CONSTRUCTION ACTIVITY OF ANY KIND (EXCLUDING LANDSCAPING) SHALL NOT BE PERMITTED ON OR ACROSS ANY PLANTING AREA. CONTRACTOR SHALL FULLY EXCAVATE ANY PLANTING AREA THAT IS DISTURBED AND REPLACE WITH TOPSOIL.
3. HYDROSEEDING IS ACCEPTABLE. APPLY WITH APPROVED EQUIPMENT DESIGNED FOR PROFESSIONAL HYDROSEEDING APPLICATIONS AT RECOMMENDED RATES.
4. PROVIDE FRESH, CLEAN NEW-CROP "PREMIUM" GRADE SEED AND SEED MIXES AS FOLLOWS: (SUBMIT SEASONAL MIX ALTERNATIVE AS APPROPRIATE)
40% KENTUCKY BLUEGRASS
30% PERENNIAL RYE GRASS
30% TURF TYPE TALL FESCUE
5. APPLY SEED AT RATE OF MINIMUM 175 POUNDS PER ACRES (4 LSB/1,000 SF).
6. SCARIFY SOIL TO DEPTH OF 3 INCHES PRIOR TO APPLICATION.
7. LAWNS SHALL BE SEEDDED FOLLOWING SCARIFYING, FINAL GRADING, FERTILIZING, AND RAKING. LAWNS SHALL BE FERTILIZED WITH 12-12-12 ANALYSIS FERTILIZER AT A RATE OF 10 LBS/1,000 SF. APPLY SEED MIX AT SPECIFIED RATE, AND LIGHTLY RAKE INTO TOP 1/4 INCH OF SOIL.
8. MULCH SEEDDED AREAS WITH STRAW MULCH AT RATE OF MINIMUM 1 1/2 TON PER ACRE (70 LBS/1,000 SF). CRIMP OR TACK STRAW MULCH TO REMAIN IN PLACE UNTIL COMPLETE GERMINATION OF SEED AND ESTABLISHED GROWTH.
9. WATER AND MAINTAIN GRASS UNTIL STAND IS ESTABLISHED AND READ FOR MOWING AT MINIMUM 4 INCH HEIGHT. CONTINUE TO WATER FOR A MINIMUM 30 DAYS OR UNTIL ACCEPTED BY OWNER.
10. FOLLOWING SEEDING OPERATIONS, CLEAN UP EXCESS MATERIALS, AND CLEAN ALL BARK MULCHED AND PAVED AREAS.
11. FOLLOWING GERMINATION, APPLY HERBICIDE TO ALL GRASS GROWTH IN PLANT MULCH AREAS.
12. ALL LAWNS SHALL BE GUARANTEED TO HAVE A FULL UNIFORM STAND OF ACCEPTABLE GRASS AT THE END OF THE ONE YEAR GUARANTEE PERIOD WITH NO BARE SPOTS COMPRISING MORE THAN 2% OF ANY LAWN AREA. ANY AREA SO NOTED WILL BE RESEEDDED OR SODDED UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED.
13. ALL DISTURBED LAWN AREAS SHALL BE SEEDDED AS NOTED AND AS APPROVED BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.

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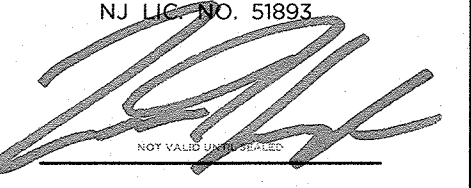


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NO.	DATE	REVISION
1	3-19-24	REMOVE SEE. ERSON. DETAILS

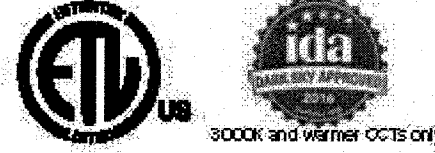
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LANDSCAPE DETAILS

PROJECT
RESIDENTIAL DEVELOPMENT
BLOCK 4201.01, LOT 33.03
GROVERS MILL ROAD & MALL ACCESS ROAD
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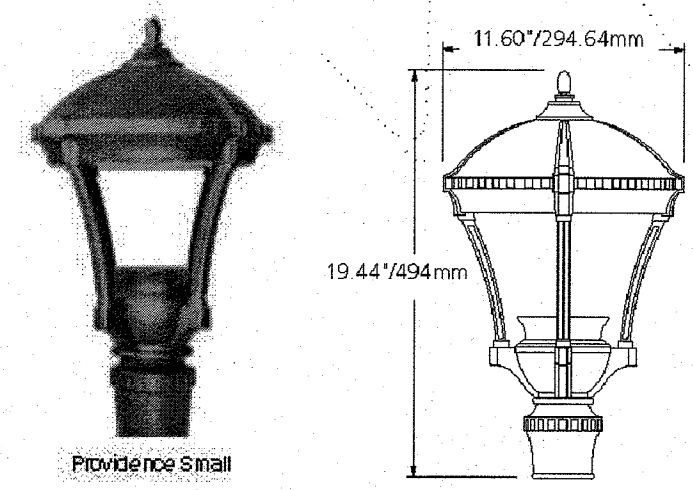
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CERTIFICATE OF AUTHORIZATION 24GA28068900 / Z1MH0002800	
DRAWN BY V.L.	CHECKED BY C.J.B.
SCALE AS SHOWN	PROJECT NO. 21-210
DATE 10-12-23	REVISION NO. 1

DRAWING NO.
C3.4



"PROVIDENCE SMALL (PROS)" LED AREA LIGHT FIXTURE, MANUFACTURED BY ARCHITECTURAL AREA LIGHTING. SEE LIGHTING SCHEDULE FOR MODEL NUMBER(S), MOUNTING HEIGHT(S), LED COLOR TEMPERATURE(S), LIGHTING DISTRIBUTION(S), AND LUMENS.

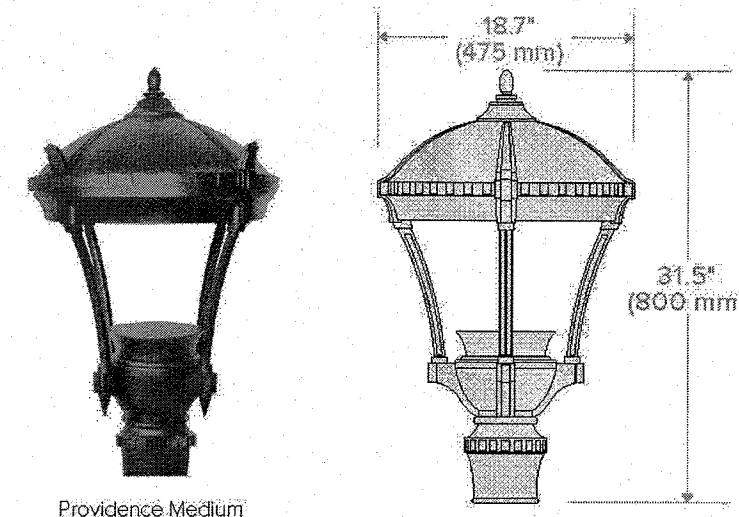


AREA LIGHT FIXTURE DETAIL
(AREA LIGHTS "B1" & "B2")

NOT TO SCALE

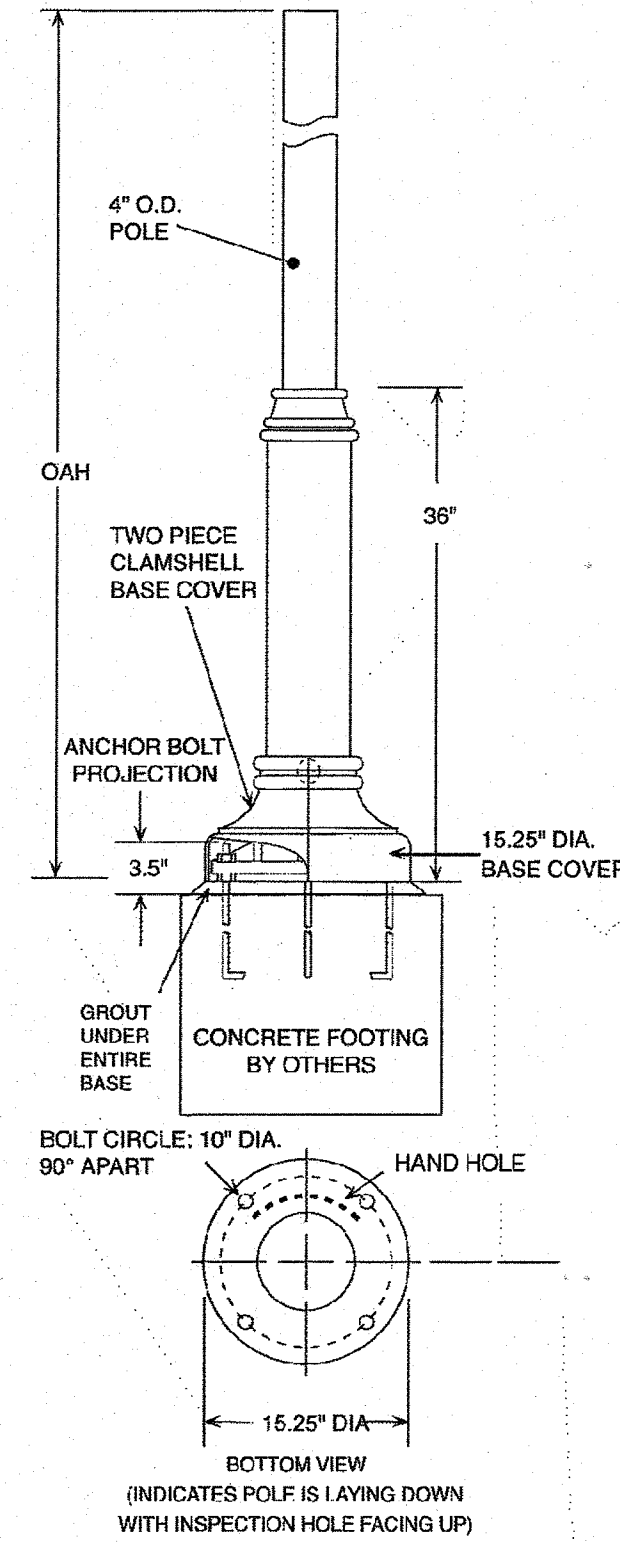


"PROVIDENCE MEDIUM (PROV2)" LED AREA LIGHT FIXTURE, MANUFACTURED BY ARCHITECTURAL AREA LIGHTING. SEE LIGHTING SCHEDULE FOR MODEL NUMBER(S), MOUNTING HEIGHT(S), LED COLOR TEMPERATURE(S), LIGHTING DISTRIBUTION(S) AND LUMENS.



AREA LIGHT FIXTURE DETAIL
(AREA LIGHTS "A1S", "A2S", "A3", "A3S", "A4", "A4S", & "A5W")

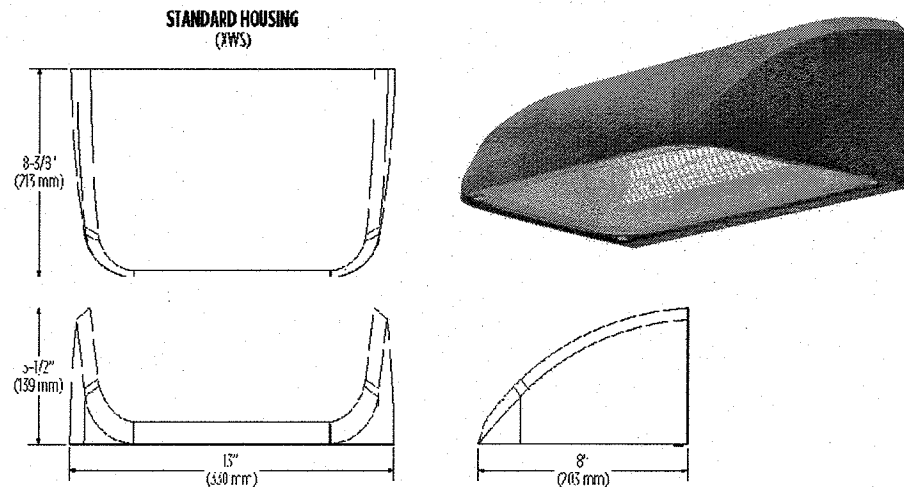
NOT TO SCALE



DECORATIVE AREA LIGHT POLE (DB6), MANUFACTURED BY ARCHITECTURAL AREA LIGHTING. FOR AREA LIGHTS "B1" & "B2", OAH = 12 FT. MODEL NO: DB6-4R12-125-12 FOR ALL OTHER AREA LIGHTS, OAH = 16 FT. MODEL NO: DB6-4R16-125-16

AREA LIGHT POLE DETAIL

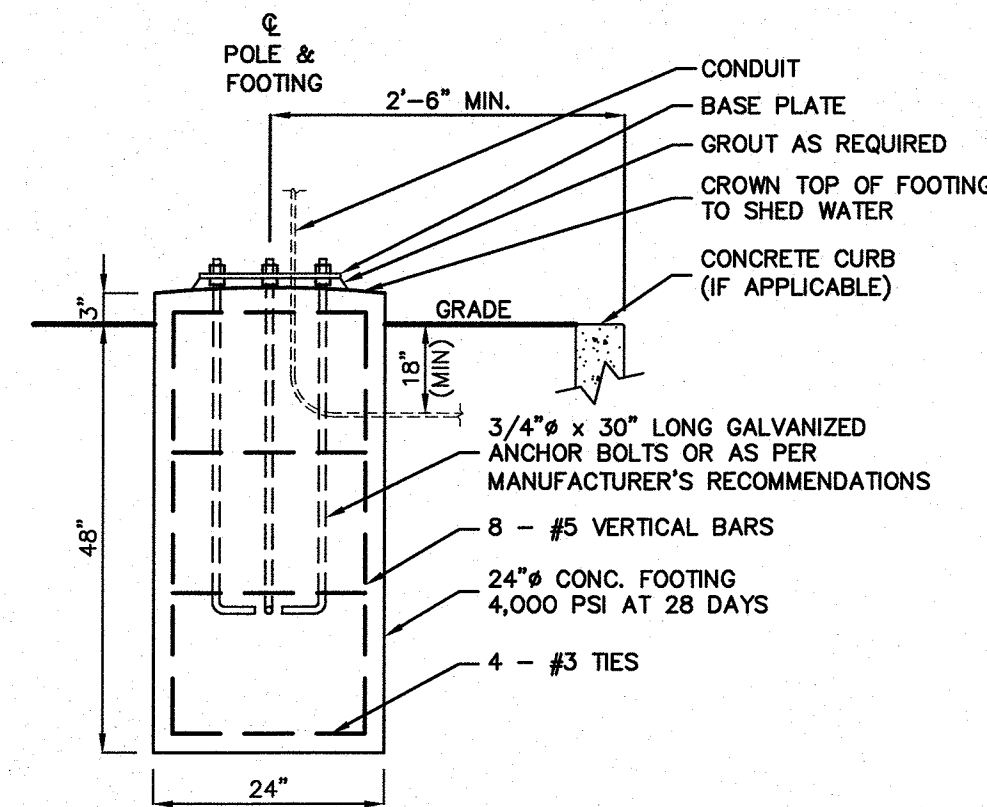
NOT TO SCALE



"PROVIDENCE MEDIUM (PROV2)" LED AREA LIGHT FIXTURE, MANUFACTURED BY ARCHITECTURAL AREA LIGHTING. SEE LIGHTING SCHEDULE FOR MODEL NUMBER(S), MOUNTING HEIGHT(S), LED COLOR TEMPERATURE(S), LIGHTING DISTRIBUTION(S) AND LUMENS.

WALL LIGHT FIXTURE DETAIL
(WALL LIGHT "W1")

NOT TO SCALE

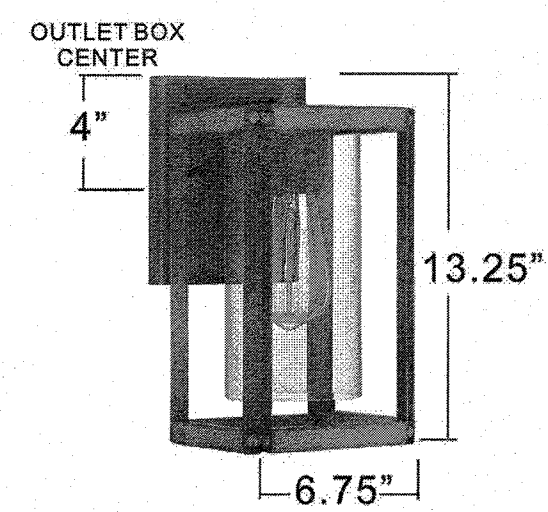


AREA LIGHT FOOTING DETAIL

NOT TO SCALE

urban ambiance
UQ11503
EXTERIOR WALL SCENCE

Fixture Collection Name	Subli
Fixture Finish	Antique Brass
Fixture Material	Steel
Shield Material	Clear Glass
Bulb Base Type	Medium Base
Bulb Voltage	120V
Number of Bulbs Req.	1
Bulb Included	No
Primary Style	Modern
Location Rating	Wet Locations
Weight (in LBS)	3.03
Chain Length	None
Extension Rods	None
Ceiling / Bulk Head Elem.	5.255 x 6.000 inches
Power Wire Length	0.5 Feet
LED Bulb Compatible	Yes
Sloped Ceiling Compatible	No



EXTERIOR WALL SCENCE, MANUFACTURED BY URBAN AMBIANCE. FOR USE WITH A 9W LED 3000K LIGHT BULB. SEE LIGHTING SCHEDULE FOR MODEL NUMBER(S), MOUNTING HEIGHT(S), LED COLOR TEMPERATURE(S), LIGHTING DISTRIBUTION(S) AND LUMENS.

WALL SCENCE FIXTURE DETAIL
(WALL SCENCE "W2")

NOT TO SCALE

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NH LIC. NO. 9368 RI LIC. NO. 6694

ERIC M. HOUGH, P.E.
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VLL
REVISION
NO. DATE
1 3-19-24

DRAWING TITLE
LIGHTING DETAILS

PROJECT
RESIDENTIAL DEVELOPMENT
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GROVERS MILL ROAD & MALL ACCESS ROAD
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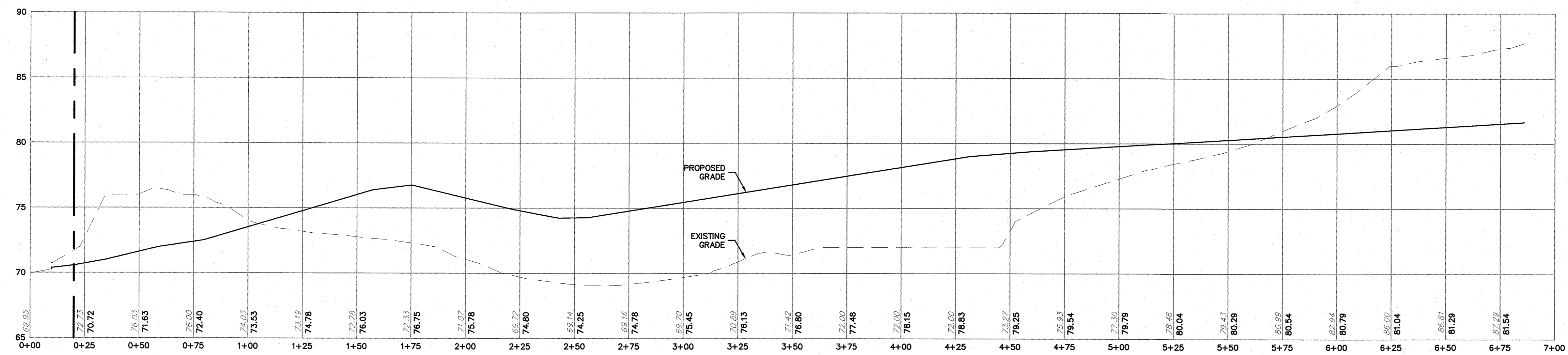
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2525 US-130 SUITE B4
CRANBURY, NJ 08512

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SCALE: AS SHOWN	PROJECT NO: 21-210
DATE: 10-12-23	REVISION NO: 1

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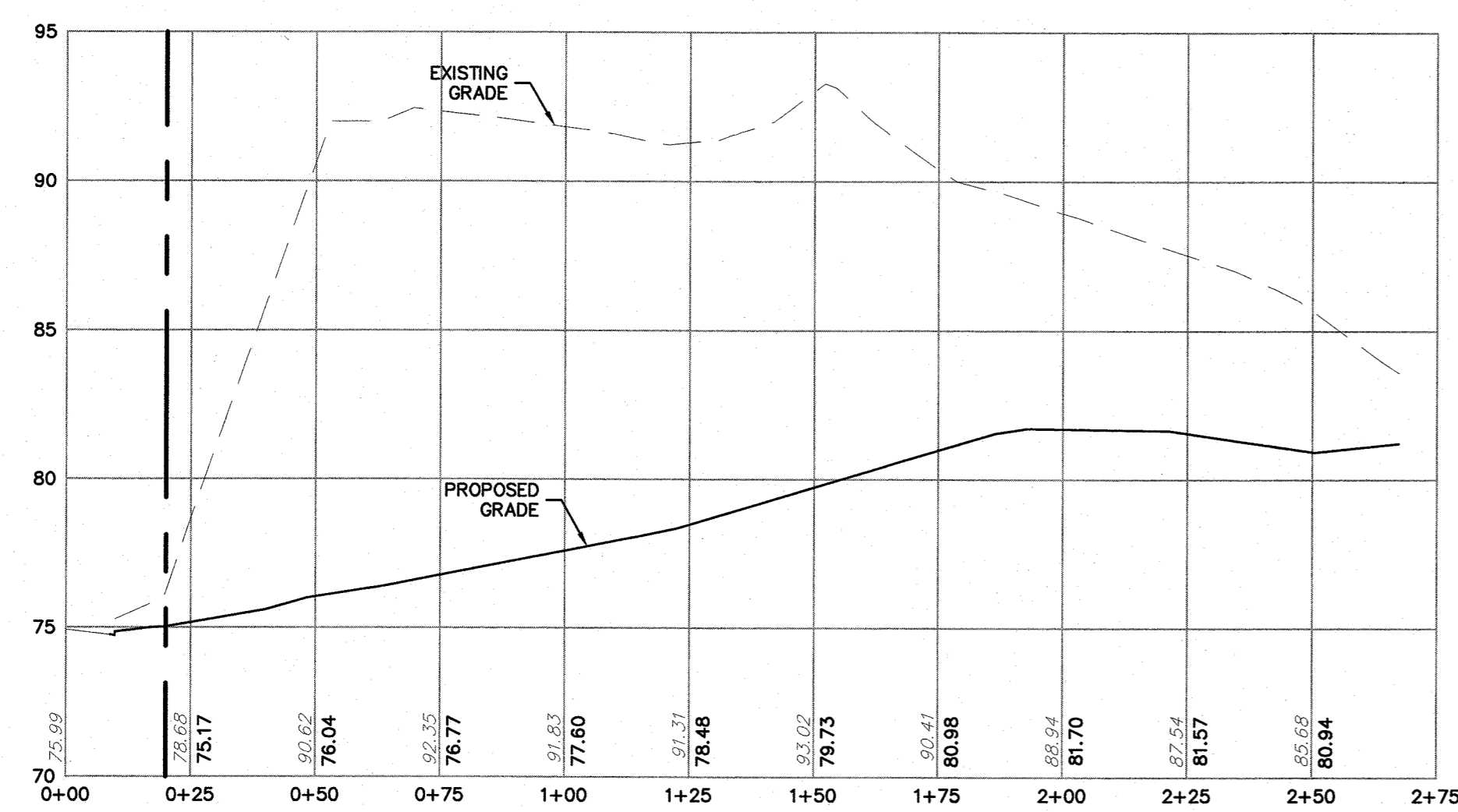
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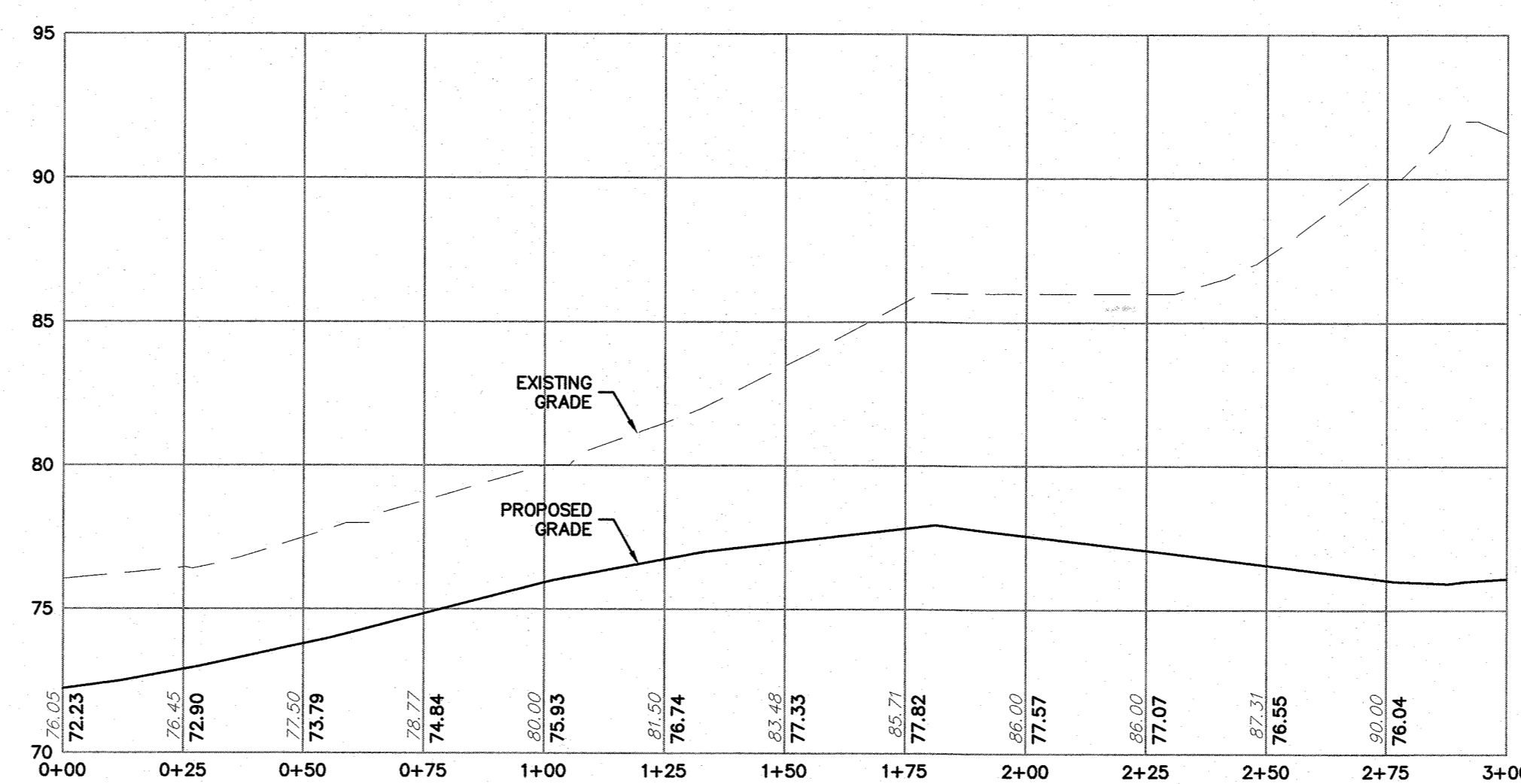
PROPOSED DRIVEWAY PROFILE A

SCALE: V: 1"=5'
H: 1"=30'



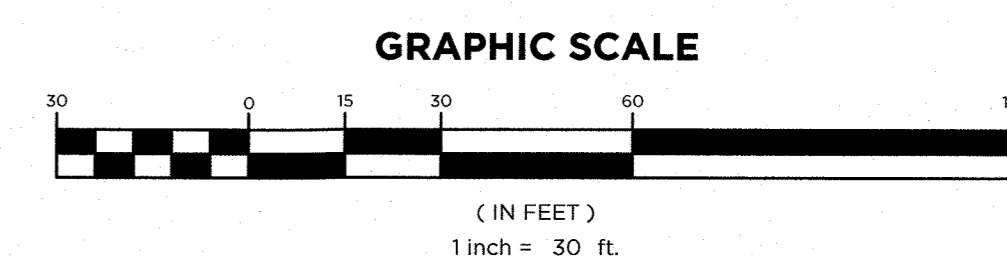
PROPOSED DRIVEWAY PROFILE B

SCALE: V: 1"=5'
H: 1"=30'



PROPOSED DRIVEWAY PROFILE C

SCALE: V: 1"=5'
H: 1"=30'



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ERIC M. HOUGH, P.E.
 PROFESSIONAL ENGINEER
 NJ LIC. NO. 5189

NO.	DATE	REVISION

DRAWING TITLE
ROAD PROFILES

PROJECT
RESIDENTIAL DEVELOPMENT
 BLOCK 4201.01, LOT 33.03
 GROVERS MILL ROAD & MALL ACCESS ROAD
 TOWNSHIP OF LAWRENCE
 MERCER COUNTY, NEW JERSEY

CLIENT
TRICONE
 2525 US-130 SUITE B4
 CRANBURY, NJ 08512

CERTIFICATE OF AUTHORIZATION
 24GA28068900 / Z1MHO0002800
 DRAWN BY: M.B.L. CHECKED BY: C.J.B.
 SCALE: AS SHOWN PROJECT NO.: 21-210
 DATE: 3-19-24 REVISION NO.: 0

DRAWING NO.
C4.1