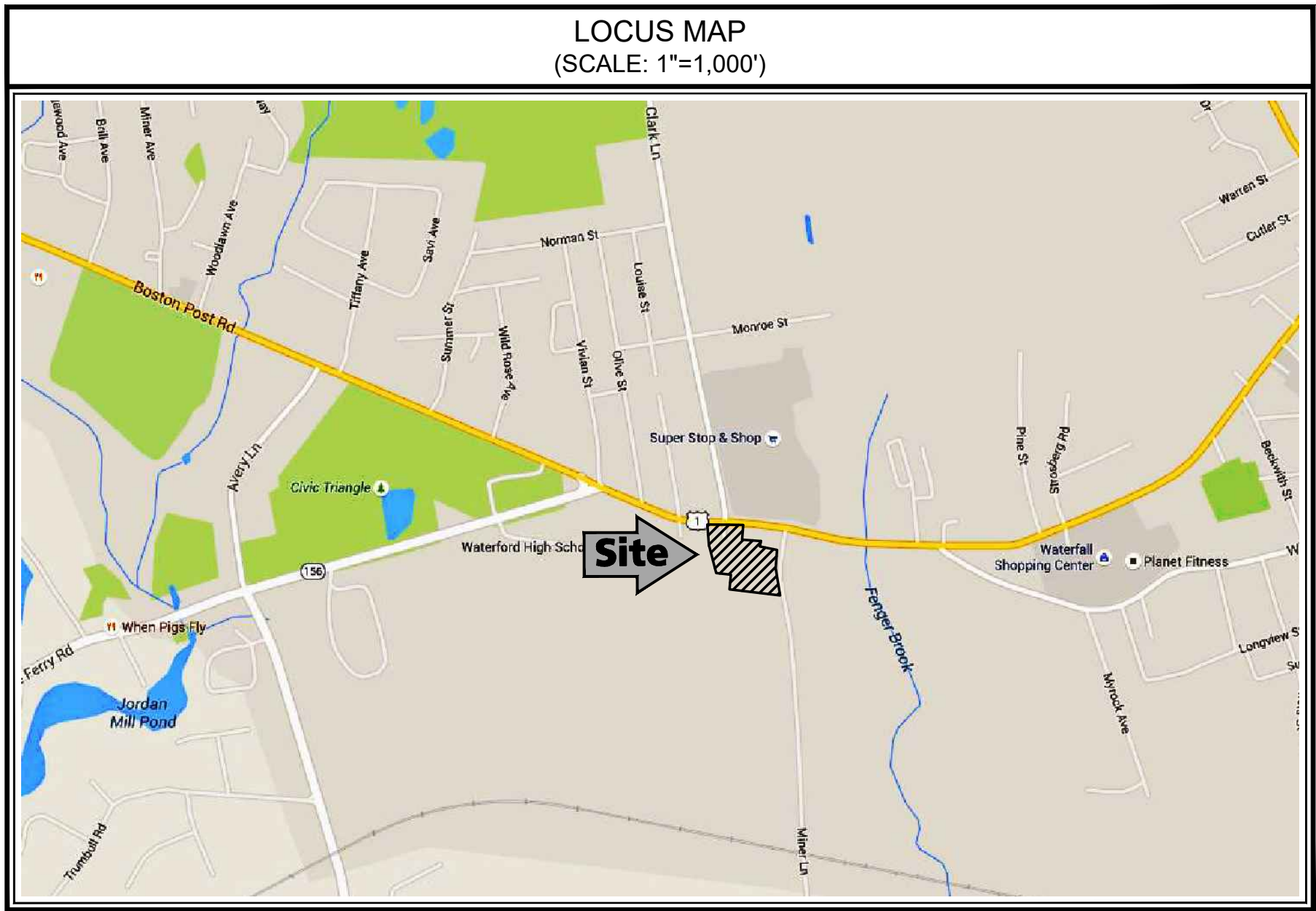


PHASE II SITE PLAN FOR 122-124 BOSTON POST ROAD - WATERFORD, CT



SUBMITTED FOR SITE PLAN REVIEW
06/22/2023



RJO'CONNELL & ASSOCIATES, INC.

CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR / OWNER:

KINCORA
WATERFORD, LLC
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

DESIGN TEAM

CIVIL ENGINEERING:
RJ O'CONNELL & ASSOCIATES, INC.
80 MONTVALE AVENUE
SUITE 201
STONEHAM, MA 02180
ATTN: BRIAN DUNDON
PHONE: (781) 279-0180

ARCHITECTURE:
PHAZE ZERO DESIGN
35 POND PARK ROAD, BAY 16
HINGHAM, MA 02043
ATTN.: ROBYN KIERNAN
PHONE: 614-223-8800

TRAFFIC:
MCMAHON ASSOCIATES
360 BLOOMFIELD AVENUE, SUITE 301
WINDSOR, CT 06095
ATTN.: JASON ADAMS
PHONE: (860) 602-8700

LANDSCAPE ARCHITECTURE:
MICHAEL D'ANGELO LANDSCAPE
ARCHITECTURE
840 SUMMER STREET, SUITE 201A
BOSTON, MA 02127
ATTN.: MIKE RETTENMEIER
PHONE: 203-592-4788

SURVEY:
LOUREIRO ENGINEERING ASSOCIATES, INC.
15 THAMES STREET
SUITE 211
GROTON, CT 06340
ATTN.: ARTHUR HAYWARD
PHONE: (860) 448-0400

LIGHTING:
CREE LIGHTING
120 92ND STREET
STURTEVANT, WI 53177
ATTN.: SAM DISCHER
PHONE: 262-884-3347

LEGAL:
TOBIN, CARBERRY, O'MALLEY,
RILEY & SELINGER, P.C.
43 BROAD STREET
P.O. BOX 58
NEW LONDON, CT 06320
ATTN: WILLIAM R. SWEENEY, ESQ. | PARTNER
PHONE: (860) 447-0335

DRAWING INDEX			
DRAWING DATE	LAST REVISION	DRAWING	DRAWING DESCRIPTION
06/22/2023	-	-	COVER SHEET
02/23/2023	-	-	EXISTING CONDITIONS PLAN
06/22/2023	-	C-1A	DEMOLITION AND EROSION CONTROL PLAN
06/22/2023	-	C-1B	DEMOLITION AND EROSION CONTROL NOTES
06/22/2023	-	C-1C	EROSION AND SEDIMENT CONTROL NARRATIVE
06/22/2023	-	C-2	GRADING AND DRAINAGE PLAN
06/22/2023	-	C-3	UTILITY PLAN
06/22/2023	-	C-4	PARKING AND TRAFFIC CONTROL PLAN
06/22/2023	-	C-5	DETAILS I
06/22/2023	-	C-6	DETAILS II
06/22/2023	-	C-7	DETAILS III
06/22/2023	-	C-8	DETAILS IV
06/22/2023	-	C-9	DETAILS V
06/22/2023	-	C-10	DUMPSTER AND PLAN DETAILS
06/22/2023	-	FT-1	FIRE TRUCK TURN PLAN
06/22/2023	-	TT-1A	WB-67 TRUCK TURN IN PLAN
06/22/2023	-	TT-1B	WB-67 TRUCK TURN OUT PLAN
06/22/2023	-	TT-1C	SU-40 TRUCK TURN PLAN
06/22/2023	-	L1	OVERALL LANDSCAPE PLAN (BY MDLA)
06/22/2023	-	L2	LANDSCAPE IRRIGATION PLAN (BY MDLA)
06/22/2023	-	L3	LANDSCAPE DETAILS (BY MDLA)
06/21/2023	-	-	CREE LIGHTING PLAN (BY CREE LIGHTING)
06/19/2023	-	A200	EXTERIOR ELEVATIONS (BY PHASE ZERO)
06/19/2023	-	A900	RENDERINGS (BY PHASE ZERO)

GOVERNMENT/UTILITY CONTACTS

FIRST SELECTMAN'S OFFICE
ROBERT BRULE
WATERFORD TOWN HALL
15 ROPE FERRY ROAD
WATERFORD, CT 06385
PHONE (860) 444-5834

FIRE SERVICES:
PUBLIC SAFETY BUILDING
204 BOSTON POST ROAD
WATERFORD, CT 06385
ATTN: MICHAEL HOWLEY,
DIRECTOR OF FIRE SERVICES
PHONE: (860) 440-0544

PUBLIC WORKS DEPARTMENT:
1000 HARTFORD TURNPIKE
WATERFORD, CT 06385
ATTN: GARY SCHNEIDER,
DIRECTOR
PHONE: (860) 444-5864

UTILITY COMMISSION OFFICE:
1000 HARTFORD TURNPIKE
WATERFORD, CT 06385
ATTN: JAMES A. BARTELLI,
DIRECTOR OF UTILITIES
PHONE: (860) 444-5886

BUILDING DEPARTMENT:
WATERFORD TOWN HALL
15 ROPE FERRY ROAD
WATERFORD, CT 06385
ATTN: STEVE CARDELLE,
BUILDING OFFICIAL
PHONE: (860) 444-5826

POLICE DEPARTMENT:
WATERFORD POLICE
41 AVERY LANE
WATERFORD, CT 06385
ATTN: MARC BALESTRACCI, CHIEF
PHONE: (860) 442-9451

ASSESSOR'S OFFICE:
WATERFORD TOWN HALL
15 ROPE FERRY ROAD
WATERFORD, CT 06385
ATTN: PAIGE WALTON,
ASSESSOR
PHONE: (860) 444-5820

PLANNING & DEVELOPMENT:
WATERFORD TOWN HALL
15 ROPE FERRY ROAD
WATERFORD, CT 06385
ATTN: JONATHAN MULLEN,
PLANNING DIRECTOR
PHONE: (860) 444-5813

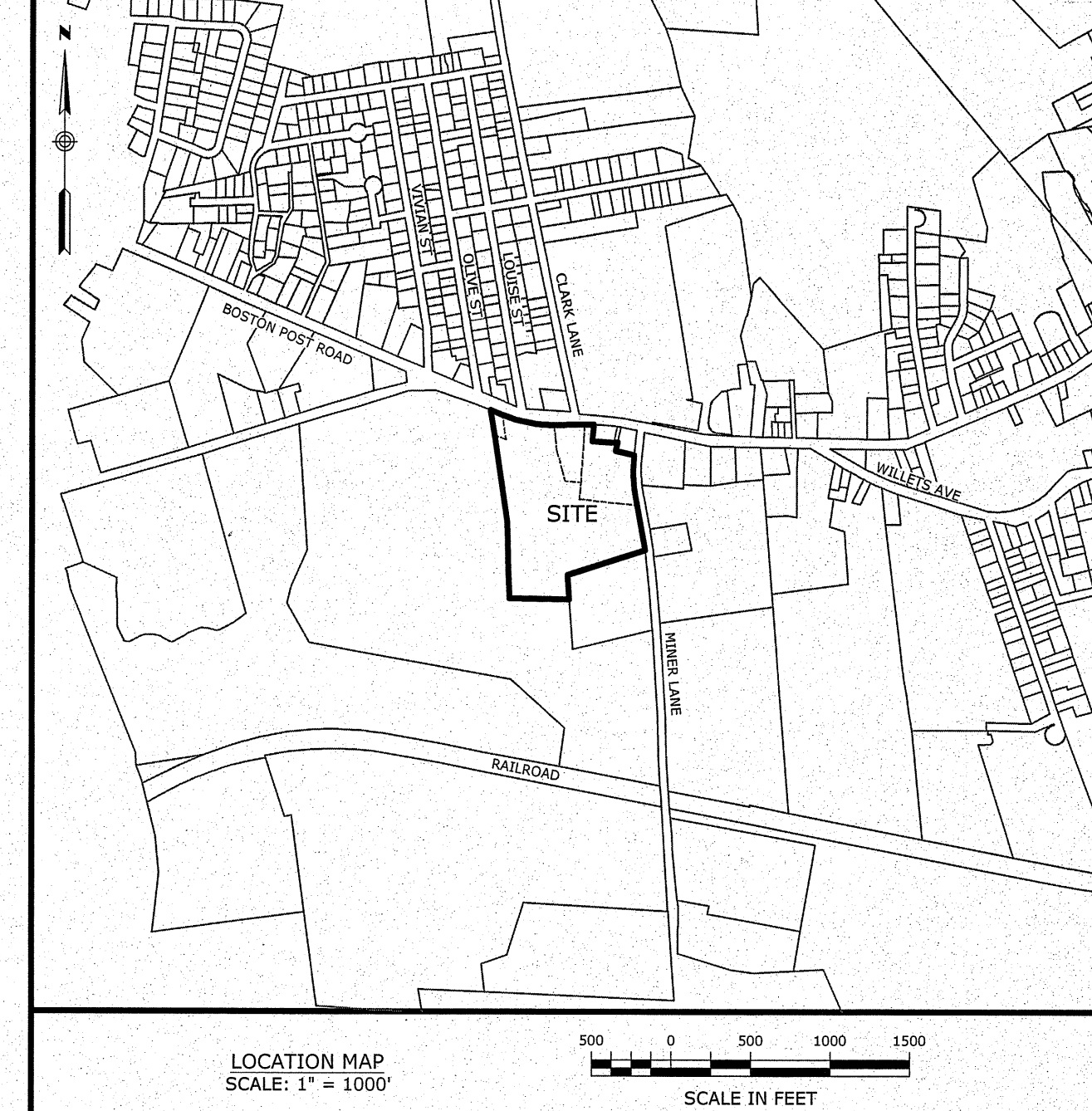
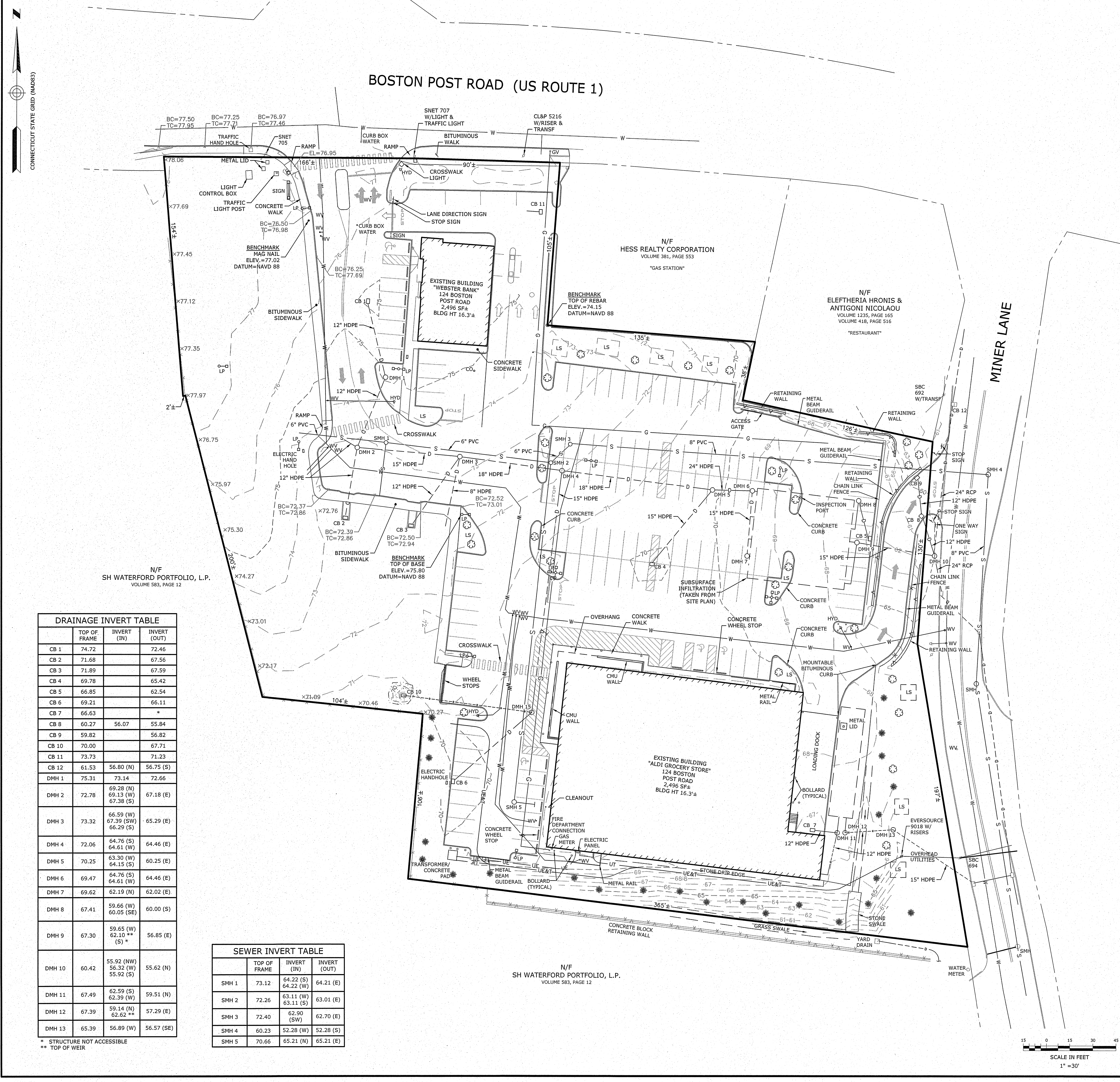
CONSERVATION COMMISSION:
WATERFORD TOWN HALL
15 ROPE FERRY ROAD
WATERFORD, CT 06385
ATTN: MAUREEN FITZGERALD,
ENVIRONMENTAL PLANNER
PHONE: (860) 444-5813

DRAWING NUMBER:

C-0

PROJECT NUMBER:

23001



- NOTES
- THIS PLAN AND THE SURVEY IT IS BASED ON HAVE BEEN PREPARED IN ACCORDANCE WITH THE REGULATIONS OF CONNECTICUT STATE AGENCIES, SECTIONS 20-300B-1 THROUGH 20-300B-20, "MINIMUM STANDARDS FOR SURVEYS AND MAPS IN THE STATE OF CONNECTICUT" ENDORSED BY THE CONNECTICUT ASSOCIATION OF LAND SURVEYORS, INC. THE TYPE OF SURVEY IS TOPOGRAPHIC CLASS T-2 AND THE VERTICAL ACCURACY CONFORMS TO CLASS V-2.
 - THIS IS NOT A PROPERTY SURVEY OR BOUNDARY SURVEY AND ANY PROPERTY LINES DEPICTED DO NOT REPRESENT A SURVEYOR'S PROPERTY/BOUNDARY OPINION.
 - REFERENCE IS MADE TO TOWN OF WATERFORD LAND EVIDENCE RECORDS VOLUME 1479 AT PAGE 205 FOR A WARRANTY DEED DATED SEPTEMBER 22, 2016 REGARDING RECORD TITLE TO THE SUBJECT PROPERTY.
 - THE SUBJECT PROPERTY IS LOCATED WITHIN THE PDD-1 (PLANNED DESIGN DISTRICT) ZONE DISTRICT.
 - "NATIONAL FLOOD INSURANCE PROGRAM FLOOD INSURANCE RATE MAP, TOWN OF WATERFORD, CONNECTICUT, MAP NUMBER 09011C04841 EFFECTIVE DATE AUGUST 5, 2013 FEDERAL EMERGENCY MANAGEMENT AGENCY" INDICATES THE SUBJECT PROPERTY IS LOCATED IN ZONE X.
 - THE SUBJECT PROPERTY IS SHOWN ON THE WATERFORD, CONNECTICUT TAX ASSESSOR MAP 133 AS LOT 569 & 570 AND HAS AN ASSIGNED STREET ADDRESS OF 122 & 124 BOSTON POST ROAD, WATERFORD, CONNECTICUT.
 - ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88). BASED ON GPS OBSERVATIONS TAKEN ON AUGUST 4, 2022.
 - THIS PLAN REPRESENTS THE SITE CONDITIONS DETERMINED BY FIELD SURVEY IN DECEMBER 2022 AND UPDATED JANUARY 17, 2023. RECORD TITLE AND ADJOINER INFORMATION WAS OBTAINED FROM TAX ASSESSOR AND LAND EVIDENCE RECORDS IN JANUARY 2023.
 - UTILITY LOCATION TAKEN FROM LOUREIRO ENGINEERING ASSOCIATES, INC. RECORD PLAN DATED 06/13/2017, SEE MAP REFERENCE.
- MAP REFERENCE:
RECORD PLAN, PROPERTY OF KINCORA WATERFORD LLC 122-124 BOSTON POST ROAD (US ROUTE 1) WATERFORD, CONNECTICUT, SCALE: 1"=30', DATE: 06/13/2017 REVISED THROUGH 06/26/2017 BY LOUREIRO ENGINEERING ASSOCIATES, INC., GROTON, CONNECTICUT.

LEGEND	
540	EXISTING MAJOR CONTOUR
539	EXISTING MINOR CONTOUR
X	FENCE
	EDGE OF PAVEMENT
D	DRAINAGE LINE
S	SEWER LINE
W	WATER LINE
G	GAS LINE
○	UTILITY POLE
○	MANHOLE
□	CATCH BASIN
○-○	LIGHT POLE
○-○-○	2 LIGHT - LIGHT POLE
○-○-○-○	4 LIGHT - LIGHT POLE
AC	ACRES
BCLC	BITUMINOUS CONCRETE LIP CURB
CB	CATCH BASIN
CO	CLEAN OUT
DMH	DRAINAGE MANHOLE
HYD	HYDRANT
LP	LIGHT POLE
LS	LANDSCAPED AREA
MH	MANHOLE
M/L	MORE OR LESS
N/F	NOW OR FORMERLY
SF	SQUARE FEET
SMH	SANITARY MANHOLE
UE&T	UNDERGROUND ELECTRIC & TELEPHONE
WV	WATER VALVE

DRAINAGE INVERT TABLE			
	TOP OF FRAME	INVERT (IN)	INVERT (OUT)
CB 1	74.72		72.46
CB 2	71.68		67.56
CB 3	71.89		67.59
CB 4	69.78		65.42
CB 5	66.85		62.54
CB 6	69.21		66.11
CB 7	66.63		*
CB 8	60.27	56.07	55.84
CB 9	59.82		56.82
CB 10	70.00		67.71
CB 11	73.73		71.23
CB 12	61.53	56.80 (N)	56.75 (S)
DMH 1	75.31	73.14	72.66
DMH 2	72.78	69.28 (N) 69.13 (W) 67.38 (S)	67.18 (E)
DMH 3	73.32	66.59 (W) 67.39 (SW) 66.29 (S)	65.29 (E)
DMH 4	72.06	64.76 (S) 64.61 (W)	64.46 (E)
DMH 5	70.25	63.30 (W) 64.15 (S)	60.25 (E)
DMH 6	69.47	64.76 (S) 64.61 (W)	64.46 (E)
DMH 7	69.62	62.19 (N)	62.02 (E)
DMH 8	67.41	59.66 (W) 60.05 (SE)	60.00 (S)
DMH 9	67.30	59.65 (W) 62.10 ** (S) *	56.85 (E)
DMH 10	60.42	55.92 (NW) 56.32 (W) 55.92 (S)	55.62 (N)
DMH 11	67.49	62.59 (S) 62.39 (W)	59.51 (N)
DMH 12	67.39	59.14 (N) 62.62 **	57.29 (E)
DMH 13	65.39	56.89 (W)	56.57 (SE)

* STRUCTURE NOT ACCESSIBLE
** TOP OF WEIR

SEWER INVERT TABLE			
	TOP OF FRAME	INVERT (IN)	INVERT (OUT)
SMH 1	73.12	64.22 (S) 64.22 (W)	64.21 (E)
SMH 2	72.26	63.11 (W) 63.11 (S)	63.01 (E)
SMH 3	72.40	62.90 (SW)	62.70 (E)
SMH 4	60.23	52.28 (W)	52.28 (S)
SMH 5	70.66	65.21 (N)	65.21 (S)

DATE

REV.

DESCRIPTION OF REVISION

LOUREIRO

ENGINEERING ASSOCIATES, INC.

Water & Utility Services • Surveying • Land • Surveying • Engineering

120 WORCESTER STREET, SUITE 205, WELLESLEY HILLS, MA 02481

PHONE: 800-486-0000 • FAX: 800-486-0899

WWW.LOUREIRO.COM

SCALE

1" = 30'

CONTRACT NO.

0439W3.01

DRAWN BY

CAC

DATE

01/23/2023

APPROVED BY

AHH

DATE

01/23/2023

EXISTING CONDITIONS PLAN

122-124 BOSTON POST ROAD

WATERFORD, CONNECTICUT

REVISIONS

KINCORA WATERFORD, LLC

120 WORCESTER STREET, SUITE 205, WELLESLEY HILLS, MA 02481

DATE: 2-23-2023

DATE: 2/23/2023 1:25 PM

DRAWING

17000025.03

SHEET NO. 1

NO. OF SHEETS 1

PREPARED FOR:

**KINCORA
WATERFORD, LLC**

to KINCORA DEVELOPMENT, LLC

170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

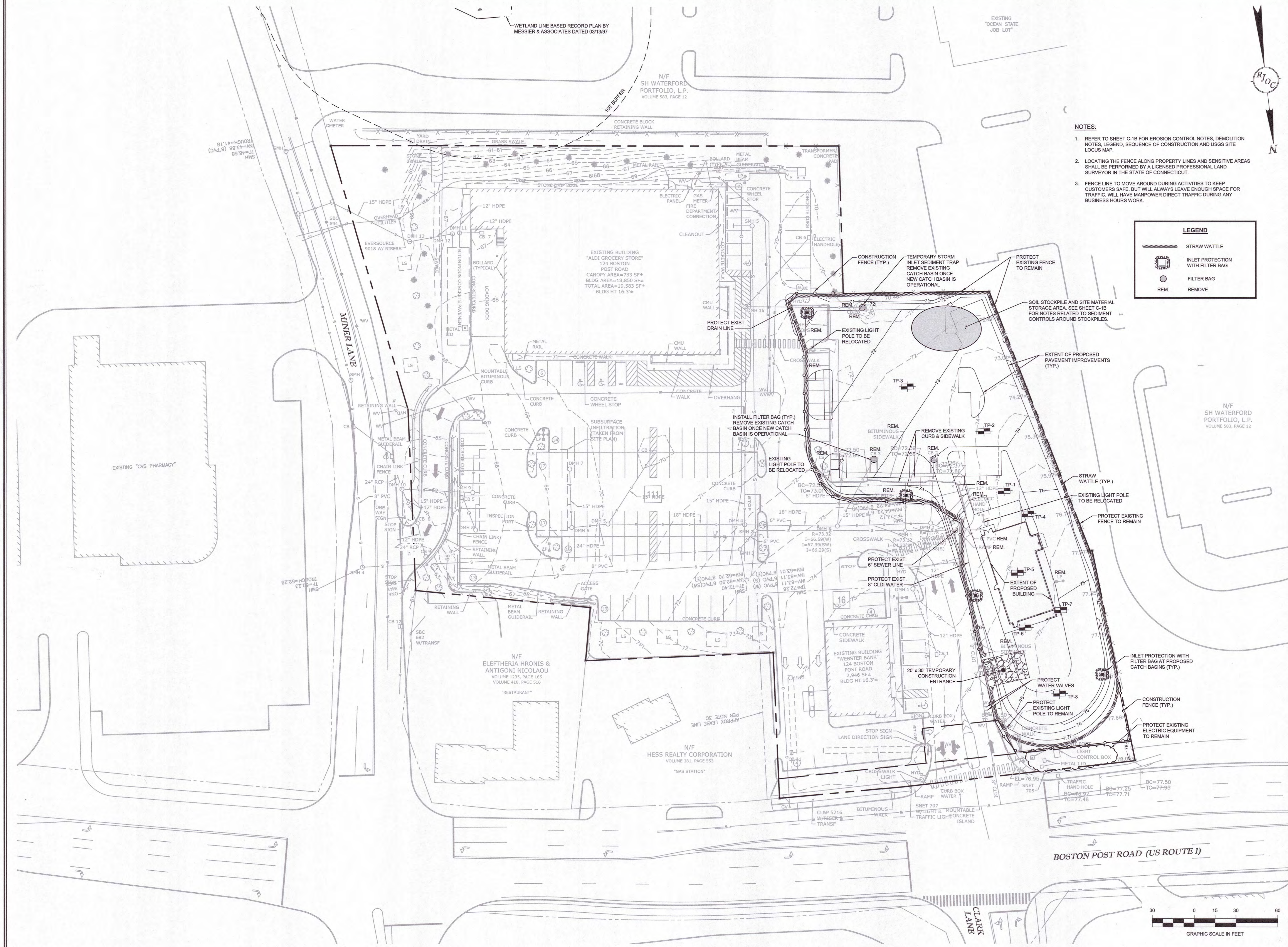
DESIGNED BY: _____
DRAWN BY: _____
REVIEWED BY: _____
SCALE: _____
DATE: _____
DRAWING NAME: _____

DRAWING NUMBER:

C-1A

PROJECT NUMBER:

23001



1. WETLANDS RESOURCE AREA SHOWN HEREON LOCATED ON THE PROPERTY IS FROM A PLAN BY MESSIER AND ASSOCIATES DATED 03/19/97.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
3. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MOST RECENT EDITION OF THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL AND ALL LOCAL MUNICIPAL REGULATIONS.
4. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO THE COMMENCEMENT OF ANY SITE WORK OR EARTHWORK OPERATIONS, SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND PERMANENT GROUND COVER IS ESTABLISHED.
5. STOCKPILES SHALL BE SURROUNDED ON THEIR PERIMETERS WITH STAKED SILTATION FENCES TO PREVENT AND/OR CONTROL SILTATION AND EROSION.
6. TOPS OF STOCKPILES SHALL BE COVERED IN SUCH A MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.
7. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH OR SEEDED FOR TEMPORARY VEGETATIVE COVER WHERE CONSTRUCTION ACTIVITIES HAVE PERMANENTLY CEASED OR HAVE TEMPORARILY BEEN SUSPENDED FOR MORE THAN SEVEN (7) DAYS. WHEN FINAL GRADES ARE REACHED IN ANY PORTION OF THE SITE, STABILIZATION PRACTICES SHALL BE IMPLEMENTED WITHIN THREE DAYS. AREAS WHICH REMAIN DISTURBED BUT INACTIVE FOR AT LEAST THIRTY DAYS SHALL RECEIVE TEMPORARY SEEDING IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL. IN ALL CASES, STABILIZATION MEASURES SHALL BE IMPLEMENTED AS SOON AS POSSIBLE IN ACCORDANCE WITH THE CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL.
8. INLET PROTECTION SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS LOCATED IN FILL AREAS & SUBJECT TO STORMWATER RUN-OFF FROM PROPOSED FILL AREAS DURING CONSTRUCTION, OR AS DIRECTED BY THE OWNER/ENGINEER. NO SEDIMENTS SHALL ENTER THE ON-SITE OR OFF-SITE DRAINAGE SYSTEMS AT ANY TIME.
9. SILTATION FILTER BAGS SHALL BE INSTALLED INSIDE EACH BASIN IN HIGH TRAFFIC AREAS WHERE WATTELS WILL INTERFERE WITH TRAFFIC.
10. ALL PROPOSED SLOPES (EXCLUDING ANY RIP RAP SLOPES) STEEPER THAN 3:1 SHALL BE STABILIZED WITH A CURLEX EROSION CONTROL MATTING BY AMERICAN EXCELSION COMPANY (OR ENGINEER APPROVED EQUIVALENT) AND PROTECTED FROM EROSION. ADDITIONALLY, THESE AREAS ARE TO BE HYDROSEED.
11. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL STRAW WATTELS AND EXTRA SILTATION FENCING FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER TO MITIGATE ANY EMERGENCY CONDITION.
12. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.
13. THE LIMIT OF WORK LINE FOR THE AREA TO BE CLEARED AND GRUBBED SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES, (IE. THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA). THIS LINE IS THE WATTELS WITH SILT FENCE LINE WHERE SHOWN. OTHERWISE IT IS THE LIMIT OF GRADING.
14. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. ALL SEDIMENT OR DEBRIS SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.
15. THE EROSION CONTROL MEASURES AS SHOWN ON THE DRAWINGS DEPICT THE MINIMUM REQUIRED CONTROL AND ARE REPRESENTATIVE OF A SINGLE STAGE OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL SITING, RELOCATION AND AUGMENTATION OF EROSION CONTROL DEVICES SO AS TO PREVENT ANY SEDIMENT FROM LEAVING THE PROJECT SITE AREA AS THE PROJECT PROGRESSES AND SITE DRAINAGE CONDITIONS CHANGE.
16. THE CONTRACTOR SHALL ANTICIPATE AND MODIFY EROSION CONTROL MEASURES BASED ON PAST AND CURRENT WEATHER CONDITIONS, SEASON AND EXPECTED FUTURE CONSTRUCTION ACTIVITIES.
17. THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED SOIL. EFFORTS SHALL BE MADE TO LIMIT THE TIME OF EXPOSURE OF DISTURBED AREAS.
18. PRIOR TO INITIATION OF CONSTRUCTION ACTIVITIES AT THE SITE, THE CONTRACTOR SHALL ENGAGE AN AGENT OR AGENTS WITH SPECIFIC PROFESSIONAL TRAINING AND EXPERTISE IN EROSION AND SEDIMENT CONTROL. THE EROSION CONTROL AGENT SHALL PREPARE A WEEKLY REPORT WHICH SHALL BE KEPT ON SITE AT ALL TIMES AND SHALL BE SHOWN TO LOCAL, STATE, AND FEDERAL AGENCIES UPON REQUEST. THIS REPORT SHALL INDICATE THE STATUS OF THE EROSION CONTROLS AND ANY MAINTENANCE REQUIRED AND PERFORMED.
19. NO LAND CLEARING OR GRUBBING SHALL BEGIN UNTIL ALL PERIMETER EROSION AND SEDIMENT CONTROL MEASURES HAVE BEEN INSTALLED.
20. ALL EXPOSED AREAS SHALL BE SEEDED AS SPECIFIED WITHIN 7 DAYS OF FINAL GRADING.
21. SHOULD CONSTRUCTION STOP FOR LONGER THAN ONE MONTH, THE SITE SHALL BE SEEDED AS SPECIFIED.
22. SEDIMENT AND EROSION CONTROL MEASURES SHALL BE INSPECTED AT LEAST ONCE EVERY SEVEN (7) DAYS AND WITHIN 24 HOURS OF A RAINFALL EXCEEDING 0.1 INCHES DURING A 24-HOUR PERIOD OR MORE FREQUENTLY IF REQUIRED BY GOVERNING AGENCIES GENERAL PERMIT. ALL MAINTENANCE REQUIRED BY INSPECTION SHALL COMMENCE WITHIN 24 HOURS AND BE COMPLETED WITHIN 48 HOURS OF REPORT.
23. THIS PLAN SHALL NOT BE CONSIDERED ALL INCLUSIVE AS THE CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PREVENT SOIL SEDIMENT FROM LEAVING THE SITE.
24. CONTRACTOR SHALL COMPLY WITH ALL STATE AND LOCAL ORDINANCES THAT APPLY.
25. ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IF DEEMED NECESSARY BY ON SITE INSPECTION.
26. IF INSTALLATION OF STORM DRAINAGE SYSTEM SHOULD BE INTERRUPTED BY WEATHER OR NIGHTFALL, THE PIPE ENDS SHALL BE COVERED WITH FILTER FABRIC.
27. GENERAL CONTRACTOR SHALL BE RESPONSIBLE TO TAKE WHATEVER MEASURES NECESSARY TO ESTABLISH PERMANENT SOIL STABILIZATION.

1. ALL EXISTING BITUMINOUS CONCRETE PAVEMENT WITHIN THE LIMIT OF WORK SHALL BE PULVERIZED IN PLACE AND MIXED WITH THE ON-SITE MATERIAL OR IMPORT MATERIAL, FOR REUSE AS ON-SITE FILL. TO BE REUSED ON-SITE, THE MIXED MATERIAL MUST MEET THE SPECIFIED GRADATION FOR FILL MATERIAL.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND PROTECTING ALL EXISTING AND NEW SITE DRAINAGE AND UTILITIES WHICH ARE TO REMAIN AND/OR BE CONSTRUCTED.
3. DISPOSAL OF ALL DEMOLISHED MATERIAL MUST BE OFF-SITE BY THE CONTRACTOR AND IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REQUIREMENTS.
4. DEMOLITION ACTIVITY ON SITE SHALL BE DONE IN A MANNER SUCH THAT RUNOFF IS DIRECTED TO THE APPROPRIATE SEDIMENT CONTROL FACILITIES.
5. THE CONTRACTOR SHALL PROTECT AND/OR CAP OFF THE EXISTING ON-SITE UTILITY SERVICES WHERE SHOWN ON THESE DRAWINGS OR DISCOVERED IN THE FIELD. ALL CAPPING/REMOVAL SHALL BE IN ACCORDANCE WITH THE APPROPRIATE UTILITY COMPANY/GOVERNMENTAL ENTITY STANDARDS.
6. EXISTING DRAIN AND WATER MAIN PIPES TO BE ABANDONED SHALL BE CAPPED AND/OR PLUGGED BY USING BRICKS AND MORTAR, OR PLUGS/CAPS AVAILABLE FROM PIPE SUPPLIERS.
7. WORK INVOLVED IN THE ABANDONMENT OF EXISTING MANHOLES AND CATCH BASINS WHERE ALLOWED SHALL BE AS FOLLOWS:
 - A. REMOVE EXISTING CASTINGS
 - B. REMOVE A MINIMUM OF THE TOP THREE FEET OF THE STRUCTURE.
 - C. PLUG ALL PIPES
 - D. BACKFILL THE STRUCTURE WITH COMPACTED GRANULAR FILL UP TO THE BOTTOM OF REQUIRED SURFACE MATERIALS.
9. PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION ACTIVITIES THE ON-SITE SEDIMENT AND EROSION CONTROL MEASURES MUST BE INSTALLED AND APPROVED BY THE OWNER AND/OR OWNERS REPRESENTATIVE.

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS LEFT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "CALL BEFORE YOU DIG" AT 811 AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
2. EXISTING UTILITY INFORMATION AND TOPOGRAPHY TAKEN FROM A PLAN ENTITLED "EXISTING CONDITIONS PLAN" DATED JANUARY 23, 2023 PREPARED BY LOUREIRO ENGINEERING ASSOCIATES, INC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
4. WETLANDS RESOURCE AREAS SHOWN HEREON BASED ON A RECORD DRAWING BY MESSIER AND ASSOCIATES DATED 03/13/1997.
5. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING AND PAYING FOR ANY PERMITS AND/OR CONNECTION FEES REQUIRED TO CARRY OUT THE WORK INCLUDING BUT NOT LIMITED TO DEMOLITION.
6. DISPOSAL OF ALL DEMOLISHED MATERIALS IS THE RESPONSIBILITY OF THE CONTRACTOR. WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL MUNICIPAL REQUIREMENTS. IN ADDITION, COMPLIANCE WITH ENVIRONMENTAL LAWS WHICH SHALL BE EVIDENCED BY A CERTIFICATION TO THE CLIENT TENANT FROM THE FIRM PREPARING THE REPORT AS MAY BE REQUIRED, NO ONSITE BURIAL PITS ARE PROPOSED.
7. THE LIMIT OF WORK LINE FOR THE AREA TO BE CLEARED AND GRUBBED SHALL BE THE SAME AS THE LIMIT OF WORK LINE NECESSARY FOR GRADING PURPOSES, (IE, THE GRADING LIMITS AROUND THE PERIMETER OF THE PROJECT AREA). THIS LINE IS THE STRAW WHATTLE WITH SILT FENCE LINE OR AS NOTED. THE SILT FENCE LINE IS THE LIMIT OF WORK WHERE NO STRAW WHATTLES ARE SHOWN.
8. THE AREA OR AREAS OF ENTRANCE AND EXIT TO AND FROM THE SITE SHALL BE CLEARED OF ALL VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL AS DETERMINED BY THE ENGINEER OR OWNER'S REPRESENTATIVE.
9. THE CONTRACTOR SHALL NOTIFY THE TOWN'S PLANNING STAFF AT LEAST 5 DAYS PRIOR TO COMMENCEMENT OF ANY SITEWORK.
10. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING A STAGING AREA FOR THE CLIENT'S TENANT IN ACCORDANCE WITH CONTRACT DOCUMENTS TO INCLUDE THE INSTALLATION OF A GRAVEL BASE AREA.

THE PROPOSED PROJECT INVOLVES THE CONSTRUCTION OF AN APPROX. 2,325 SF CHIPOTLE AND ASSOCIATED 39 PARKING SPACES AT 122 AND 124 BOSTON POST ROAD IN WATERFORD, CONNECTICUT. SEE SHEET C-4 FOR A DETAILED DESCRIPTION OF THE PROPOSED BUILDING, PARKING, AND SITE IMPROVEMENTS. THE EXISTING M & B BANK, ALDI, AND SURROUNDING IMPROVEMENTS WILL REMAIN. THE PROJECT INVOLVES MINOR REALIGNMENT OF CURBING AND THE REMOVAL OF 7 PARKING SPACES ALONG THE LIMIT OF WORK. THE SITE WORK WILL TAKE APPROXIMATELY NINE MONTHS AND WILL CONCLUDE APPROXIMATELY IN SPRING 2024.

DISTANCE TO NEAREST WATERS OF THE STATE OF CONNECTICUT = $\pm 600'$ (FENGER BROOK TO THE EAST)



PREPARED BY:

**RJO'CONNELL
& ASSOCIATES, INC.**

CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS

80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

**KINCORA
WATERFORD, LLC**
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

122-124 BOSTON
POST ROAD
WATERFORD, CT

DRAWING NUMBER: _____

Copyright © 2023 by R.J. O'Connell & Associates, Inc.

Drawing name: G:\CT\Waterford\Kincora Development\122-124 Boston Post Road\Main\23001_C-1C Erosion and Sediment Control Narrative.dwg
Jun 22, 2023 1:03:59pm

EROSION AND SEDIMENT CONTROL NARRATIVE

1. INTRODUCTION AND PERMIT COMPLIANCE

THIS NARRATIVE DESCRIBES THE MINIMUM MEASURES REQUIRED TO CONTROL SOIL EROSION DURING AND AFTER CONSTRUCTION OF THE SITEWORK SHOWN ON THIS PLAN. THE SOIL EROSION AND SEDIMENT CONTROL MEASURES SHOWN ON THIS PLAN ARE DESIGNED IN ACCORDANCE WITH A DOCUMENT ENTITLED "CONNECTICUT GUIDELINES FOR SOIL EROSION AND SEDIMENT CONTROL" PUBLISHED BY THE CONNECTICUT COUNCIL ON SOIL AND WATER CONSERVATION IN 2002. THE CONTRACTOR MAY BE REQUIRED TO IMPLEMENT ADDITIONAL MEASURES TO PREVENT SITE EROSION AND SEDIMENTATION OF DOWNSTREAM WATERWAYS.

THE CONTRACTOR IS REQUIRED TO OBTAIN COPIES OF, AND COMPLY WITH THE CONDITIONS OF ALL PERMITS FOR THIS PROJECT, INCLUDING BUT NOT LIMITED TO:

- MUNICIPAL APPROVAL OF THE EROSION AND SEDIMENT CONTROL PLAN
- MUNICIPAL PLANNING AND ZONING SITE PLAN APPROVAL
- CONNECTICUT DEP GENERAL PERMIT FOR THE DISCHARGE OF STORMWATER AND DEWATERING WASTE WATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES

THE CONTRACTOR'S ACTIVITIES AND OPERATIONS INCLUDE ALL SITE WORK AND WORK INCIDENTAL TO THE PROJECT INCLUDING, BUT NOT LIMITED TO HAUL ROADS, WASTE AND DISPOSAL AREAS, STAGING AREAS, AND FIELD OFFICES. IF ANY OF THE CONTRACTOR'S ACTIVITIES REQUIRE APPROVALS ABOVE AND BEYOND THOSE ALREADY ACCOUNTED FOR BY THE OWNER'S PERMITS, THE CONTRACTOR SHALL APPLY FOR AND OBTAIN SUCH PERMITS PRIOR TO CONDUCTING THOSE OPERATIONS. IF INCIDENTAL WORK SUCH AS HAUL ROADS, WASTE AND DISPOSAL AREAS, STAGING AREAS, AND FIELD OFFICES ARE NOT SHOWN ON THE PLANS, AND REQUIRE ADDITIONAL EROSION CONTROL, THE CONTRACTOR SHALL PROVIDE SUCH CONTROLS.

2. PROJECT DESCRIPTION AND SITE CHARACTERISTICS

THIS PROJECT INVOLVES THE CONSTRUCTION OF A 2,325± SQUARE FEET RESTAURANT AND PARKING FOR APPROXIMATELY 39 CARS. SPECIFIC ACTIVITIES INCLUDE:

- DEMOLITION
- CLEARING AND GRUBBING,
- EARTHWORK,
- UTILITY CONSTRUCTION,
- BUILDING CONSTRUCTION;
- PAVING AND CURBING,
- CONSTRUCTION OF SUBSURFACE DRAINAGE INFILTRATION AND DETENTION SYSTEM
- CONSTRUCTION OF WATER QUALITY INLET
- LANDSCAPING AND PLANTING.

THE TOTAL SITE AREA IS 4.0± ACRES. TOTAL SITE DISTURBANCE IS APPROXIMATELY 0.94 ACRES. THE TOTAL IMPERVIOUS SURFACE AFTER CONSTRUCTION IS APPROXIMATELY 2.50± ACRES. THE ULTIMATE RECEIVING WATERCOURSE IS FENGER BROOK.

THE PROPOSED PROJECT IS PART OF A REDEVELOPMENT OF THE EXISTING 4.0± ACRE PARCEL. TWO EXISTING BUILDINGS INCLUDING A BANK AND THE ALREADY BUILT ALDI BUILDING, ALONG WITH ASSOCIATED PARKING, UTILITIES, AND LANDSCAPED AREAS. THE SITE IS BOUND BY BOSTON POST ROAD TO THE NORTH, TWO COMMERCIAL PROPERTIES TO THE NORTH, MINER LANE TO THE EAST, AND OCEAN STATE JOB LOT TO THE SOUTH AND WEST. THE SITE SLOPES IN A SOUTHEASTERLY DIRECTION FROM THE NW CORNER OF BOSTON POST ROAD THE SE CORNER AT MINER LANE. THE RUNOFF FROM THE SITE RUNS OVERLAND AND THROUGH A CLOSED DRAINAGE SYSTEM BEFORE CONNECTING INTO A THE CLOSED DRAINAGE SYSTEM IN MINER LANE. THE SUBSURFACE CONDITIONS CONSIST OF DENSE COMPACTED FILL RANGING IN DEPTH FROM 4FT. TO 7 FT. BELOW GRADE WITH NATURALLY OCCURRING MATERIALS CONSISTING OF SILTY SAND BELOW THE FILL. THERE ARE NO WETLAND RESOURCE AREAS LOCATED ON THE SITE. THE SITE IS LOCATED OUTSIDE OF FLOOD HAZARD AREAS.

3. CONSTRUCTION SEQUENCING

THE CONTRACTOR WILL BE RESPONSIBLE FOR IMPLEMENTING THE FOLLOWING EROSION AND SEDIMENT CONTROLS AND STORM WATER MANAGEMENT CONTROL MEASURES. THE CONTRACTOR MAY DESIGNATE THESE TASKS TO CERTAIN SUBCONTRACTORS AS HE SEES FIT, BUT THE ULTIMATE RESPONSIBILITY FOR IMPLEMENTING THESE CONTROLS AND ENSURING THEIR PROPER FUNCTIONING REMAINS WITH THE CONTRACTOR. THE ORDER OF ACTIVITIES WILL BE AS FOLLOWS:

- INSTALL PERIMETER STRAW WATTLES IN THE LOCATIONS SHOWN ON DWG. C-1A TITLED "DEMOLITION AND EROSION CONTROL PLAN". STRAW WATTLES TO BE INSTALLED PER DETAIL SHOWN ON DETAIL SHEETS.
- INSTALL INLET/OUTLET PROTECTION AT THE LOCATIONS OF ALL EXISTING GRATE INLETS, CURB INLETS AND AT THE ENDS OF ALL EXPOSED STORM WATER SEWER PIPES.
- BEGIN TERMINATION OF EXISTING UTILITY SERVICES IN ACCORDANCE WITH THE REQUIREMENTS OF THE UTILITY COMPANY HAVING AUTHORITY.
- COMMENCE CLEARING AND GRUBBING ACTIVITIES.
- BEGIN INSTALLATION OF INFILTRATION CHAMBER SYSTEMS.
- COMMENCE SITE GRADING ACTIVITIES (ROUGH GRADE SITE). DURING GRADING ACTIVITIES PERFORM EROSION AND SEDIMENT CONTROL INSPECTIONS AS REQUIRED BY THESE DOCUMENTS AND THE STORMWATER POLLUTION CONTROL PLAN.
- FILL SLOPES SHALL BE COMPACTED AND STABILIZED WITH VEGETATION AND EROSION CONTROL BLANKETS AS QUICKLY AS POSSIBLE DURING THE INITIAL SITE EARTHWORK.
- AT ALL TIMES DURING GRADING ACTIVITIES, VERIFY STABILITY OF PERIMETER CONTROLS AND REPAIR WHERE NECESSARY. CLEAN AND RE-INSTALL ALL INLET AND OUTLET PROTECTION. COVER STOCKPILES TO MINIMIZE EROSION BY WIND OR RAINFALL. COMPLETE FINAL SWEEPING OF ALL EXISTING PAVED SURFACES TO REMOVE ANY REMAINING SEDIMENT.
- INSPECT THE ENTIRE SITE TO VERIFY THAT NO AREAS REMAIN THAT ARE SUSCEPTIBLE TO ALLOWING SEDIMENT AND/OR HAZARDOUS MATERIALS TO BE DISCHARGED FROM THE PROJECT SITE.
- DISTURBED AREAS OF THE SITE WHERE CONSTRUCTION ACTIVITY HAS, OR WILL, CEASE FOR MORE THAN 7 DAYS SHALL BE TEMPORARILY STABILIZED.
- INSTALL SITE UTILITIES. INLET PROTECTION MUST BE INSTALLED AT ALL EXISTING AND NEW DRAIN INLETS. PLACE RIP-RAP AND OUTLET PROTECTION AT ALL DRAIN OUTLETS AT LOCATIONS SHOWN ON THE PLANS.
- FINALIZE PAVEMENT AND BUILDING SUBGRADE PREPARATION.
- REMOVE INLET PROTECTION AROUND INLETS AND MANHOLES NO MORE THAN 48 HOURS PRIOR TO PLACING STABILIZED BASE COURSE.
- INSTALL AND COMPACT PAVEMENT GRAVELS.
- INSTALL BINDER AND FINISH COURSE PAVEMENT.
- INSTALL SILT BAGS IN CATCH BASINS UNTIL SITE IS VEGETATED AND STABILIZED.
- FINE GRADE LANDSCAPE AREAS AND INSTALL LANDSCAPE PLANTINGS.
- INSTALL TRAFFIC CONTROL SIGNAGE AND PARKING LOT STRIPING.
- COMPLETE OUTSTANDING PUNCHLIST ITEMS AND PERFORM FINAL CLEAN-UP ACTIVITIES.
- REMOVE AND DISPOSE OF ALL ACCUMULATED SANDS AND SEDIMENT TO DESIGN GRADES, STABILIZE AND REVEGETATE DISTURBED AREAS.
- REMOVE PERIMETER CONTROLS AFTER PAVING OPERATIONS ARE COMPLETE AND ALL DISTURBED AREAS ARE STABILIZED, ONLY UPON APPROVAL OF THE TOWN OF WATERFORD.

4. RESPONSIBILITY

4.1 RESPONSIBILITIES OF OWNER/PERMITEE

THE OWNER/PERMITEE IS KINCORA DEVELOPMENT, 170 WORCESTER STREET, SUITE 204, WELLESLEY, MA 02481.

THE OWNER/PERMITEE SHALL:

- PROVIDE THE CONTRACTOR WITH COPIES OF LAND-USE PERMITS THAT OWNER HAS ACQUIRED.
- REVIEW WITH ALL PARTIES INVOLVED THE SITE WORK IMPROVEMENTS PLANNED AS WELL AS THE PURPOSE OF THE EROSION CONTROL PLAN, ITS OBJECTIVES AND REQUIREMENTS.

THE GENERAL PERMIT FOR DISCHARGE OF STORMWATER AND DEWATERING WASTE WATERS ASSOCIATED WITH CONSTRUCTION ACTIVITIES REQUIRES ADDITIONAL RESPONSIBILITIES OF THE PERMITEE. THE PERMITEE SHALL:

- KEEP RECORDS IN ACCORDANCE WITH SECTION 6(b)(9)(D) OF THE GENERAL PERMIT.
- INSPECT CONSTRUCTION ACTIVITIES IN ACCORDANCE WITH SECTION 6(c) OF THE GENERAL PERMIT.
- IDENTIFY CONTRACTOR AND SUBCONTRACTORS WHO WILL PERFORM SITE WORK.
- OBTAIN CONTRACTOR CERTIFICATION OF THE PLAN, IN ACCORDANCE WITH SECTION 6(b)(6)(E).
- AMEND THE PLAN AS REQUIRED BY SECTION 6(B)(4) OF THE GENERAL PERMIT.
- FILE THE TERMINATION NOTICE IN ACCORDANCE WITH SECTION 5 OF THE GENERAL PERMIT.

4.2 RESPONSIBILITIES OF CONTRACTOR

THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING EROSION OF THE SITE AND FOR PROTECTING ADJACENT WETLANDS, WATERWAYS AND ABUTTING PROPERTIES FROM SEDIMENTATION AND EROSION.

THE CONTRACTOR SHALL:

- INSTALL, MONITOR, AND MAINTAIN THE SOIL EROSION AND SEDIMENT CONTROL MEASURES AS SHOWN ON THIS PLAN AND COORDINATE SEQUENCING, EROSION AND SEDIMENT CONTROL. MODIFICATIONS/CHANGES WITH ENGINEER TO FACILITATE CONSTRUCTION WORK.
- COMPLY WITH ALL PERMIT REQUIREMENTS.
- PROVIDE THE OWNER, ENGINEER, AND THE MUNICIPALITY WITH 24 HOUR PHONE NUMBERS IN THE EVENT OF AN EMERGENCY AT THE SITE.

5. PRECONSTRUCTION CONFERENCE

THE CONTRACTOR SHALL INITIATE A PRECONSTRUCTION CONFERENCE WITH THE PERMITEE, OWNER-OF-RECORD, CONTRACTOR, ENGINEER, AND MUNICIPAL REPRESENTATIVE TO REVIEW THE PROPOSED SOIL EROSION AND SEDIMENT CONTROL MEASURES.

6. DESCRIPTION AND MAINTENANCE OF EROSION CONTROL MEASURES

6.1 TEMPORARY STABILIZATION MEASURES

GENERAL SEDIMENT AND EROSION CONTROL NOTE:

THE PROJECT EROSION AND SEDIMENT CONTROL MONITOR SHALL SUPERVISE THE LAYOUT OF SEDIMENT AND EROSION CONTROL MEASURES TO ENSURE MAXIMUM PROTECTION OF EXISTING NATIVE TREES AND SHRUBS. EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED PRIOR TO ANY FILL BEING PLACED AND SHALL BE MODIFIED AS REQUIRED DURING EARTHWORK OPERATIONS TO CONTROL AND DIVERT SURFACE RUNOFF FROM FILL SLOPES AND EXPOSED SOIL SURFACES. THE EROSION AND SEDIMENT CONTROL MEASURES SHALL INCLUDE SILT FENCES AND STAKED STRAW WATTLES AT BOTTOM OF FILL SLOPES. EROSION CONTROL BLANKETS SHALL BE PLACED ON COMPLETED SLOPES STEEPER THAN 3:1 AS SOON AS POSSIBLE. WHEN NECESSARY, SEEDING WITH TEMPORARY GRASSES MAY BE REQUIRED. USE BERMS AND TEMPORARY DRAINAGE SWALES TO DIVERT RUNOFF FROM SLOPES PRIOR TO FINAL STABILIZATION.

TEMPORARY GRASS COVER:

PROVIDE TEMPORARY GRASS COVER WHERE INDICATED ON THE PLANS OR WHERE TEMPORARY LAND GRADING WILL BE UNALTERED FOR MORE THAN ONE MONTH BUT LESS THAN 12 MONTHS. THE CONTRACTOR SHALL LOOSEN THE SOIL TO A DEPTH OF TWO INCHES BEFORE SEEDING. IF EXISTING SOIL IS NOT CAPABLE OF GROWING GRASS, THE CONTRACTOR SHALL SPREAD AT LEAST TWO INCHES OF TOPSOIL OVER THE LOOSENED SURFACE. IF SEEDING COMMENCES DURING THE SUMMER OR EARLY AUTUMN, ANNUAL OR PERENNIAL RYE GRASS SEED SHALL BE USED. IF SEEDING COMMENCES IN SPRING OR LATE AUTUMN, WINTER RYE GRASS SEED SHALL BE USED. SEEDING RATES SHALL BE 5 LBS/1000 S.F. HAY MULCH SHALL BE SPREAD AT THE RATE OF 100 LBS/1000 S.F. THE CONTRACTOR SHALL IRRIGATE THE GRASS UNTIL AN ACCEPTABLE STAND OF GRASS IS ESTABLISHED.

STOCKPILING OR STORAGE OF EXCAVATED MATERIALS:

COMPLETELY SURROUND ALL TEMPORARY (2-4 WEEKS) MATERIAL STOCKPILES WITH SILT FENCE TO PREVENT TRANSPORTATION OF SEDIMENT. SEED STOCKPILES WHAT WILL REMAIN FOR A LONGER DURATION WITH A QUICK GROWING RYE GRASS.

FABRIC SLOPE PROTECTION:

INSTALL FABRIC SLOPE PROTECTION ON SLOPES STEEPER THAN 3:1. THE CONTRACTOR SHALL SELECT A FABRIC FROM THE CONNECTICUT DEPARTMENT OF TRANSPORTATION'S APPROVED PRODUCT LIST, CURLEX EROSION CONTROL MATTING BY AMERICAN EXCELSIOR COMPANY, OR APPROVED EQUAL. CONTRACTOR WILL SUBMIT A FILTER FABRIC SHOP DRAWING FOR ENGINEER AND MUNICIPALITY REVIEW AND APPROVAL. THE FABRIC SHALL MEET THE REQUIREMENTS OF CLASS 1 TYPE C SLOPE PROTECTION. THE FABRIC SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND GUIDELINES. THE CONTRACTOR SHALL MAINTAIN THE FABRIC UNTIL A STAND OF GRASS, ACCEPTABLE TO THE ENGINEER, IS ESTABLISHED.

TEMPORARY MULCH:

MULCH ALL DISTURBED AREAS WITH HAY OR STRAW AT THE RATE OF 2 TONS PER ACRE. SPREAD MULCH BY HAND OR MULCH BLOWER TO PROVIDE A UNIFORM DISTRIBUTION. ANCHOR THE MULCH BY TRACKING WITH TRACKED CONSTRUCTION EQUIPMENT SO CLEAT MARKS ARE PARALLEL TO THE CONTOUR. MULCH NETTINGS, APPLIED IN ACCORDANCE WITH THE MANUFACTURERS RECOMMENDATIONS, MAY BE USED AS AN ALTERNATE TO TRACKING. RESTORE ANY AREAS WHERE MULCH IS WASHED AWAY OR BLOWN AWAY BY THE WIND.

THIS ACTIVITY SHALL BE USED TO STABILIZE AREAS WHERE CONSTRUCTION IS SUSPENDED DURING THE WINTER MONTHS. ONCE THE APPROPRIATE DATES FOR SEEDING ARE REACHED, THE CONTRACTOR SHALL COMPLETE THE SEEDING OPERATIONS.

DUST CONTROL:

TAKE PRECAUTIONS TO PREVENT DUST FROM BECOMING A NUISANCE TO ABUTTING PROPERTY OWNERS AND STREETS. BROOM OFF PAVEMENTS ADJOINING THE EXCAVATION ON A DAILY BASIS. COVER AND/OR KEEP ALL EARTH STOCKPILES MOIST AT ALL TIMES. USE CALCIUM CHLORIDE TO CONTROL DUST OVER CERTAIN AREAS OF THE SITE, AS DIRECTED BY THE ENGINEER OR SHOWN ON THE PLANS. CALCIUM CHLORIDE SHALL CONFORM TO ASTM D-98 TYPE 1. THE CONTRACTOR SHALL MAINTAIN AND INSPECT, ON A DAILY BASIS, THE ADEQUACY OF DUST CONTROL MEASURES AND CORRECT ANY DEFICIENCIES IMMEDIATELY.

TREE PROTECTION:

THE CONTRACTOR SHALL PROVIDE SNOW FENCING, BOARD FENCING, OR ROPE FENCING AROUND TREES OR GROUPS OF TREES THAT ARE TO REMAIN, TO PROTECT THEM AGAINST DAMAGE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SELECTING AND INSTALLING THE PROTECTION MEASURES MOST APPROPRIATE FOR THE CONDITIONS PRESENT. THE CONTRACTOR SHALL REPAIR AND/OR REPLACE TREE PROTECTION MEASURES IMMEDIATELY IF DAMAGED DURING CONSTRUCTION.

6.2 TEMPORARY STRUCTURAL MEASURES

CATCH BASIN PROTECTION, FILTER FABRIC AND STONE FILTER:

USE FILTER FABRIC AND STONE FILTER FOR PROTECTION OF CATCH BASINS IN A LOW POINT AS SHOWN AND DETAILED ON DWG. C-1A AND C-5. FIRMLY STAKE FILTER FABRIC INTO THE PAVEMENT BASE MATERIAL. WRAP THE ENTIRE GRATE WITH MIRAFI 140N FILTER FABRIC OR APPROVED EQUAL. REMOVE SEDIMENT FROM AROUND THE INLET PROTECTION ONCE LEVELS REACH 1/4 THE EFFECTIVE HEIGHT. REPLACE THE INLET PROTECTION IMMEDIATELY IF THEY ARE DAMAGED OR DETERIORATED. THE FABRIC SHALL BE REPLACED IMMEDIATELY IF ITS PERMEABILITY IS IMPEDED BY SEDIMENT.

CATCH BASIN PROTECTION, STRAW WATTLE CHECK DAMS, TYPE 5:

USE STRAW WATTLE CHECK DAMS FOR PROTECTION OF CATCH BASINS IN A SWALE. PLACE STAKED BARRIERS IN THE SWALE IN AT LEAST TWO LOCATIONS UPSTREAM OF THE BASIN AS SHOWN ON THE PLANS AND DETAILS. MONITOR THE BARRIERS TO ENSURE THAT RUNOFF EITHER FILTERS THROUGH THE BARRIER OR GOES OVER THE TOP. DO NOT ALLOW RUNOFF TO BYPASS THE SIDE OF THE BARRIER. REMOVE THE SEDIMENT WHEN IT REACHES 1/4 OF THE HEIGHT OF THE BARRIER.

6.3 PERMANENT STABILIZATION MEASURE

IMPLEMENT STABILIZATION MEASURE WITHIN THREE DAYS OF FINAL GRADING

PERMANENT SEEDING:

FOLLOW LANDSCAPE ARCHITECT'S SPECIFICATIONS AND REQUIREMENTS FOR TOPSOIL, SEED, FERTILIZER, AND MULCH.

LANDSCAPE PLANTINGS:

PROVIDE PLANTINGS AS INDICATED ON THE PLANS. THIS WORK INCLUDES FURNISHING AND PLANTING TREES, SHRUBS, AND GROUNDCOVER OF THE TYPES AND SIZES INDICATED ON THE DRAWINGS. THE CONTRACTOR MAY ALSO BE REQUIRED TO 1) FURNISH AND PLACE TOPSOIL, 2) GUY OR STAKE TREES OR SHRUBS, 3) FERTILIZE, 4) WATER, 5) PRUNE, 6) SPRAY, 7) INSTALL MULCH, 8) ESTABLISH ALL GROUNDCOVER PRIOR TO THE END OF THE PERIOD OF ACCEPTANCE. THE CONTRACTOR IS RESPONSIBLE FOR THE ABOVE ACTIVITIES UNTIL FINAL ACCEPTANCE BY THE LANDSCAPE ARCHITECT AND/OR ENGINEER.

6.4 PERMANENT STRUCTURAL MEASURES

LAND GRADING:

PROPOSED GRADES ARE SHOWN IN DETAIL ON CIVIL DRAWING C-2.

BRING ALL EXCAVATED, FILLED, OR DISTURBED AREAS TO FINAL GRADE AS SOON AS POSSIBLE AND STABILIZE AREAS WITH LOAM, SEED AND MULCH IMMEDIATELY. KEEP EROSION CONTROL MEASURES IN PLACE UNTIL THE SITE IS STABILIZED WITH PAVEMENT AND/OR VEGETATION.

INFILTRATION CHAMBER SYSTEM:

AN INFILTRATION CHAMBER SYSTEM IS REQUIRED, AS SHOWN ON THE PLANS AND DETAILS, TO REDUCE THE PEAK RATE OF RUNOFF LEAVING THE SITE. CONSTRUCT THE INFILTRATION CHAMBER SYSTEM ACCORDING TO THE PLANS AND DETAILS. MINIMIZE THE AMOUNT OF SEDIMENT FLOWING INTO THE UNDERGROUND SYSTEM BY TEMPORARILY CAPPING THE INLET PIPE TO THE SYSTEM UNTIL FINAL CATCH BASINS AND PAVEMENT COURSES HAVE BEEN INSTALLED. ADDITIONALLY, INSTALL SILT SACKS OR APPROVED EQUIVALENT UNTIL CONSTRUCTION IS COMPLETED. IN ORDER TO MINIMIZE SEDIMENT ENTERING THE INFILTRATION CHAMBER SYSTEM, FOLLOWING CONSTRUCTION AND SITE STABILIZATION, THE CONTRACTOR SHALL REMOVE SEDIMENT AS REQUIRED.

6.5 OTHER CONTROLS

WASTE DISPOSAL:

PROVIDE AN ADEQUATE NUMBER OF COVERED WASTE CONTAINERS TO ENSURE THAT NO LITTER, DEBRIS, BUILDING MATERIALS, OR SIMILAR MATERIALS ARE DISCHARGED TO WETLANDS OR WATERCOURSES. INSTRUCT SUBCONTRACTORS TO USE THE CONTAINERS FOR WASTE MATERIAL. EMPTY THE CONTAINERS PROMPTLY WHEN FULL.

CONSTRUCTION ENTRANCE:

PLACE CLEAN WASHED STONE (CONNDOT No.3 STONE) AT THE SITE ENTRANCE(S) TO THE LENGTH, WIDTH AND DEPTH INDICATED ON THE PLANS AND DETAILS TO HELP REMOVE MUD AND/OR CLODS OF SOIL FROM CONSTRUCTION VEHICLES EXITING FROM THE SITE. ADD STONE AS NECESSARY TO MAINTAIN ADEQUATE SERVICEABILITY.

PAVEMENT MAINTENANCE:

THE CONTRACTOR SHALL SWEEP PAVED ROADWAYS ADJACENT TO THE SITE ON A ROUTINE BASIS TO PREVENT TRACKING OF MUD ONTO PUBLIC ROADWAYS AND WASHING OF MUD INTO WATERWAYS. IF THE CONTRACTORS SCHEDULE FOR CLEANING THE PAVEMENT IS FOUND TO BE INADEQUATE BY THE OWNER, OWNERS REPRESENTATIVE, OR THE MUNICIPALITY, THE CONTRACTOR SHALL INCREASE THE FREQUENCY AT NO ADDITIONAL COST TO THE OWNER.

CLEANING OF STORMWATER STRUCTURES:

CLEAN ALL STORMWATER STRUCTURES, INCLUDING, BUT NOT LIMITED TO PIPES, SWALES, DETENTION BASINS, SEDIMENT TRAPS, CATCH BASIN SUMPS AND RIPRAP APRONS OF SEDIMENT UPON COMPLETION OF THE PROJECT.

7. DEWATERING

CONSTRUCTION DEWATERING:

THIS ITEM INCLUDES METHODS AND EQUIPMENT NECESSARY TO MAINTAIN, IN A DRY CONDITION, ANY AREAS IN WHICH CONSTRUCTION IS TO BE CONDUCTED. WHATEVER THE METHODS OR EQUIPMENT USED, DISPOSE OF THE DISCHARGE WATER IN SUCH A MANNER TO AVOID POLLUTION OF EXISTING WATERCOURSES, INJURY TO PERSONS OR PUBLIC OR PRIVATE PROPERTY.

THE CONTRACTOR SHALL DEVELOP A DEWATERING PROGRAM DESIGNED TO ENSURE THAT DISPOSAL OF ALL DEWATERING WASTE WATERS WILL NOT CAUSE SCOURING OR EROSION OR CONTAIN SUSPENDED SOLIDS IN AMOUNTS WHICH COULD REASONABLY BE EXPECTED TO CAUSE POLLUTION OF WETLANDS OR WATERWAYS. DISCHARGE WASTE WATERS IN A MANNER WHICH MINIMIZES THE DISCOLORATION OF RECEIVING WATERS.

THE CONTRACTOR SHALL CONSTRUCT A SHALLOW BASIN TO COLLECT DEWATERING WASTE WATERS. CONCRETE TRUCKS ARE ONLY TO WASH OFF IN THE SHALLOW BASIN FOR COLLECTING DEWATERING WASTE WATERS. THE BASIN SHALL BE OF ADEQUATE CAPACITY TO PERMIT INFILTRATION OF ALL DEWATERING WASTE WATERS WITHOUT OVER TOPPING.

CT DEEP STORMWATER GUIDELINE NOTES

THE PERMITEE SHALL ROUTINELY INSPECT THE SITE FOR COMPLIANCE WITH THE GENERAL PERMIT AND THE PLAN FOR THE SITE UNTIL A NOTICE OF TERMINATION IS SUBMITTED. INSPECTION PROCEDURES FOR THESE ROUTINE INSPECTIONS SHALL BE ADDRESSED AND IMPLEMENTED IN THE FOLLOWING MANNER:

(i) THE PERMITEE SHALL MAINTAIN A RAIN GAUGE ON-SITE TO DOCUMENT RAINFALL AMOUNTS, AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM THAT GENERATES A DISCHARGE. A QUALIFIED INSPECTOR, AS DEFINED IN THE "DEFINITIONS" SECTION OF THE GENERAL PERMIT, SHALL INSPECT, AT A MINIMUM, THE FOLLOWING: DISTURBED AREAS OF THE CONSTRUCTION ACTIVITY THAT HAVE NOT BEEN FINALLY STABILIZED; ALL EROSION AND SEDIMENTATION CONTROL MEASURES; ALL STRUCTURAL CONTROL MEASURES; SOIL STOCKPILE AREAS; WASHOUT AREAS AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. THESE AREAS SHALL BE INSPECTED FOR EVIDENCE OF, OR THE POTENTIAL FOR, POLLUTANTS ENTERING THE DRAINAGE SYSTEM AND IMPACTS TO THE RECEIVING WATERS. LOCATIONS WHERE VEHICLES ENTER EXIT THE SITE SHALL ALSO BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING. FOR STORMS THAT END ON A WEEKEND, HOLIDAY OR OTHER TIME AFTER WHICH NORMAL WORKING HOURS WILL NOT COMMENCE WITHIN 24 HOURS, AN INSPECTION IS REQUIRED WITHIN 24 HOURS ONLY FOR STORMS THAT EQUAL OR EXCEED 0.5 INCHES. FOR STORMS OF LESS THAN 0.5 INCHES, AN INSPECTION SHALL OCCUR IMMEDIATELY UPON THE START OF THE SUBSEQUENT NORMAL WORKING HOURS. WHERE SITES HAVE BEEN TEMPORARILY OR FINALLY STABILIZED, SUCH INSPECTION SHALL BE CONDUCTED AT LEAST ONCE EVERY MONTH FOR THREE MONTHS.

(ii) THE QUALIFIED INSPECTOR(S) SHALL EVALUATE THE EFFECTIVENESS OF EROSION AND SEDIMENT CONTROLS, STRUCTURAL CONTROLS, STABILIZATION PRACTICES, AND ANY OTHER CONTROLS IMPLEMENTED TO PREVENT POLLUTION AND DETERMINE IF IT IS NECESSARY TO INSTALL, MAINTAIN, OR REPAIR SUCH CONTROLS AND/OR PRACTICES TO IMPROVE THE QUALITY OF STORMWATER DISCHARGE(S).

(iii) A REPORT SHALL BE PREPARED AND RETAINED AS PART OF THE PLAN. THIS REPORT SHALL SUMMARIZE: THE SCOPE OF THE INSPECTION; NAME(S) AND QUALIFICATIONS OF PERSONNEL MAKING THE INSPECTION; THE DATE(S) OF THE INSPECTION; WEATHER CONDITIONS INCLUDING PRECIPITATION INFORMATION; MAJOR OBSERVATIONS RELATING TO EROSION AND SEDIMENT CONTROLS AND THE IMPLEMENTATION OF THE PLAN; A DESCRIPTION OF THE STORMWATER DISCHARGE(S) FROM THE SITE; AND ANY WATER QUALITY MONITORING PERFORMED DURING THE INSPECTION. THE REPORT SHALL BE SIGNED BY THE PERMITEE OR HIS/HER AUTHORIZED REPRESENTATIVE IN ACCORDANCE WITH THE "CERTIFICATION OF DOCUMENTS" SECTION OF THE GENERAL PERMIT.

THE REPORT SHALL INCLUDE A STATEMENT THAT, IN THE JUDGEMENT OF THE QUALIFIED INSPECTOR(S) CONDUCTING THE SITE INSPECTION, THE SITE IS EITHER IN COMPLIANCE OR OUT OF COMPLIANCE WITH THE TERMS AND CONDITIONS OF THE PLAN AND PERMIT. IF THE SITE INSPECTION INDICATES THAT THE SITE IS OUT OF COMPLIANCE, THE INSPECTION REPORT SHALL INCLUDE A SUMMARY OF THE REMEDIAL ACTIONS REQUIRED TO BRING THE SITE BACK INTO COMPLIANCE. NON-ENGINEERED CORRECTIVE ACTIONS SHALL BE IMPLEMENTED ON SITE WITHIN 24 HOURS AND INCORPORATED INTO A REVISED PLAN WITHIN THREE CALENDAR DAYS OF THE DATE OF INSPECTION UNLESS ANOTHER SCHEDULE IS SPECIFIED IN THE GUIDELINES. ENGINEERED CORRECTIVE ACTIONS SHALL BE IMPLEMENTED ON SITE WITHIN SEVEN DAYS AND INCORPORATED INTO A REVISED PLAN WITHIN TEN DAYS OF THE DATE OF INSPECTION, UNLESS ANOTHER SCHEDULE IS SPECIFIED IN THE GUIDELINES OR IS APPROVED BY THE COMMISSIONER. DURING THE PERIOD IN WHICH ANY CORRECTIVE ACTIONS ARE BEING DEVELOPED AND HAVE NOT YET BEEN FULLY IMPLEMENTED, INTERIM MEASURES SHALL BE IMPLEMENTED TO MINIMIZE THE POTENTIAL FOR THE DISCHARGE OF POLLUTANTS FROM THE SITE.

(iv) INSPECTORS FROM THE DEEP AND THE APPROPRIATE DISTRICT MAY INSPECT THE SITE FOR COMPLIANCE WITH THE GENERAL PERMIT AT ANY TIME CONSTRUCTION ACTIVITIES ARE ONGOING AND UPON COMPLETION OF CONSTRUCTION ACTIVITIES TO VERIFY THE FINAL STABILIZATION OF THE SITE AND/OR THE INSTALLATION OF POST-CONSTRUCTION STORMWATER MANAGEMENT MEASURES PURSUANT TO SECTION 6(a).

RJOC		DATE
	REVISION	
		NO.
	REVISION	
		NO.

PREPARED BY:

RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.278.0180 RJCONNELL.COM

PREPARED FOR:

KINCORA WATERFORD, LLC
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

PROJECT NAME:

122-124 BOSTON POST ROAD
WATERFORD, CT

SEAL:



DESIGNED BY:	DRG
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.
DATE:	08/22/2023
DRAWING NAME:	

EROSION AND SEDIMENT CONTROL NARRATIVE

DRAWING NUMBER:

C-1C

PROJECT NUMBER:

23001

Drawing name: G:\CT\Waterford\Kincora Development\122-124 Boston Post Road\Water\23001_C-2 Grading and Drainage Plan.dwg
Jun 22, 2023 1:17:06pm

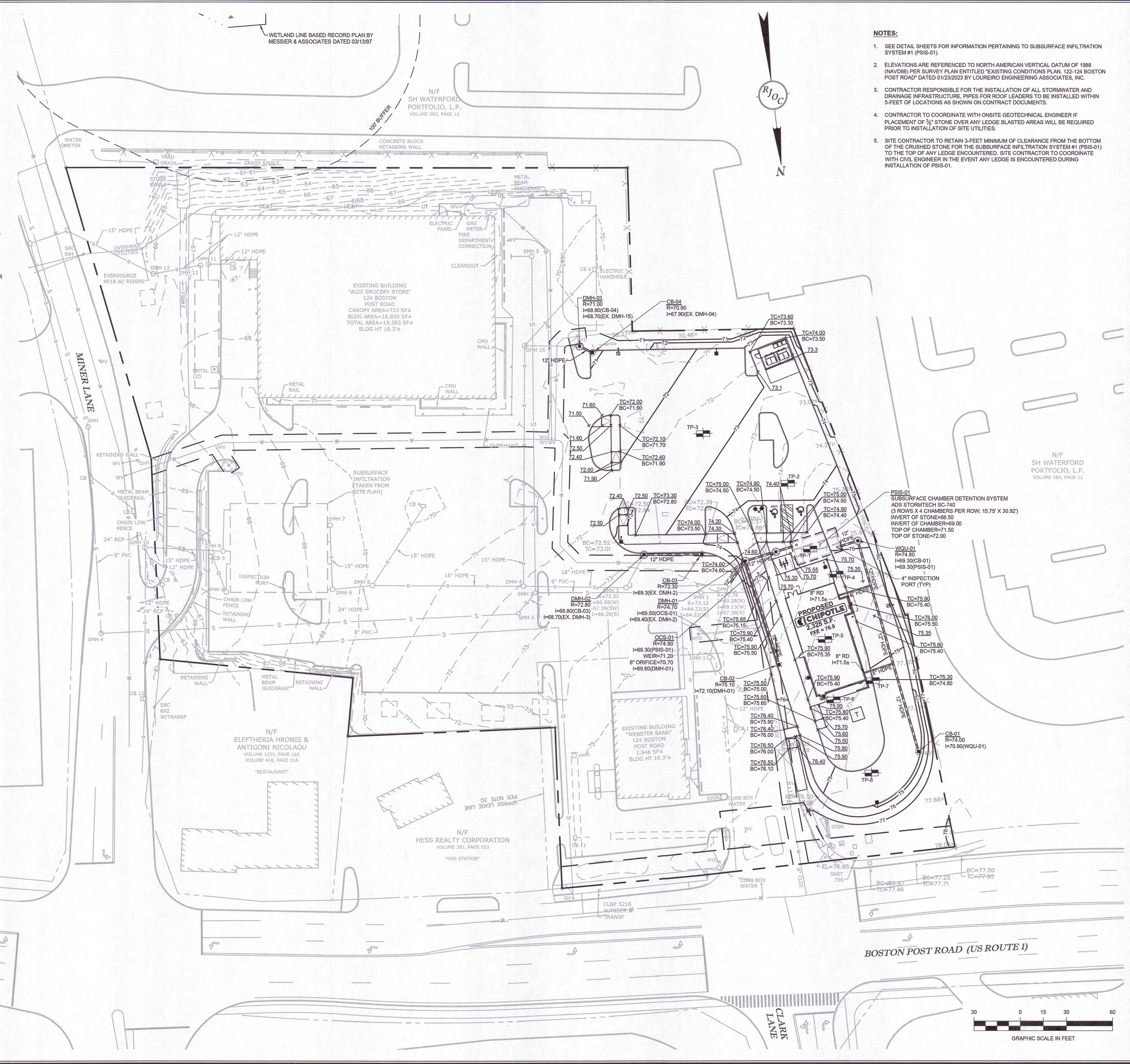
GRADING & DRAINAGE NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "CALL BEFORE YOU DIG" AT 811 AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENT SHOWN ON THE PLAN.
2. EXISTING UTILITY INFORMATION AND TOPOGRAPHY TAKEN FROM A PLAN ENTITLED "EXISTING CONDITIONS PLAN" DATED JANUARY 23, 2023 PREPARED BY LOUREIRO ENGINEERING ASSOCIATES, INC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
4. ALL CATCH BASINS SHALL BE EQUIPPED WITH GAS/OIL HOODS AND SHALL HAVE 4 FOOT SUMPS.
5. ALL DRAINAGE CONNECTIONS SHALL BE HDPE, UNLESS NOTED OTHERWISE.
6. HDPE PIPE SHALL CONFORM WITH ASTM 2648 AND ASTM F477, SHALL BE MANUFACTURED WITH HIGH DENSITY POLYETHYLENE PLASTIC AND SHALL BE ADS N-12 "MEGA GREEN" PIPE AS MANUFACTURED BY ADVANCE DRAINAGE SYSTEM, INC. OR APPROVED EQUAL UNLESS OTHERWISE NOTED OR DETAILED.
7. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER SERVICES CROSS STORM DRAIN LINES.
8. ALL SERVICE CONNECTIONS (I.E., ROOF AND CANOPY DRAINS) SHALL BE INSTALLED TO A POINT 5 FEET FROM THE BUILDING WALL UNLESS OTHERWISE NOTED OR DETAILED.
9. ALL PROPOSED SLOPES (EXCLUDING ANY RIPRAP SLOPES) STEEPER THAN 3:1 SHALL BE STABILIZED WITH A CURLEX EROSION CONTROL MATTING BY AMERICAN EXCELSIOR COMPANY (OR ENGINEER APPROVED EQUAL) AND PROTECTED FROM EROSION. ADDITIONALLY, THESE AREAS ARE TO BE HYDROSEED.
10. THE CONTRACTOR SHALL PLACE AND COMPACT STRUCTURAL FILL WITHIN THE LIMITS OF THE BUILDING PAD. PLACEMENT AND COMPACT OF STRUCTURAL FILL TO FINAL ELEVATION PER ARCHITECTURAL AND/OR STRUCTURAL DOCUMENTS.
11. ALL DRAINAGE STRUCTURES AND STORM SEWER PIPES SHALL BE DESIGNED FOR HEAVY DUTY TRAFFIC (H20) LOADING AND INSTALLED ACCORDINGLY.
12. ALL DRAINAGE STRUCTURES SHALL BE PRE-CAST CONCRETE.

SUBSURFACE INFILTRATION FIELDS

1. COMPACTION OF THE FIELD SUBGRADE SHALL BE IN ACCORDANCE WITH THESE PLANS AND SITEWORK SPECIFICATIONS. UPON COMPLETION OF SUBGRADE COMPACTION, FIELD TESTING WILL BE COMPLETED TO CONFIRM THE 5-INCH/HOUR INFILTRATION RATE USED IN DESIGN.
2. THE STONE INFILTRATION BEDS AND INFILTRATION CHAMBERS SHALL BE PROTECTED DURING CONSTRUCTION FROM SEDIMENT LADEN RUNOFF.
3. CONTRACTOR SHALL NOTIFY ENGINEER OF SCHEDULE TO INSTALL INFILTRATION SYSTEM. FIELD INSPECTION AND AS-BUILT VERIFICATION OF SYSTEM SHALL BE REQUIRED.

LEGEND	DESCRIPTION
	CATCH BASIN
	INSPECTION PORT
	CONTOUR
	DRAIN MANHOLE
	DRAIN PIPE
	ROOF DRAIN (RD)
	SPOT GRADE
	TOP/BOTTOM OF CURB



NOTES:

1. SEE DETAIL SHEETS FOR INFORMATION PERTAINING TO SUBSURFACE INFILTRATION SYSTEM #1 (PSIS-01).
2. ELEVATIONS ARE REFERENCED TO NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD88) PER SURVEY PLAN ENTITLED "EXISTING CONDITIONS PLAN, 122-124 BOSTON POST ROAD" DATED 01/23/2023 BY LOUREIRO ENGINEERING ASSOCIATES, INC.
3. CONTRACTOR RESPONSIBLE FOR THE INSTALLATION OF ALL STORMWATER AND DRAINAGE INFRASTRUCTURE, PIPES FOR ROOF LEADERS TO BE INSTALLED WITHIN 5-FEET OF LOCATIONS AS SHOWN ON CONTRACT DOCUMENTS.
4. CONTRACTOR TO COORDINATE WITH ONSITE GEOTECHNICAL ENGINEER IF PLACEMENT OF 3/8" STONE OVER ANY LEDGE BLASTED AREAS WILL BE REQUIRED PRIOR TO INSTALLATION OF SITE UTILITIES.
5. SITE CONTRACTOR TO RETAIN 3-FEET MINIMUM OF CLEARANCE FROM THE BOTTOM OF THE CRUSHED STONE FOR THE SUBSURFACE INFILTRATION SYSTEM #1 (PSIS-01) TO THE TOP OF ANY LEDGE ENCOUNTERED. SITE CONTRACTOR TO COORDINATE WITH CIVIL ENGINEER IN THE EVENT ANY LEDGE IS ENCOUNTERED DURING INSTALLATION OF PSIS-01.

RJOC

DATE

REVISION

NO.

DATE

REVISION

NO.

PREPARED BY:

RJO'CONNELL & ASSOCIATES, INC.

CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

KINCORA WATERFORD, LLC

c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

PROJECT NAME:

122-124 BOSTON POST ROAD

WATERFORD, CT

SEAL:

DESIGNED BY:

DRG

DRAWN BY:

MCR

REVIEWED BY:

BJM

SCALE:

1" = 30'

DATE:

06/22/2023

DRAWING NAME:

DRAWING NUMBER:

C-2

PROJECT NUMBER:

23001

Copyright © 2023 by R.J. O'Connell & Associates, Inc.

**RJO'CONNELL
& ASSOCIATES, INC.**
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

**KINCORA
WATERFORD, LLC**
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

122-124 BOSTON
POST ROAD
WATERFORD, CT

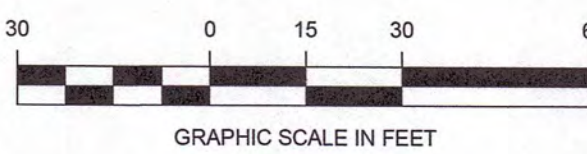
DR

UTILITY PLAN

C-3

23001

Copyright © 2023 by R.J. O'Connell & Associates, Inc.



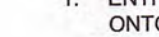
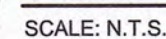
1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR MUST CONTACT THE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "CALL BEFORE YOU DIG" AT 811 AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN
2. EXISTING UTILITY INFORMATION AND TOPOGRAPHY TAKEN FROM A PLAN ENTITLED "EXISTING CONDITIONS PLAN" DATED JANUARY 23, 2023 PREPARED BY LOUREIRO ENGINEERING ASSOCIATES, INC.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCH MARKS NECESSARY FOR THE WORK.
4. ALL UTILITIES TO BE INSTALLED TO WITHIN 5-FEET OF BUILDING FOUNDATION LIMITS.
5. ALL WATER MAINS SHALL BE INSTALLED WITH A MINIMUM OF 4.5 FEET OF COVER AND A MAXIMUM OF 9.0 FEET OF COVER EXCEPT AS NOTED OR DETAILLED OTHERWISE. GREATER DEPTHS ARE PERMITTED WHERE REQUIRED TO AVOID CONFLICTS WITH OTHER UTILITIES.
6. GENERALLY, WATER MAIN FITTINGS IDENTIFIED ON THIS DRAWING ARE SHOWN FOR INSTALLATION LOCATION PURPOSES. THE CONTRACTOR SHALL NOTE THAT NOT ALL FITTINGS ARE NOTED, SHOWN, OR INDICATED.
7. ALL WATER MAIN FITTINGS, TEES, HYDRANTS, ETC. SHALL BE RESTRAINED WITH CONCRETE TIE-ROD BLOCKS.
8. ALL HYDRANTS SHALL BE INSTALLED WITH A 6" C.D.I. RUNOUT AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED GATE VALVE, BOX, AND TEE FITTING. ALL HYDRANTS SHALL MEET LOCAL MUNICIPAL SPECIFICATION REQUIREMENTS AND SHALL BE INSTALLED IN ACCORDANCE WITH ALL LOCAL MUNICIPAL REQUIREMENTS.
9. A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER MAINS AND WATER MAINS. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER MAIN, THE WATER MAIN SHALL BE LAID IN A SEPARATE TRENCH AND THE ELEVATION OF THE CROWN OF THE SEWER SHALL BE AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER MAIN.
10. DOMESTIC WATER SERVICES 2.5" AND SMALLER SHALL BE TYPE K COPPER TUBING AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED CORPORATION STOP WITH APPROVED SADDLE, CURB STOP, AND BOX.
11. ALL WATER MAINS 3" & LARGER SHALL BE CEMENT LINED DUCTILE IRON - CLASS 52, AND SHALL BE INSTALLED WITH APPROPRIATELY SIZED FITTINGS AND GATE VALVES.
12. DOMESTIC WATER SERVICES SHALL BE INSTALLED WITH APPROPRIATELY SIZED GATE, BOX AND TEE FITTINGS.
13. ALL WATER MAIN APPURTENANCES, MATERIALS, METHODS OF INSTALLATION AND TESTING REQUIREMENTS SHALL MEET OR EXCEED ALL LOCAL MUNICIPAL REQUIREMENTS.
14. PRESSURE AND LEAKAGE TEST, DISINFECTION AND FLUSHING SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL MUNICIPAL STANDARDS AND REQUIREMENTS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS IN CONNECTION WITH UTILITY TESTS, FLUSHING AND INSPECTIONS AS REQUIRED BY THE LOCAL MUNICIPALITY.
15. PRIMARY WATER METER AND BACKFLOW PREVENTER SHALL BE LOCATED AT THE POINT WHERE THE WATER LINE ENTERS THE BUILDING UNLESS OTHERWISE NOTED OR DETAILED ON THE DRAWINGS.
16. ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE PIPE (P.V.C.), SDR 35 AND SHALL CONFORM WITH ASTM-D3034 UNLESS OTHERWISE NOTED.
17. A MINIMUM OF 18" VERTICAL CLEARANCE SHALL BE MAINTAINED WHERE WATER MAINS CROSS STREET DRAIN LINES.
18. WHERE SANITARY SEWERS CROSS WATER MAINS, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST EIGHTEEN INCHES BELOW THE INVERT OF THE WATER MAIN. IF THE SEWER CROWN IS NOT AT LEAST EIGHTEEN INCHES BELOW THIS REQUIREMENT, THE WATER MAIN SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL JOINT PIPE FOR A DISTANCE OF TEN FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER MAIN SHALL BE CENTERED OVER THE SEWER SO THAT THE JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. IF MECHANICAL JOINT PIPE IS NOT USED THEN BOTH THE WATER MAIN AND SANITARY SEWER SHALL BE ENCASED IN CONCRETE FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE OTHER PIPE AS MEASURED NORMALLY FROM ALL POINTS ALONG THE PIPE.
19. PROPOSED GAS SERVICE LOCATIONS ARE APPROXIMATE ONLY. THE CONTRACTOR SHALL CONFIRM WITH THE GAS COMPANY THAT GAS LINE INSTALLATION SHALL BE BY THE LOCAL GAS COMPANY. THE CONTRACTOR SHALL TRAVE THE GAS COMPANY ADVANCE NOTICE OF WHEN THE GAS LINE CAN BE INSTALLED. UNLESS OTHERWISE COORDINATED, THE CONTRACTOR IS RESPONSIBLE FOR ALL EXCAVATION AND BACKFILL AND COMPACTION FOR THE GAS LINE.
20. THE CONTRACTOR TO PROVIDE 6" SEWER SERVICE, 2" DOMESTIC WATER SERVICE TO WITHIN 5-FEET OF CLIENT TENANTS BUILDING PAD AT LOCATIONS SHOWN ON CONTRACT DOCUMENTS. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH APPLICABLE PLUMBING CODE, BUILDING CODE, AND PROVIDER REQUIREMENTS.
21. THE CONTRACTOR SHALL PROVIDE ELECTRIC SERVICE (SIZE DETERMINED BY OTHERS), INCLUDING TRANSFORMER AND SERVICE PANELS. ALL CONDUIT AND PULL STRINGS WILL BE INSTALLED FROM TRANSFORMER TO WITHIN 5-FEET OF CLIENT TENANTS BUILDING PAD.
22. THE CONTRACTOR SHALL PROVIDE A CONDUIT AND PULL WIRE (SIZES TO BE DETERMINED BY OTHERS) FOR TELEPHONE SERVICE TO WITHIN 5-FEET OF CLIENT TENANTS BUILDING PAD. INSTALLATION AND MATERIALS WILL BE PER APPLICABLE BUILDING CODE OR SERVICE PROVIDER, WHICHEVER IS MORE STRINGENT.
23. IF DELAYS OCCUR DURING THE INSTALLATION OF UTILITIES, THE CONTRACTOR TO PROVIDE TEMPORARY SERVICES AS NEED ON-SITE.
24. THE CONTRACTOR TO COORDINATE WITH ELECTRIC SERVICE PROVIDER REGARDING SERVICE FOR CLIENT.

- THE CALCULATIONS DEPICTED BELOW ARE BASED UPON THE UNIT DAILY SEWAGE GENERATION FLOW PUBLISHED WITHIN SECTION IV (DESIGN FLOWS) OF THE CONNECTICUT PUBLIC HEALTH CODE, ON-SITE SEWAGE DISPOSAL REGULATIONS AND TECHNICAL STANDARDS FOR SUBSURFACE SEWAGE DISPOSAL SYSTEMS.

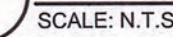
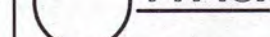
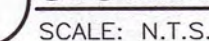
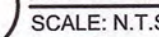
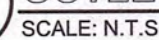
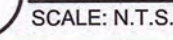
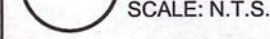
- = 30 GPD (RESTAURANT W/ PUBLIC TOILETS) x No. SEATS
- = 30 GPD x 56 SEATS
- = 1,680 GPD

2,000 GAL. > 1,689 GAL.

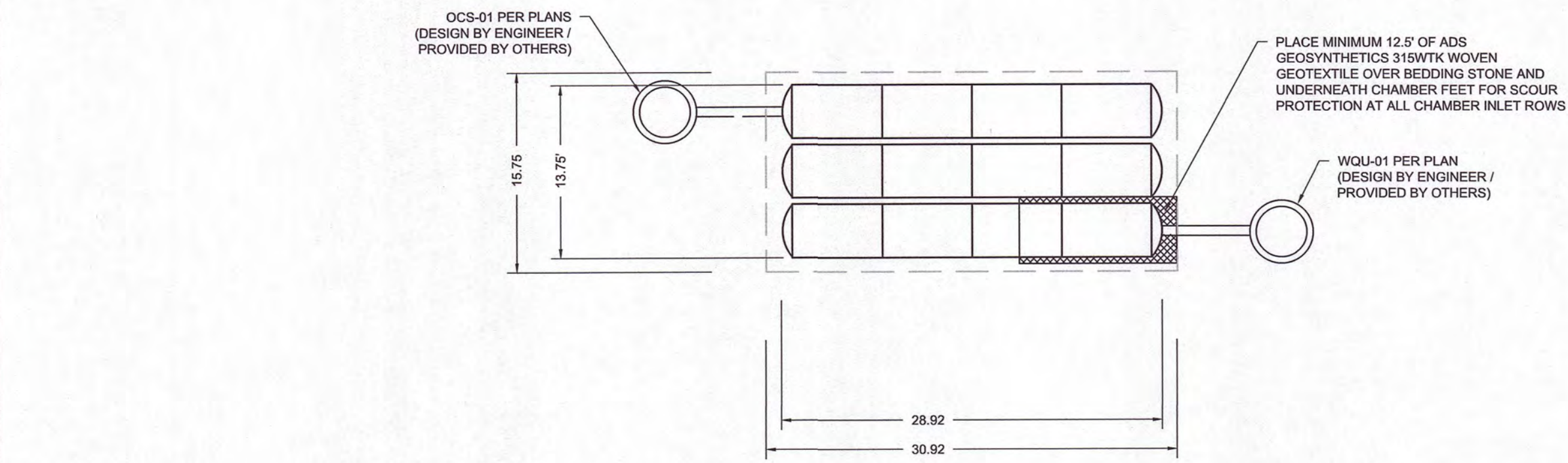
1. THIS LIGHTING DESIGN IS BASED ON INFORMATION SUPPLIED BY OTHERS. SITE DETAILS PROVIDED ARE REPRODUCED ONLY AS A VISUALIZATION AID. FIELD DEVIATIONS MAY SIGNIFICANTLY AFFECT PREDICTED PERFORMANCE. PRIOR TO INSTALLATION, CRITICAL SITE INFORMATION (POLE LOCATIONS, ORIENTATION, MOUNTING HEIGHT, ETC) SHOULD BE COORDINATED WITH THE CONTRACTOR AND/OR SPECIFIER RESPONSIBLE FOR THE PROJECT.
2. LUMINAIRE DATA IS TESTED TO INDUSTRY STANDARDS UNDER LABORATORY CONDITIONS. OPERATING VOLTAGE AND NORMAL MANUFACTURING TOLERANCES OF LAMP, BALLAST, AND LUMINAIRE MAY AFFECT FIELD RESULTS.
3. CONFORMANCE TO FACILITY CODE AND OTHER LOCAL REQUIREMENTS IS THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.
4. THE LAYOUT AND INSTALLATION OF CONDUITS AND WIRING FROM THE SITE LIGHT POLES TO THE CONTROL PANEL TO BE PERFORMED AS DESIGN-BUILD.
5. SITE LIGHTING CONSISTS OF RELOCATION OF EXISTING LIGHT POLES AND FIXTURES AND ADDING A FEW NEW POLE MOUNTED FIXTURES THE SAME AS THE EXISTING FIXTURES.



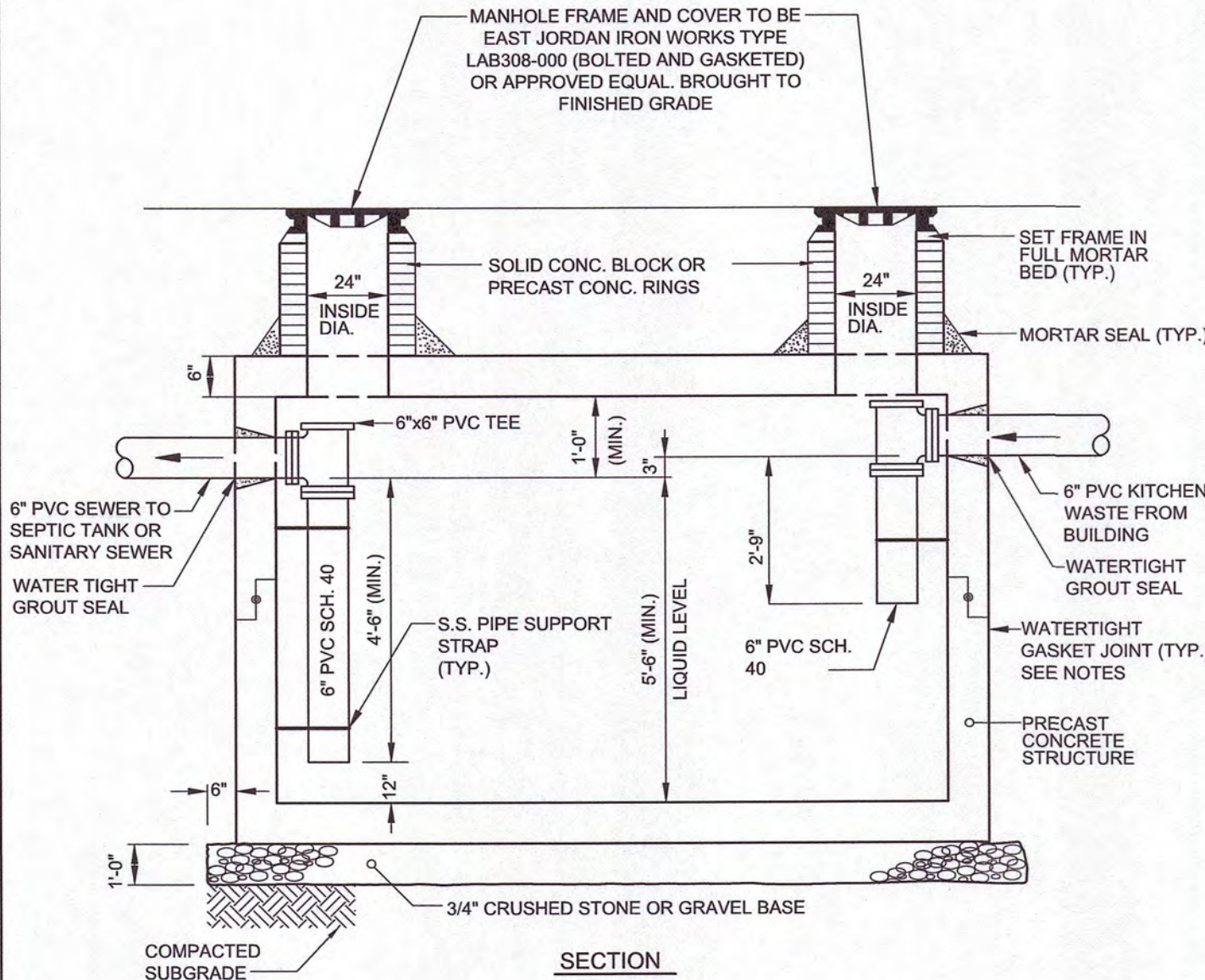
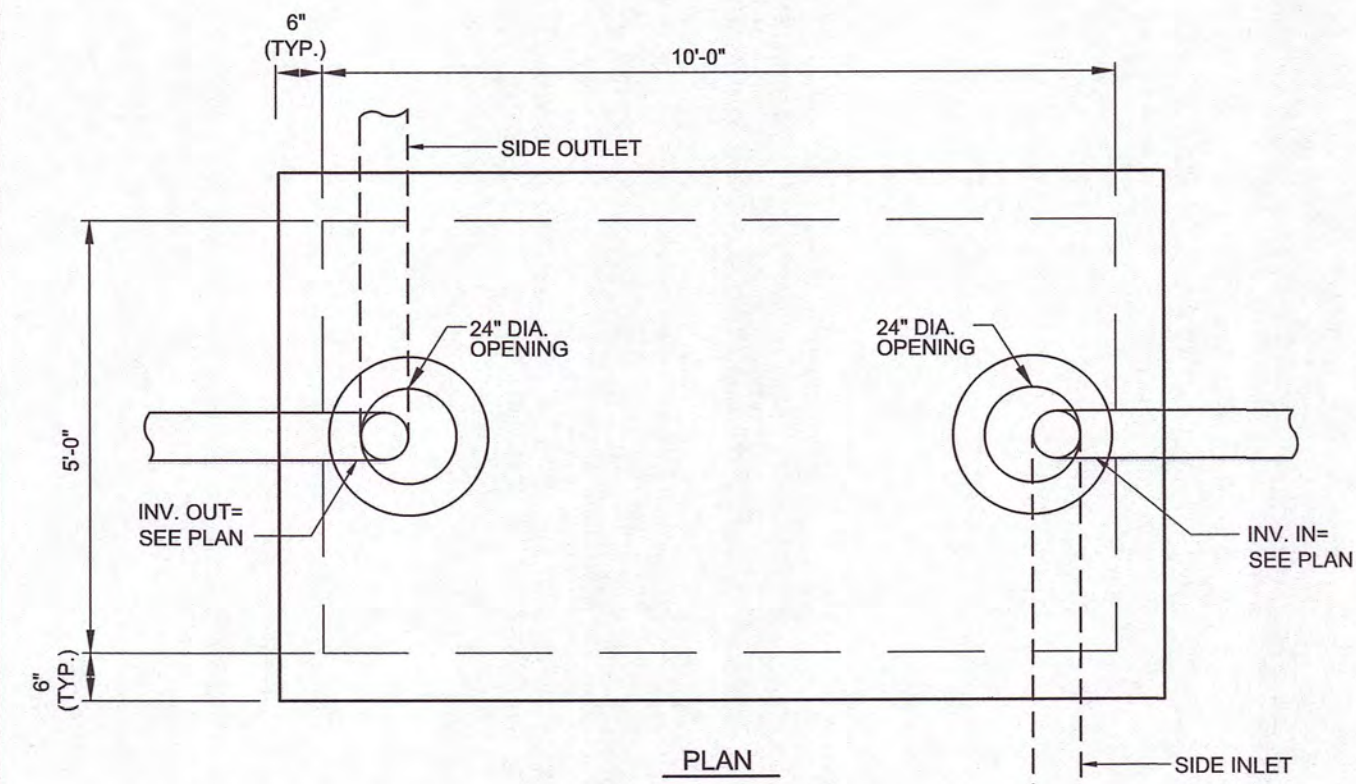
- SCALE: N.T.S.

23001

PROPOSED ELEVATIONS	
MAXIMUM ALLOWABLE GRADE (TOP OF PAVEMENT/UNPAVED):	79.50
MINIMUM ALLOWABLE GRADE (UNPAVED WITH TRAFFIC):	73.00
MINIMUM ALLOWABLE GRADE (UNPAVED NO TRAFFIC):	73.00
MINIMUM ALLOWABLE GRADE (BASE OF FLEXIBLE PAVEMENT):	73.00
MINIMUM ALLOWABLE GRADE (TOP OF RIGID CONCRETE PAVEMENT):	73.00
TOP OF STONE:	72.00
TOP OF CHAMBER:	71.50
6" BOTTOM MANIFOLD / CONNECTION INVERT:	69.05
BOTTOM OF CHAMBER:	69.00
BOTTOM OF STONE:	68.50



PROPOSED SUBSURFACE INFILTRATION SYSTEM 1 (PSIS-01)
SCALE: N.T.S.



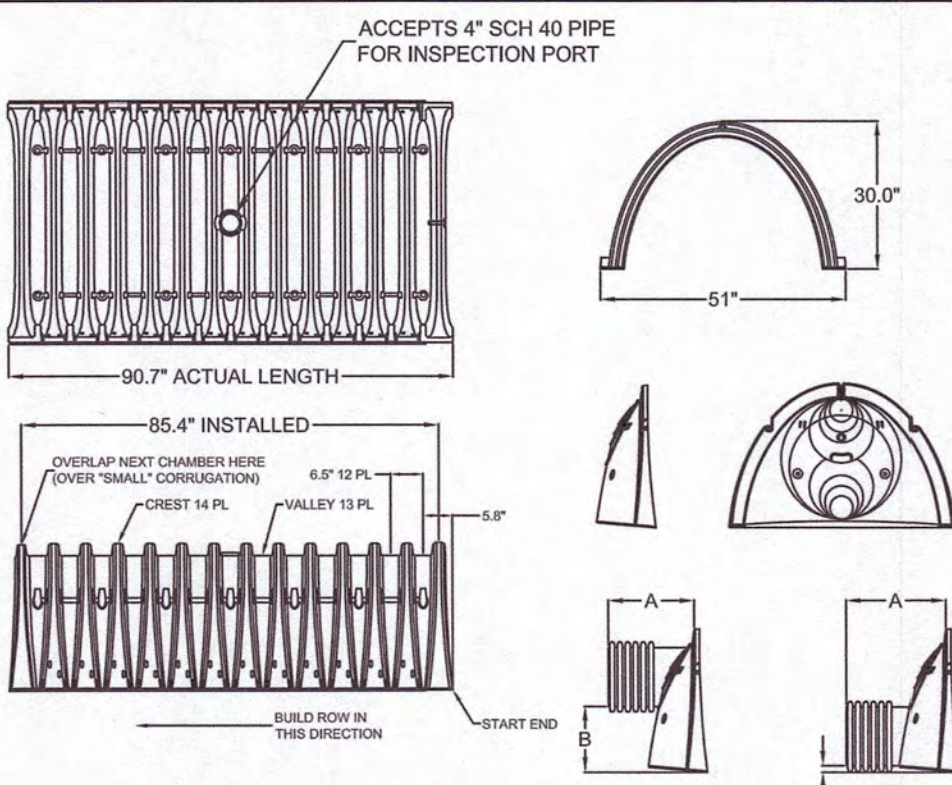
- NOTES:**
- STRUCTURE TO BE MODEL GT-2000 MANUFACTURED BY OLD CASTLE PRECAST OR APPROVED EQUAL
 - CONCRETE MINIMUM STRENGTH - 5000 PSI AT 28 DAYS
 - STEEL REINFORCEMENT - ASTM A-615-79, GRADE 60, 1" MIN. COVER
 - DESIGN LOADINGS - AASHTO HS20-44 INCLUDING CONSIDERATION FOR CONCENTRATED LOADS TRANSMITTED TO ACCESS.
 - MINIMUM CAPACITY - 2000 GALLONS AT LIQUID LEVEL
 - CONSTRUCTION JOINT(S) - SEALED WITH 1" DIA. BUTYL RUBBER OR EQUIVALENT.
 - REMOVE CONCRETE COVERS WHEN USING RISERS WITH MH COVERS
 - REFER TO PLUMBING DRAWINGS FOR VENTING
 - GREASE TANK SIZING SHALL BE CONFIRMED BY PLUMBING ENGINEER.

TYPICAL 2000 GAL. GREASE TRAP
SCALE: N.T.S.

PROPOSED LAYOUT (SYSTEM 1)
(12) STORMTECH SC-740 CHAMBERS
(6) STORMTECH SC-740 END CAPS
INSTALLED WITH 6" COVER STONE, 6" BASE STONE, 40% STONE VOID
AREA OF SYSTEM- 487 FT²
PERIMETER OF SYSTEM- 93 FT

PLACE MINIMUM 12.5' OF ADS
GEOSYNTHETIC 315WTK WOVEN
GEOTEXTILE OVER BEDDING STONE AND
UNDERNEATH CHAMBER FEET FOR SCOUR
PROTECTION AT ALL CHAMBER INLET ROWS

WQU-01 PER PLAN
(DESIGN BY ENGINEER /
PROVIDED BY OTHERS)



NOMINAL CHAMBER SPECIFICATIONS
SIZE (W x H x INSTALLED LENGTH) -
CHAMBER STORAGE -
MINIMUM INSTALLED STORAGE -
WEIGHT -

51.0" x 30.0" x 65.4"
45.9 CUBIC FEET
74.9 CUBIC FEET
75 LBS.

STUBS AT TOP OF END
CAP FOR PARTS NUMBERS
ENDING WITH "T"

PART #	CHAMBER	PIPE SIZE	A	B	C
SC740EP08T	SC-740	8 in (203 mm)	10.90 in (277 mm)	16.50 in (419 mm)	N/A
SC740EP08B	SC-740	8 in (203 mm)	10.90 in (277 mm)	N/A	0.50 in (13 mm)
SC740EP08T	SC-740	8 in (203 mm)	12.20 in (310 mm)	16.50 in (419 mm)	N/A
SC740EP08B	SC-740	8 in (203 mm)	12.20 in (310 mm)	N/A	0.60 in (15 mm)
SC740EP10T	SC-740	10 in (254 mm)	13.40 in (340 mm)	14.50 in (368 mm)	N/A
SC740EP10B	SC-740	10 in (254 mm)	13.40 in (340 mm)	N/A	0.70 in (18 mm)
SC740EP12T	SC-740	12 in (305 mm)	14.70 in (373 mm)	12.50 in (318 mm)	N/A
SC740EP12B	SC-740	12 in (305 mm)	14.70 in (373 mm)	N/A	1.20 in (30 mm)
SC740EP15T	SC-740	15 in (375 mm)	18.40 in (467 mm)	9.00 in (229 mm)	N/A
SC740EP15B	SC-740	15 in (375 mm)	18.40 in (467 mm)	N/A	1.30 in (33 mm)
SC740EP18T	SC-740	18 in (457 mm)	19.70 in (500 mm)	5.00 in (127 mm)	N/A
SC740EP18B	SC-740	18 in (457 mm)	19.70 in (500 mm)	N/A	1.60 in (41 mm)
SC740EP24B	SC-740	24 in (609 mm)	18.50 in (470 mm)	N/A	0.10 in (3 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL.

ALL STUBS EXCEPT FOR THE SC740EP08B
ARE PLACED AT BOTTOM OF END CAP SUCH
THAT THE OUTSIDE DIAMETER OF THE STUB IS
FLUSH WITH THE BOTTOM OF THE END CAP.
FOR ADDITIONAL INFORMATION CONTACT
STORMTECH AT 1-888-952-2694.

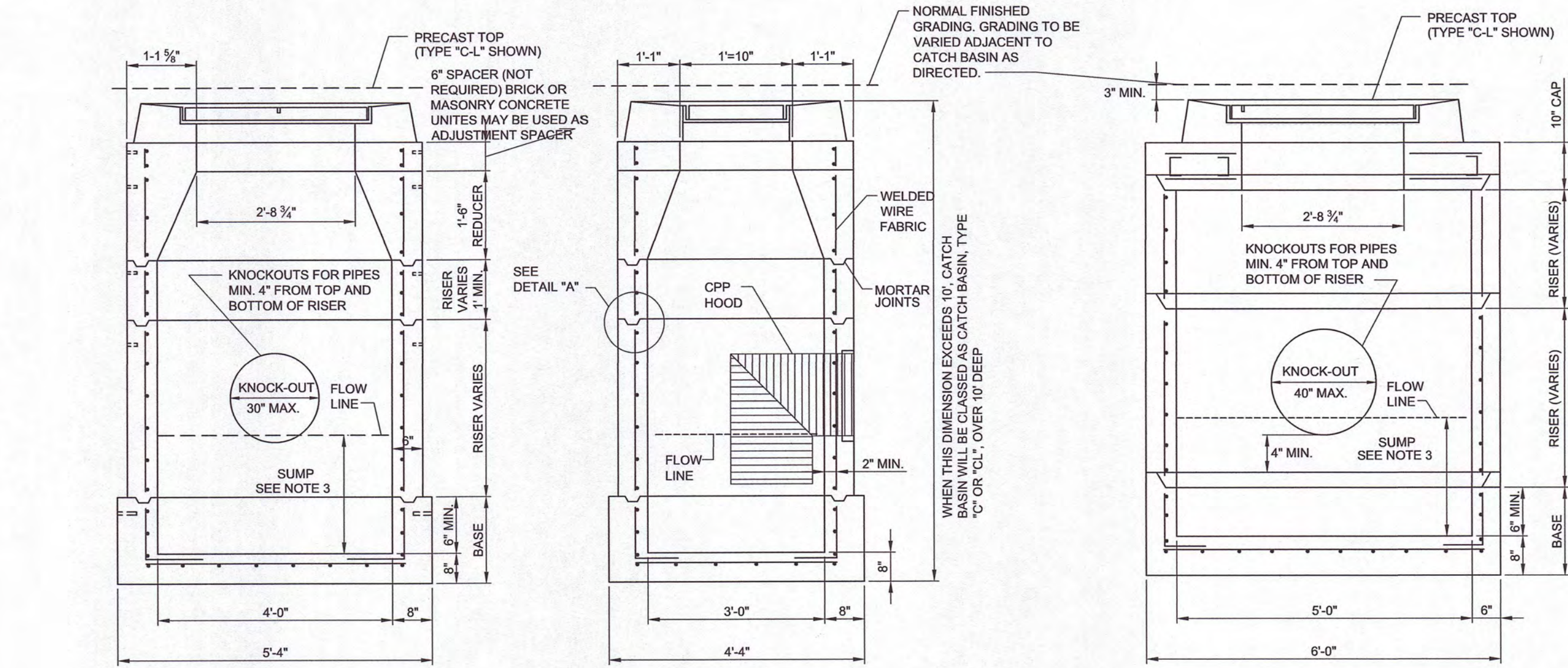
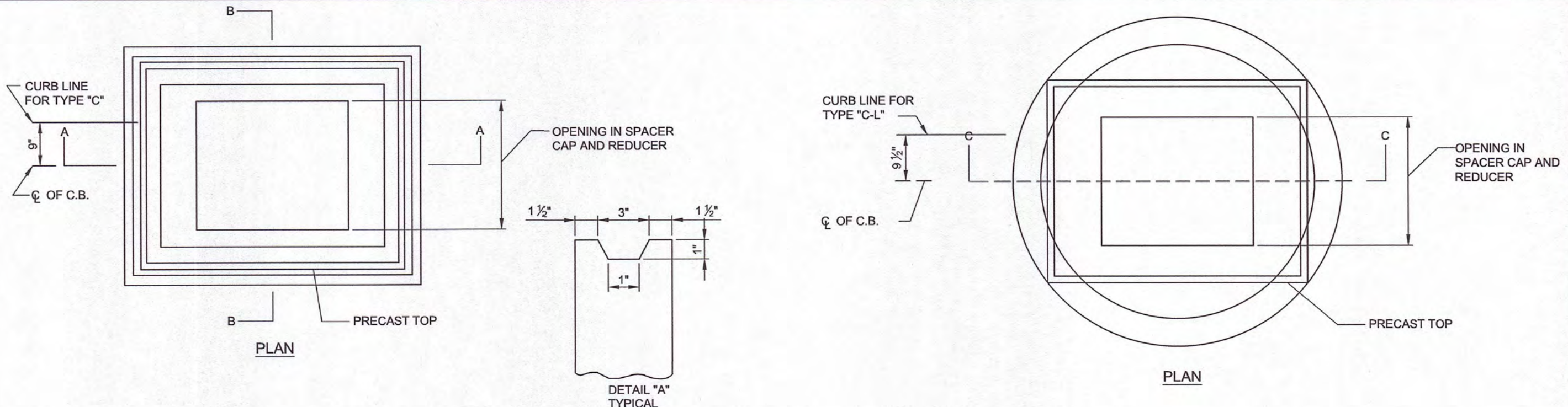
* FOR THE SC740EP24B THE 24"
STUB LIES BELOW THE BOTTOM OF THE
END CAP APPROXIMATELY 1.75".
BACKFILL MATERIAL SHOULD BE
REMOVED FROM BELOW THE N-12 STUB
SO THAT THE FITTING SETS LEVEL.

* NOTE: CHAMBER SYSTEM DESIGN MUST BE IN
ACCORDANCE WITH STORMTECH DESIGN MANUAL

StormTech
Subsurface Stormwater Management
20 Beaver Road, Suite 104
Wethersfield, CT 06097
Phone: 888-952-2694
Fax: 866-328-9401
www.stormtech.com

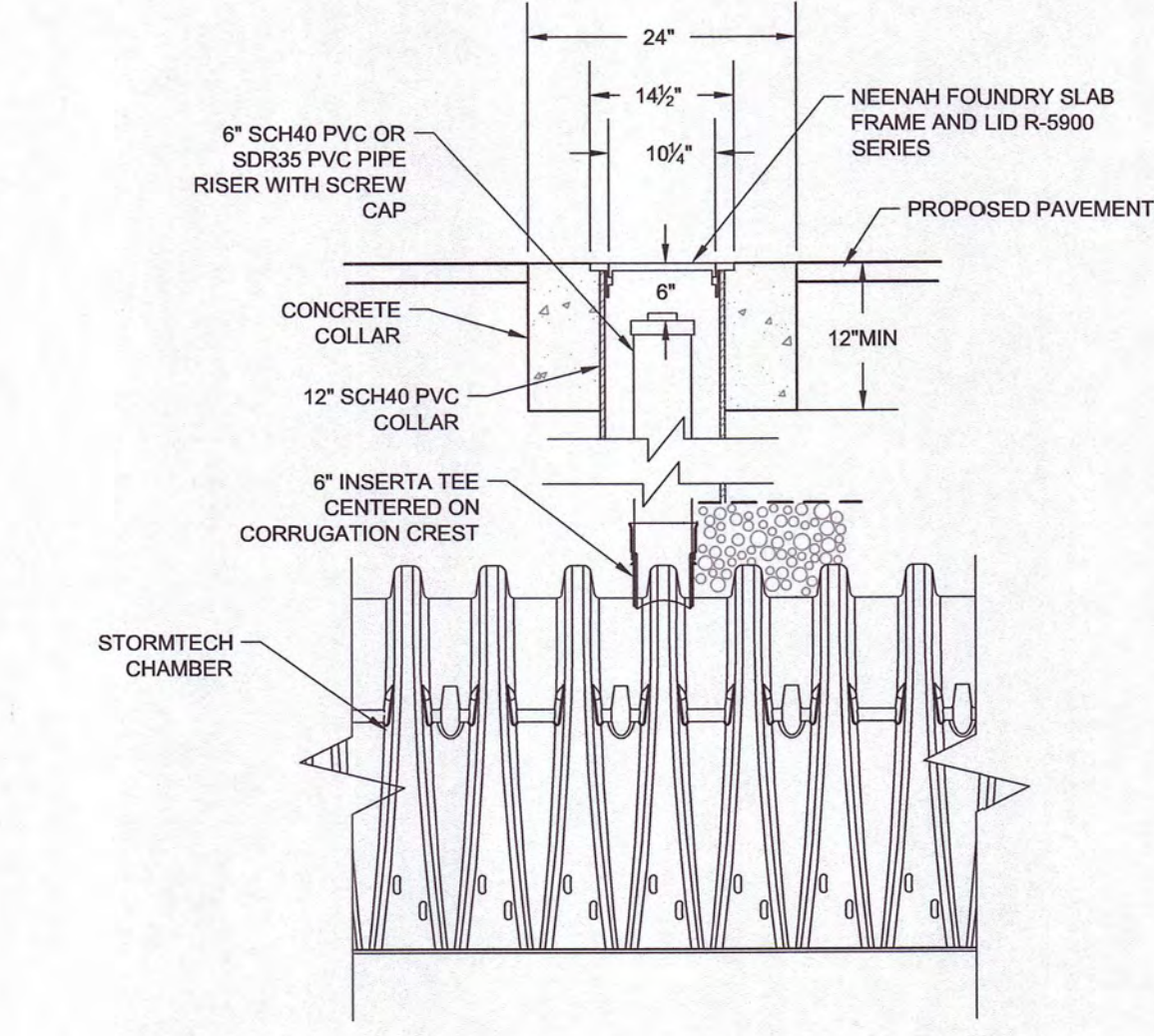
SC-740 TECHNICAL SPECIFICATIONS
SCALE: N.T.S. CHECKED: _____
DATE: _____ ACAD NO. _____
DRAWN BY: _____ SHEET _____ OF _____

SC-740 STORMTECH CHAMBER
SCALE: N.T.S.

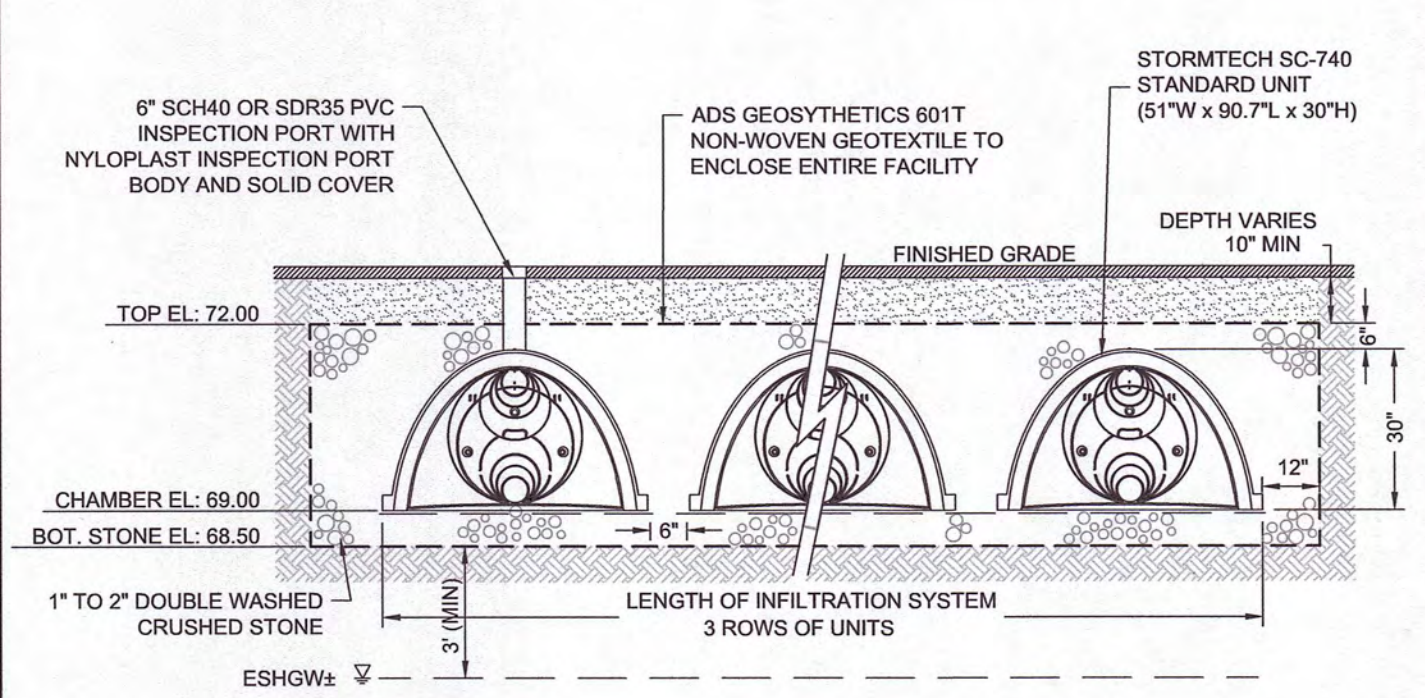


- NOTE:**
- HOODS SHALL BE INSTALLED AT ALL CATCH BASIN OUTLETS.
 - REFER TO CTDOT STANDARD DETAIL FOR GRATE SPECIFICATIONS
 - CATCH BASINS SHALL HAVE 4" DEEP HUMPS OR 4 TIMES THE DIAMETER OF OUTLET PIPES WHICH IS GREATER.

CONNECTICUT D.O.T. STANDARD CATCH BASIN
SCALE: N.T.S.



OBSERVATION PORT
SCALE: N.T.S.



- NOTES:**
- PROVIDE MINIMUM 3 FEET SEPARATION BETWEEN BOTTOM OF THE 6 INCH DOUBLE WASHED STONE LAYER AND SEASONAL HIGH GROUNDWATER TABLE.
 - REMOVE ALL TOPSOIL AND SUBSOIL IN AREA OF PROPOSED INFILTRATION FACILITY AND REPLACE WITH SAND CONFORMING TO CONNECTICUT STATE ENVIRONMENTAL CODE AS NECESSARY IN FILL CONDITIONS.

SUBSURFACE INFILTRATION FACILITY
SCALE: N.T.S.

RJOC

DATE

REVISION

NO.

DATE

REVISION

NO.

PREPARED BY:

RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

KINCORA WATERFORD, LLC
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

PROJECT NAME:

122-124 BOSTON POST ROAD
WATERFORD, CT

SCALE:

DESIGNED BY:

DRG
MCR
BJM
N.T.S.
6/22/2023

DRAWING NAME:

C-6

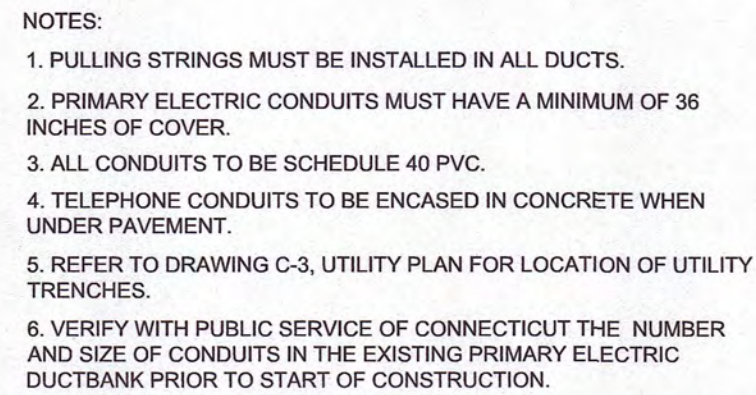
DRAWING NUMBER:

C-6

PROJECT NUMBER:

23001

Copyright © 2023 by R.J. O'Connell & Associates, Inc.



BEND

PLUG

TEE

NOTE: FOR HORIZONTAL BENDS ONLY
L = MINIMUM LENGTH OF PIPE TO BE RESTRAINED (FEET)

TYPE OF FITTING	PIPE SIZE (IN)					
	6	8	10	12	16	
1/32 B	4	5	6	7	9	(FEET)
1/16 B	7	9	11	13	17	
1/8 B	11	15	18	22	30	
1/4 B	19	24	29	35	45	
TEE PLUG	27	38	50	62	90	

PAVEMENT

CURB

18"

"WATER" CAST IN COVER

EXTENSION TYPE CURB BOX, MUELLER MODEL NO. H-10350 94E BUFFALO TYPE WITH FOOT PIECE OR APPROVED EQUAL

WATER MAIN

CORPORATION STOP INSTALLED AT 45° ABOVE HORIZONTAL MUELLER H15008 OR APPROVED EQUAL

TYPE 1/2" COPPER TUBING

GOOSENECK

CURB STOP

2 C.F. 3/4" CRUSHED STONE

CURB STOP COPPER TO COPPER COMPRESSION FITTINGS MUELLER THREADS OR APPROVED EQUAL

NOTES:

1. WATER SERVICES LARGER THAN 1" ARE TO BE RESTRAINED TO MAIN W/ APPROVED SADDLE.
2. INSTALLATION AND MATERIALS TO BE IN ACCORDANCE WITH THE CITY OF NEW LONDON'S AND WATERFORD UTILITY COMMISSIONS STANDARDS AND SPECIFICATIONS.

[illegible]

BITUMASTIC **O-RING**

- NOTES:**
1. HORIZONTAL JOINTS BETWEEN PRECAST CONCRETE MANHOLE SECTIONS SHALL BE OF A TYPE APPROVED BY THE ENGINEER. JOINTS SHALL BE MADE INTERTIGHT WITH A BUTYL RUBBER O-RING PER ASTM C443 OR A DOUBLE ROW OF BUTYL RESIN JOINT SEALANT IN ROPE FORM CONFORMING TO ASTM 198 B/ASTM C990.
 2. ALL GASKETS AND SEALANTS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S WRITTEN INSTRUCTIONS
 3. FOR BUTIMATIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.
 4. MATERIALS AND METHOD OF INSTALLATION SHALL CONFORM TO THE WATERFORD UTILITY COMMISSION'S SPECIFICATIONS.

30" DIA. MANHOLE FRAME (OMA200000023) & COVER (OMA200000023) BY EAST JORDAN IRON WORKS OR APPROVED EQUAL COVER TO BE LETTERED "SEWER" (3" HIGH)

ADJUST TO GRADE W/3 TO 5 COURSES OF HARD CLAY BRICK SET IN FULL MORTAR BED

30" DIA. MANHOLE OPENING

6"

48" DIA. (MIN)

5" MIN

STEPS 12" O.C.

6"

6"

PIPE

CONE SECTION 30" x 48"

BASE SECTION

12" MIN. (TYP.)

3/4" CRUSHED STONE OR CRUSHED BASE GRAVEL

12" MIN.

SECTION

COMPACTED SUBGRADE

PAINT WITH 2 COATS OF CARBOLINE BITUMASTIC 300M COAL TAR EPOXY OR APPROVAL EQUAL

DOUBLE ROW OF BUTYL RUBBER FLEXIBLE JOINT SEALANT PER ASTM C990/AASHTO M-198M

KOR-N-SEAL PIPE TO MANHOLE CONNECTOR W/ STAINLESS STEEL PIPE CLAMP OR APPROVED EQUAL (TYP.)

SEWER PIPE

BRICK INVERT & CHANNEL SEE DETAIL.

6" MIN

PIPE

- NOTES:**
1. MANHOLES AND ALL COMPONENT PARTS SHALL BE OF SIZE, STRENGTH AND CONFIGURATION AS SHOWN EXCEPT THAT TOP SLABS MAYBE SUBSTITUTED FOR ECCENTRIC CONE SECTIONS. MANHOLES SHALL BE AN ASSEMBLY OF REINFORCED, PRECAST CONCRETE BASE RISER SECTIONS PER ASTM C478 OR MONOLITHICALLY, CAST-IN-PLACE REINFORCED CONCRETE. APPROVED MANHOLE STRUCTURE SHALL BE DESIGNED AND CONSTRUCTED TO MEET OR EXCEED H-20 LOADING AND PREVENT LEAKAGE IN EXCESS OF ONE (1) GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.
 2. MANHOLE STEPS TO BE STEEL REINFORCED, CO-POLYMER, POLY-PROPYLENE PLASTIC CONFORMING TO ASTM D4101. STEEL REINFORCING SHALL BE A DEFORMED 1/2" ROD, GRADE 60, ASTM A615. ALIGN STEPS WITH MANHOLE OPENING.
 3. MATERIALS AND METHODS OF INSTALLATION TO MEET OR EXCEED LOCAL MUNICIPAL DPW SPECIFICATIONS.

Diagram illustrating the construction details of a precast concrete sewer manhole. The structure is shown in cross-section, showing the precast concrete walls and the internal brickwork. The manhole is installed in a trench, with a gravel base and crushed stone or gravel base below the invert. The invert is made of red clay brick laid on edges as stretchers. The walls are made of red clay brick laid flat. The top of the manhole is covered with a precast concrete sewer manhole cover. The diagram includes labels for the materials and construction details:

- PRECAST CONCRETE SEWER MANHOLE (SEE DETAIL)
- PITCH TO DRAIN 1" PER FOOT
- 2/3 PIPE DIA. (MIN.)
- TABLE TO BE RED CLAY BRICK LAID FLAT
- CEMENT CONCRETE BRICK IN MORTAR
- CRUSHED STONE OR GRAVEL BASE (SEE SEWER MANHOLE DETAIL)
- INVERT TO BE RED CLAY BRICK LAID ON EDGES AS STRETCHER.

NOTE: MATERIALS, METHOD OF INSTALLATION SHALL CONFORM TO THE TOWN OF WATERFORD SPECIFICATIONS.

A cross-sectional diagram illustrating the 'Pipe-in-Pipe' repair method. A vertical section of an existing manhole wall, labeled 'MANHOLE WALL (BRICK OR BLOCK)', is shown. Inside this wall, there is an 'IRREGULAR SURFACE OF EXISTING PIPE OPENING'. A 'NEW PIPE' is inserted into this opening. The space between the new pipe and the existing opening is filled with 'NON-SHRINK GROUT'. At the bottom of the repair, a 'FLEXIBLE WATERSTOP (FERROCO OR EQUAL)' is used to seal the joint. The interior of the existing manhole is labeled 'INTERIOR OF EXISTING MANHOLE'.

- NOTES:**
1. CORE DRILL PRECAST MANHOLES AND USE FLEXIBLE BOOT SUCH AS KOR-N-SEAL OR EQUAL.
 2. RE-USE CAST-IN MANHOLE TO PIPE CONNECTORS WHERE PRACTICAL.
 3. REPAIR CHANNEL IF DAMAGED DURING CONSTRUCTION.

The diagrams illustrate four methods for installing a water main bend in a trench:

- Top-left (Plan View):** Shows a water main pipe with a bend. A concrete thrust block is placed at the bend. Labels include: "CONC. THRUST BLOCK (BEND)", "WATER MAIN", "BEND ANGLE VARIES", "UNDISTURBED SIDE OF TRENCH", and "PLAN".
- Top-right (Elevation View):** Shows a water main pipe with a bend. A concrete thrust block is placed at the bend. Labels include: "CONC. THRUST BLOCK", "WATER MAIN", "BACK FILL", and "ELEVATION".
- Bottom-left (Plan View):** Shows a water main pipe with a bend. A concrete thrust block (cap) is placed at the bend. Labels include: "CONC. THRUST BLOCK (CAP)", "FLAG ROCK", "PLUG", "TEE", "WATER MAIN", "UNDISTURBED SIDE OF TRENCH", "CONC. THRUST BLOCK (CAP)", and "PLAN".
- Bottom-right (Elevation View):** Shows a water main pipe with a bend. A concrete thrust block is placed at the bend. Labels include: "CONC. THRUST BLOCK", "WATER MAIN", "BACK FILL", and "ELEVATION".

- NOTES:**
1. ALL WATERMAIN FITTINGS, BENDS, TEES, PLUGS ETC. SHALL BE MANUFACTURED BY THURST BLOKS EXCEPT WHERE SHOWN OTHERWISE.
 2. ALL THURST BLOKS & COLLARS SHALL BE INSTALLED SO THAT THEY BEAR AGAINST UNDISTURBED EARTH.
 3. SIZE OF CONCRETE THURST BLOKS AS NOTED BELOW.
 4. MINIMUM COMPRESSIVE STRENGTH OF THURST BLOK CONCRETE SHALL BE 4,000 P.S.I.
 5. MINIMUM BEARING AREA BASED ON 2000 LB/SF ALLOWABLE SOIL BEARING PRESSURE WITH A 1.5 SAFETY FACTOR
 6. A MINIMUM OF 13 CUBIC YARD OF CONCRETE SHALL BE USED FOR THURST BLOKS
 7. MATERIALS, METHOD INSTALLATION SHALL CONFORM TO THE CITY OF NEW LONDON'S AND WATERFORD UTILITY COMMISSIONS SPECIFICATIONS.
 8. ALL WATERMAIN FITTINGS SHALL BE MECHANICAL, JOINT WITH MEGALUG OR GASKETED GLANDS AS MANUFACTURED BY EBBA ION.

MINIMUM THRUST BLOCKING BEARING AREAS IN SQUARE FEET					
PIPE DIA.	TEES/CAP/HYD	90° BEND	45° BEND	22.5° BEND	11.25° BEND
4"	2	2	2	2	1
6"	4	5	3	2	1
8"	6	8	5	2	1
10"	9	13	7	3	2
12"	13	18	10	4	3
14"	18	25	14	6	4
16"	23	32	18	8	6

POTABLE WATER

SEWER

SECTION VIEW

14" MIN

POTABLE WATER LINE

SEWER LINE

PLAN VIEW

CROSSING OF SEWER & POTABLE WATER LINES

NOT TO SCALE

- NOTES:**
1. SEWER JOINTS SHALL BE EQUIQUANTUM FROM AND LOCATED AS FAR AS POSSIBLE AWAY FROM THE WATER LINE.
 2. IF THE VERTICAL SEPARATION BETWEEN THE BOTTOM OF THE WATER MAIN AND THE TOP OF THE SEWER IS LESS THAN 18 INCHES (WATER MAIN IS ABOVE SEWER), USE ONE OF THE FOLLOWING PROCEDURES: (A) THE WATER MAIN SHALL BE RECONSTRUCTED FOR A DISTANCE OF 10 FEET ON EACH SIDE OF SEWER WITH RUBBER-GASKETED JOINTS. JOINT PIPE AND FULL LENGTH WATER MAIN SHOULD BE CONTIGUOUS EITHER SEWER, OR (B) CONSTRUCT BOTH THE WATER & SEWER PIPE OF RUBBER-GASKETED, CEMENT-LINED DUCTILE IRON PIPE OR EQUIVALENT AND PRESSURE TEST BOTH PIPES, OR (C) CASAGE BOTH PIPES IN CONCRETE.

WHEEL DETAIL FOR 100 PSI SERVICE

PREPARED BY:

**RJO'CONNELL
& ASSOCIATES, INC.**

CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS

80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONNELL.COM

PREPARED FOR:

**KINCORA
WATERFORD, LLC**
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

PROJECT NAME:

122-124 BOSTON
POST ROAD
WATERFORD, CT

SEAL



DESIGNED BY:	DRC
DRAWN BY:	MCR
REVIEWED BY:	BJM
SCALE:	N.T.S.
DATE:	06/22/2023
DRAWING NAME:	

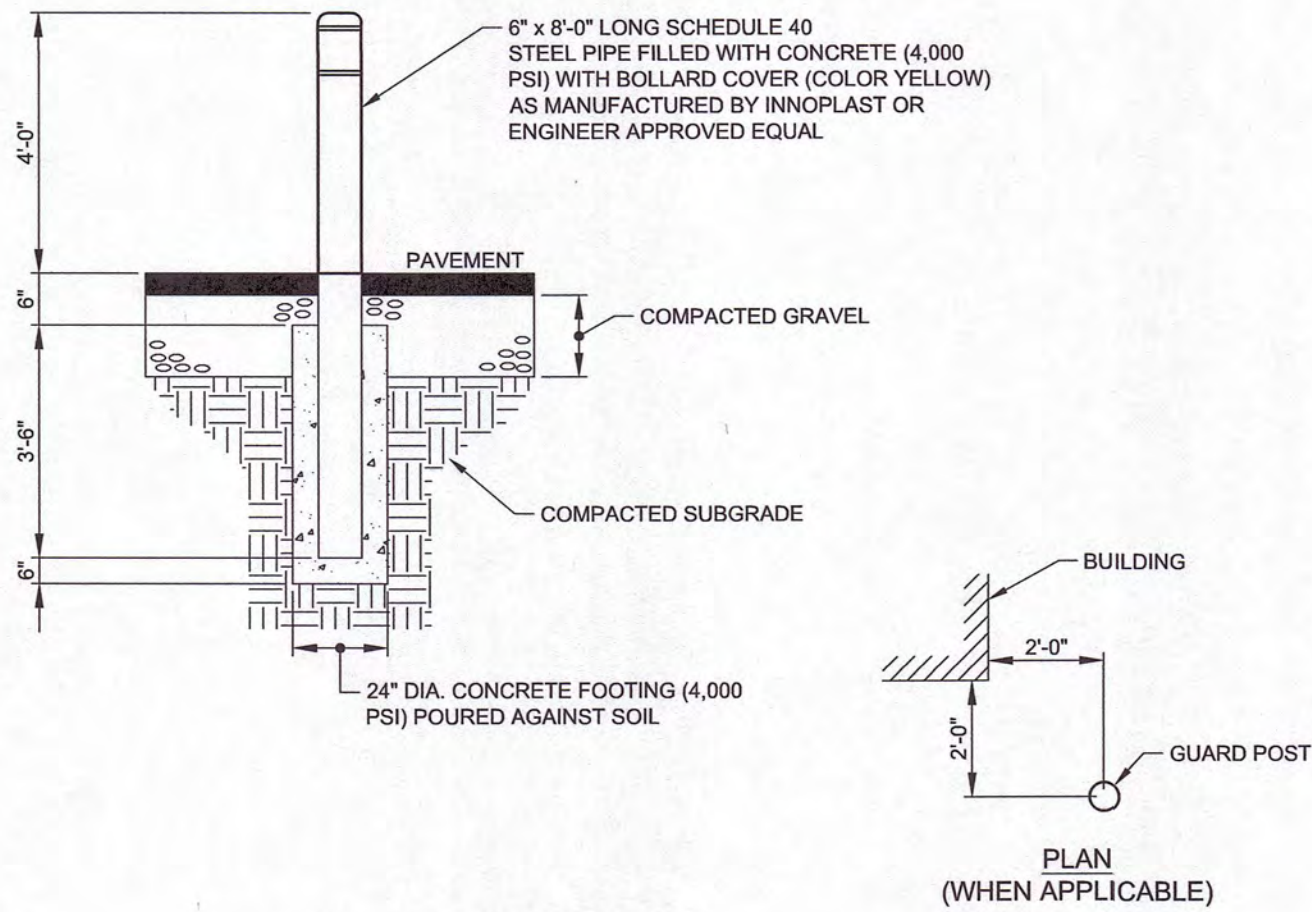
DETAILS - III

DRAWING NUMBER

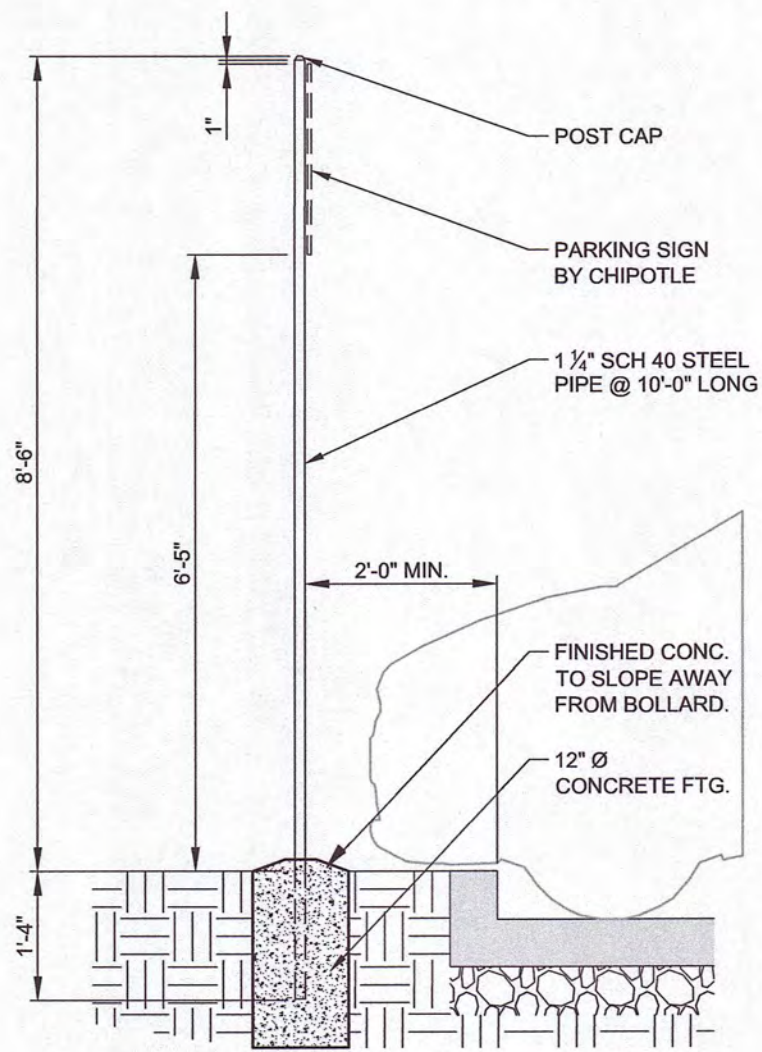
C-7

PROJECT NUMBER

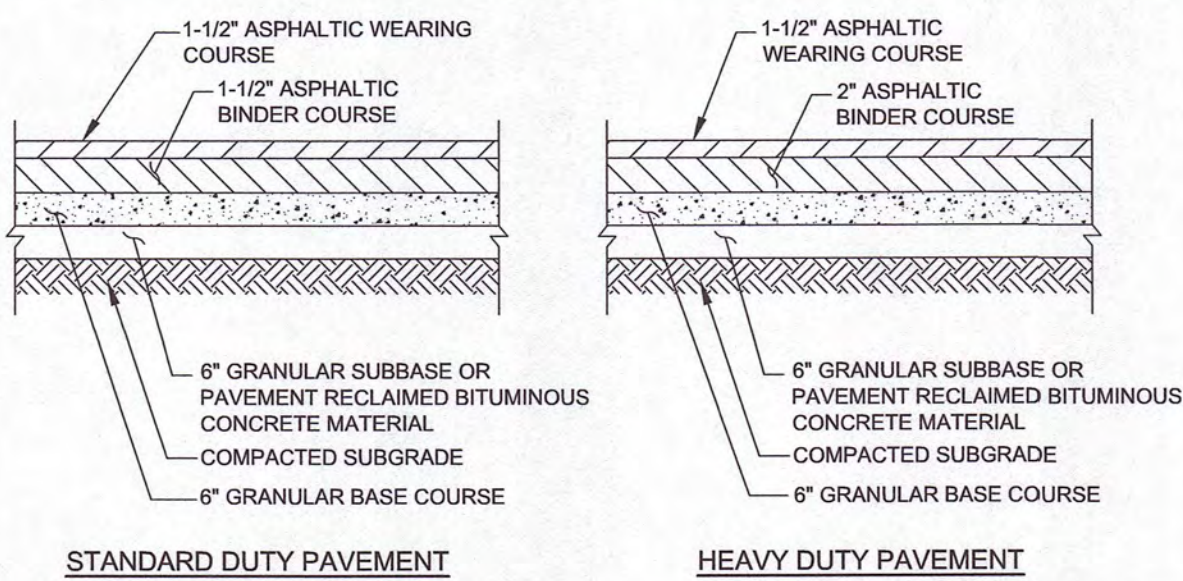
23001



TYPICAL 6-INCH METAL BOLLARD DETAIL
SCALE: N.T.S.



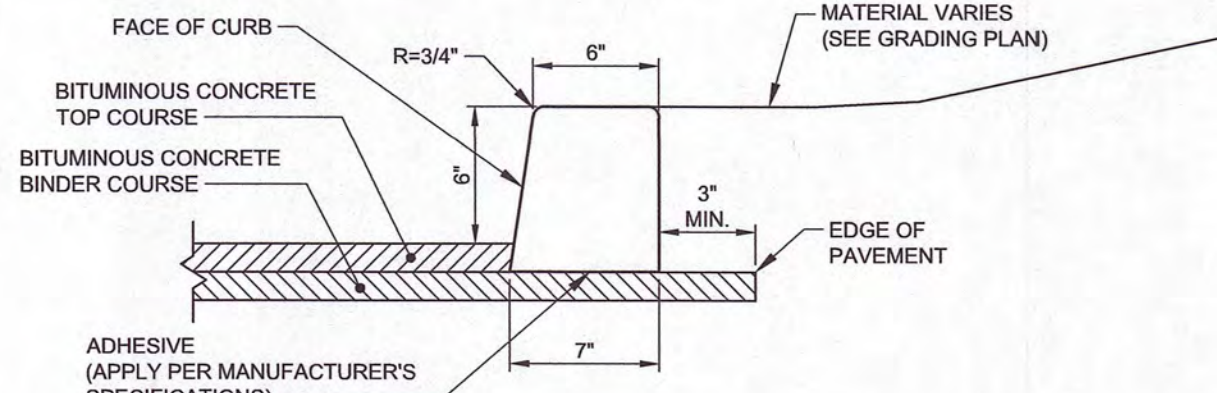
TYPICAL SIGN POST DETAIL
SCALE: N.T.S.



PAVEMENT LAYER	STANDARD DUTY PAVEMENT	HEAVY DUTY PAVEMENT
BIT. CONC. WEARING COURSE, CLASS 2	1.5"	1.5"
BIT. CONC. BINDER COURSE, CLASS 1	1.5"	2.5"
BASE COURSE	6"	6"
SUBBASE COURSE	6"	6"

PAVEMENT SECTION TABLE

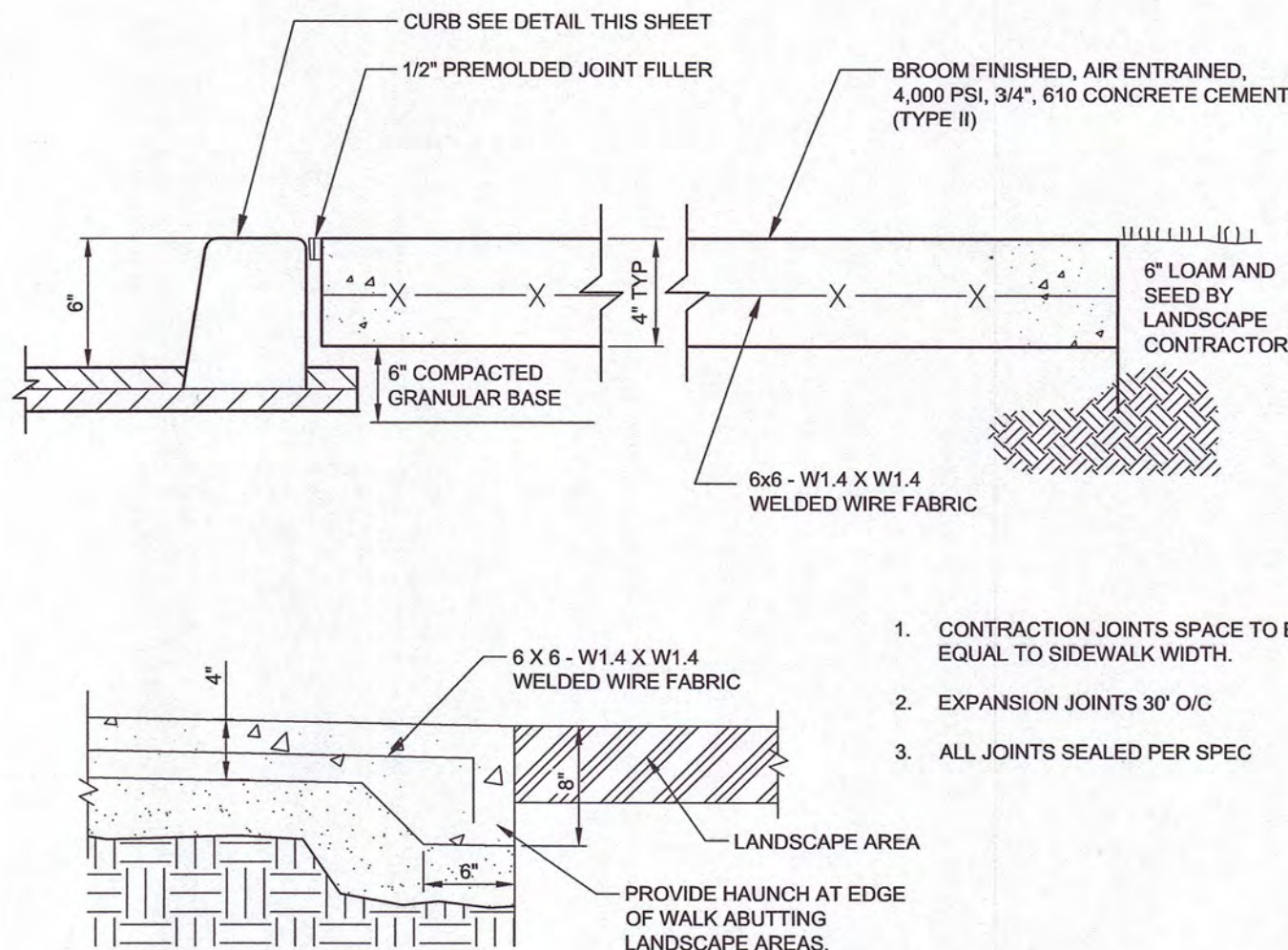
TYPICAL PAVEMENT DETAIL
SCALE: N.T.S.



NOTES:

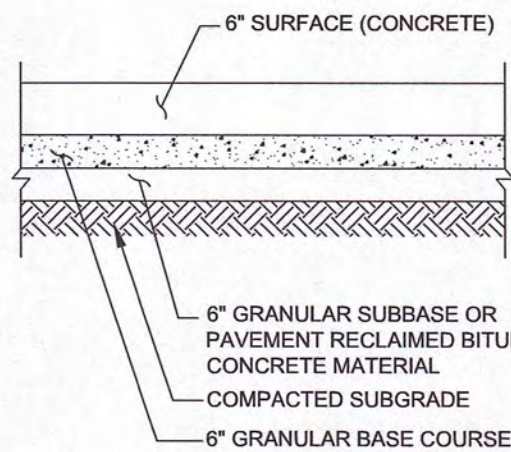
- CURB TO BE AS MANUFACTURED BY CONCRETE CRAFTERS OF OXFORD, CT OR APPROVED EQUAL.
- THE CONCRETE SHALL BE DESIGNED TO INCLUDE APPROXIMATELY 75% STATE APPROVED CONCRETE SAND AND 25% 3/8" STONE. THE CONCRETE SHALL CONTAIN A MINIMUM OF 564 POUNDS OF CEMENT (6 SACKS) PER CUBIC YARD YIELDING A CONCRETE THAT WILL EXCEED 3,500 P.S.I. IN 28 DAYS. THE CONCRETE SHALL BE PRODUCED ACCORDING TO ASTM C94 READY MIXED CONCRETE OR ASTM C685 CONCRETE PRODUCED BY VOLUMETRIC CONTINUOUS MIXING.
- A TWO COMPONENT EPOXY OR SUITABLE CONCRETE ADHESIVE DESIGNED TO BOND FRESH CONCRETE TO EXISTING PAVEMENT SHALL BE USED.
- A CONTROL JOINT SHALL BE INSTALLED AT EVERY NINE FOOT INTERVALS AND AT GREATER INTERVALS ON CURVES SO AS TO MINIMIZE SHRINKAGE CRACKING.
- THE FINISHED CURB SHALL BE COATED WITH A CURING COMPOUND WHICH HAS BEEN DESIGNED TO SEAL THE SURFACE AND FORM A WATERPROOF MEMBRANE TO RETARD THE LOSS OF WATER FROM THE FRESH CONCRETE. THE MANUFACTURE'S INSTRUCTIONS MUST BE FOLLOWED.
- THE CURB SHALL BE PLACED ON THE BINDER PAVEMENT COURSE AND THE FINISH (TOP) COURSE SHALL BE PAVED TO THE CURB FACE.

EXTRUDED CONCRETE CURB



- CONTRACTION JOINTS SPACE TO BE EQUAL TO SIDEWALK WIDTH.
- EXPANSION JOINTS 30' O/C
- ALL JOINTS SEALED PER SPEC

TYPICAL CONCRETE SIDEWALK DETAIL
SCALE: N.T.S.



RIGID PAVEMENT

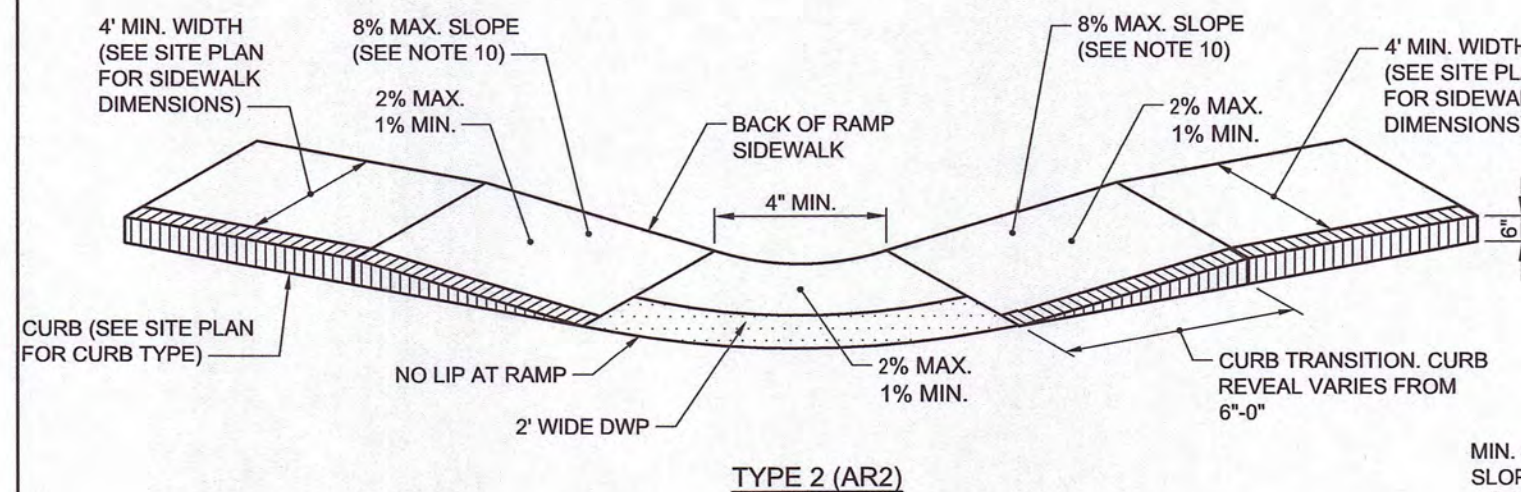
PAVEMENT LAYER	STANDARD DUTY PAVEMENT
SURFACE	6"
BASE COURSE	6"
SUBBASE COURSE	6"

PAVEMENT SECTION TABLE

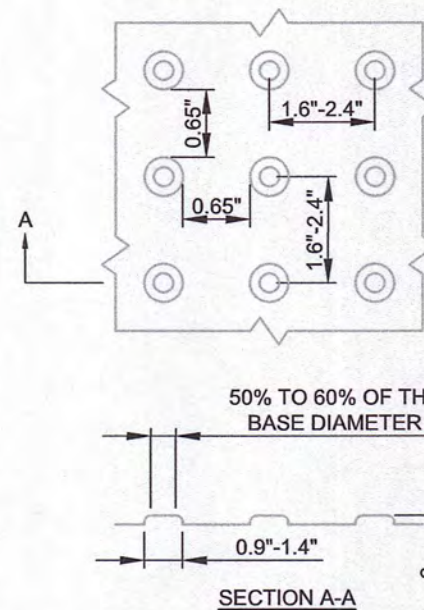
TYPICAL RIGID PAVEMENT DETAIL
SCALE: N.T.S.

NOTE:

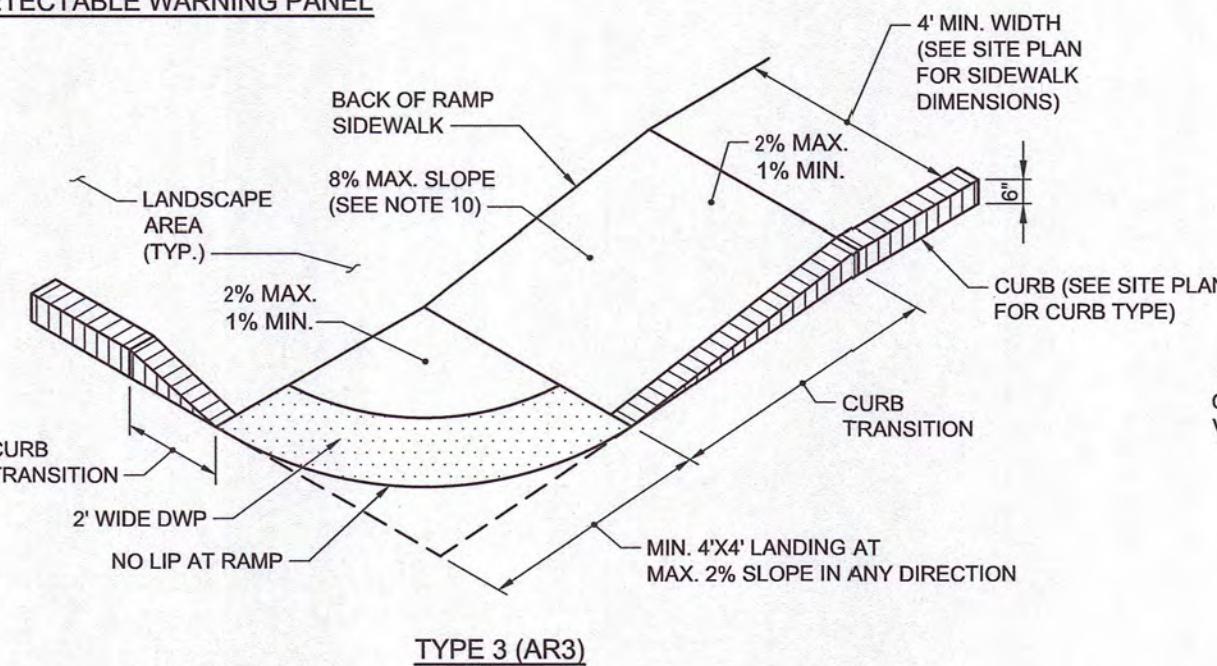
- SEE PLANS FOR CURB TYPE.
- CURB, RAMPS AND WALKS ALONG ACCESSIBLE ROUTES SHALL MEET OR EXCEED STANDARDS SET FORTH IN THE ARCHITECTURAL ACCESS BOARD (AAB), 521CMR AND THE AMERICANS WITH DISABILITIES ACT (ADA) 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
- THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2%(1% MIN.).
- THE MAXIMUM ALLOWABLE RUNNING SLOPE OF AN ACCESSIBLE ROUTE, EXCLUDING CURB RAMPS, SHALL BE 5%.
- THE MAXIMUM ALLOWABLE SLOPE OF AN ACCESSIBLE ROUTE CURB RAMPS SHALL BE 8%.
- MAINTAIN A MINIMUM OF 4 FEET CLEAR AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS ETC.).
- GRADE BASE OF RAMP TO PREVENT PONDING.
- RAMP CONSTRUCTION SHALL CONFORM TO TYPICAL SIDEWALK SECTION.
- WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5'X5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
- WHEELCHAIR RAMP SLOPE AND SIDE SLOPES (TRANSITIONS) MUST NOT EXCEED 1:12 (8% MAXIMUM, 7.5% PREFERRED).
- ALL RAMPS SHALL BE CEMENT CONCRETE WITH EXPOSED AGGREGATE SURFACE.
- DETECTABLE WARNING PANELS (DWP'S) SHALL BE A SUITABLE MATERIAL PERMANENTLY APPLIED TO THE RAMP, DETECTABLE WARNING SURFACES SHALL CONTRAST WITH ADJACENT WALKING SURFACES, EITHER LIGHT-ON-DARK OR DARK-ON-LIGHT.



TYPE 2 (AR2)

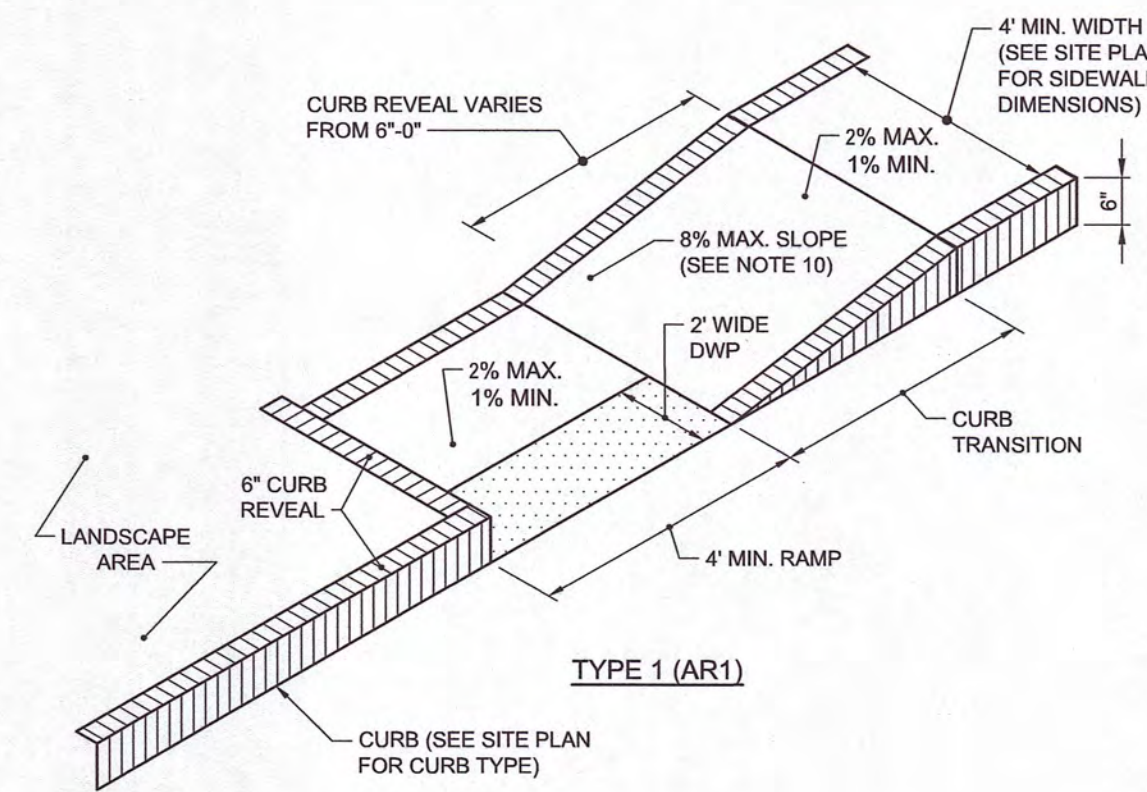


DETECTABLE WARNING PANEL

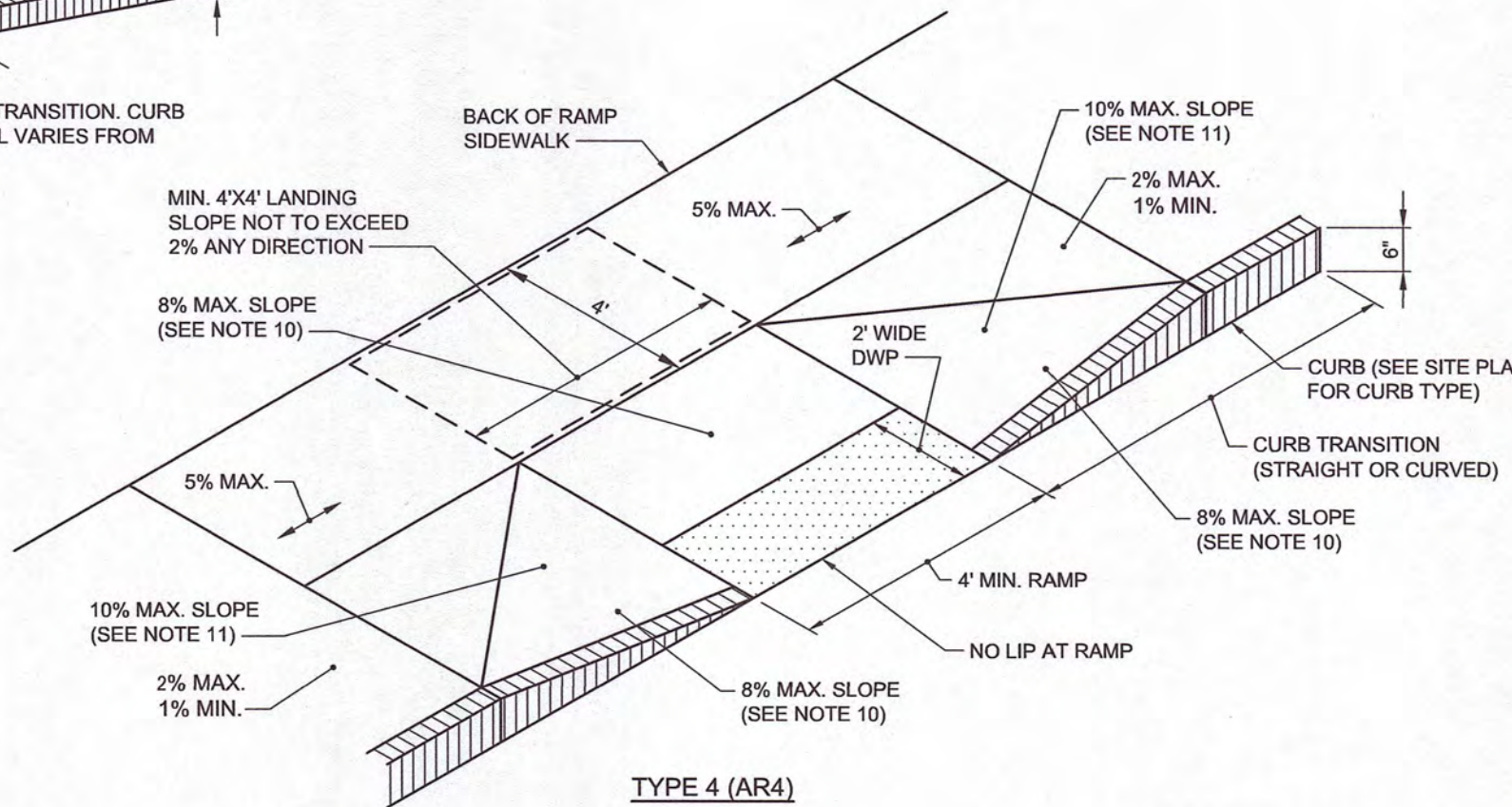


TYPE 3 (AR3)

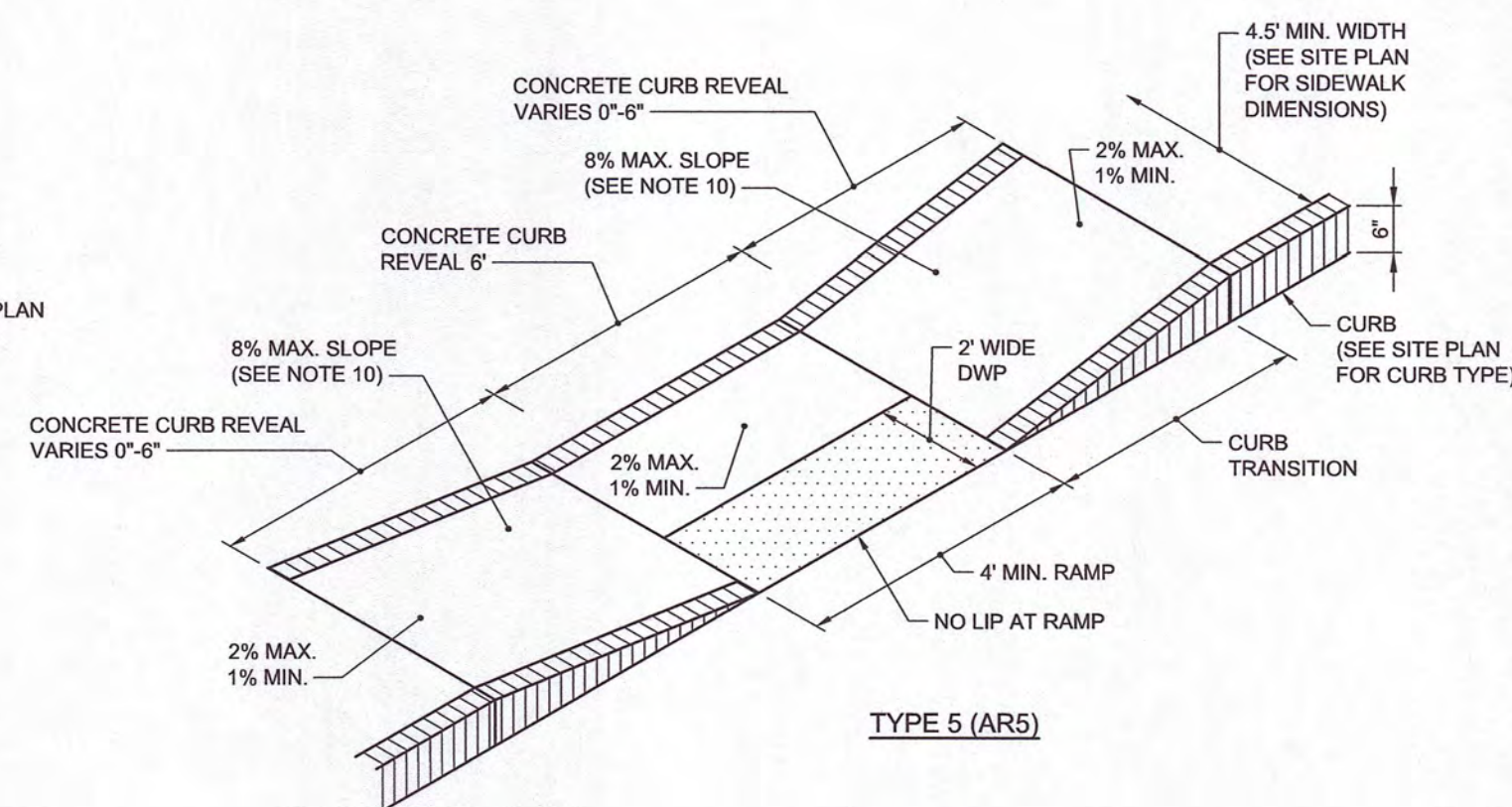
ACCESSIBLE CURB RAMPS (AR)
SCALE: N.T.S.



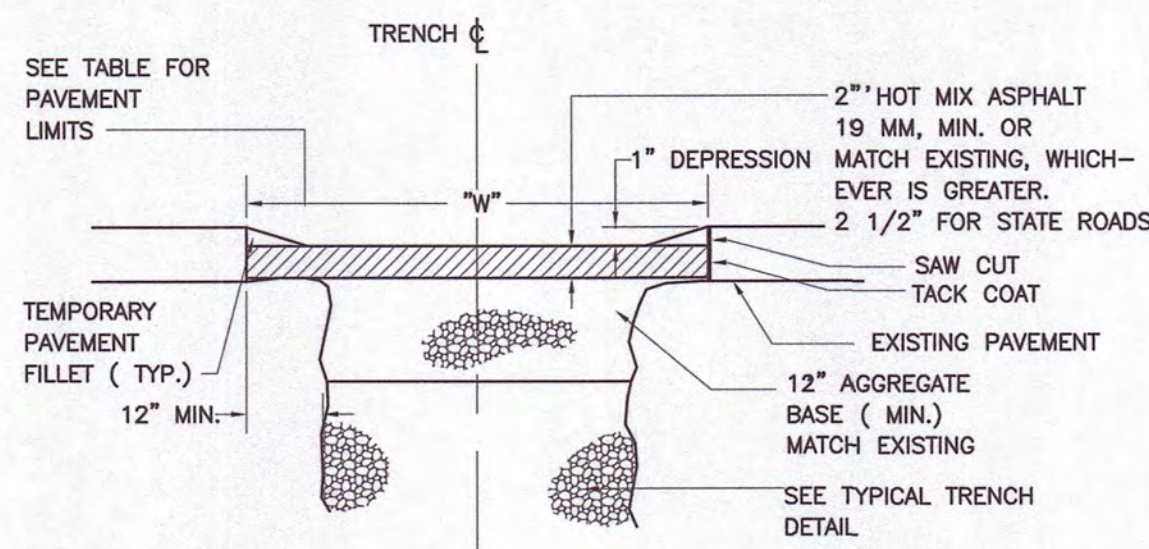
TYPE 1 (AR1)



TYPE 4 (AR4)



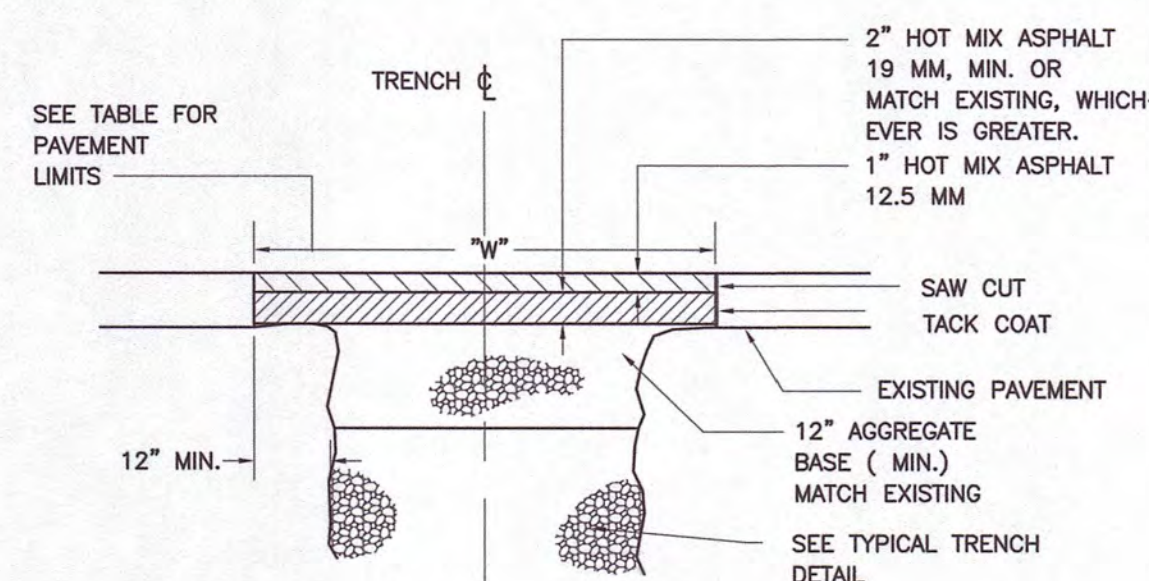
TYPE 5 (AR5)



PIPE I.D.	(FOR 0' - 10' DEEP)
6" - 15"	7'-0"
16" - 21"	8'-0"

"W" SHALL BE INCREASED BY 1'-0" FOR TRENCHES 10' - 15', AND BY 2'-0" FOR TRENCHES 15' - 20' DEEP.

INITIAL ROADWAY TRENCH PAVING (WITHOUT OVERLAY)
SCALE: N.T.S.



- NOTES:
- INITIAL TRENCH PAVING MAY BE USED AS THE BASE COURSE FOR FINAL PAVING IF IN GOOD REPAIR.
 - FOR STATE ROADS PAVEMENT THICKNESS SHALL BE 2 1/2" HOT MIX ASPHALT, 19mm MIN OR MATCH EXISTING WHICHEVER IS GREATER, AND 1 1/2" HOT MIX ASPHALT 12.5mm, MIN.

PIPE I.D.	(FOR 0' - 10' DEEP)
6" - 15"	7'-0"
16" - 21"	8'-0"

"W" SHALL BE INCREASED BY 1'-0" FOR TRENCHES 10' - 15', AND BY 2'-0" FOR TRENCHES 15' - 20' DEEP.

FINAL ROADWAY TRENCH PAVING (WITHOUT OVERLAY)
SCALE: N.T.S.

RJOC

PREPARED BY:

RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCNNELL.COM

PREPARED FOR:

KINCORA WATERFORD, LLC
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

PROJECT NAME:

122-124 BOSTON POST ROAD
WATERFORD, CT

SEAL:



DESIGNED BY:

DRAWN BY:

REVIEWED BY:

SCALE:

DATE:

DRAWING NAME:

DRG

MCR

BJM

N.T.S.

06/22/2023

DETAILS - IV

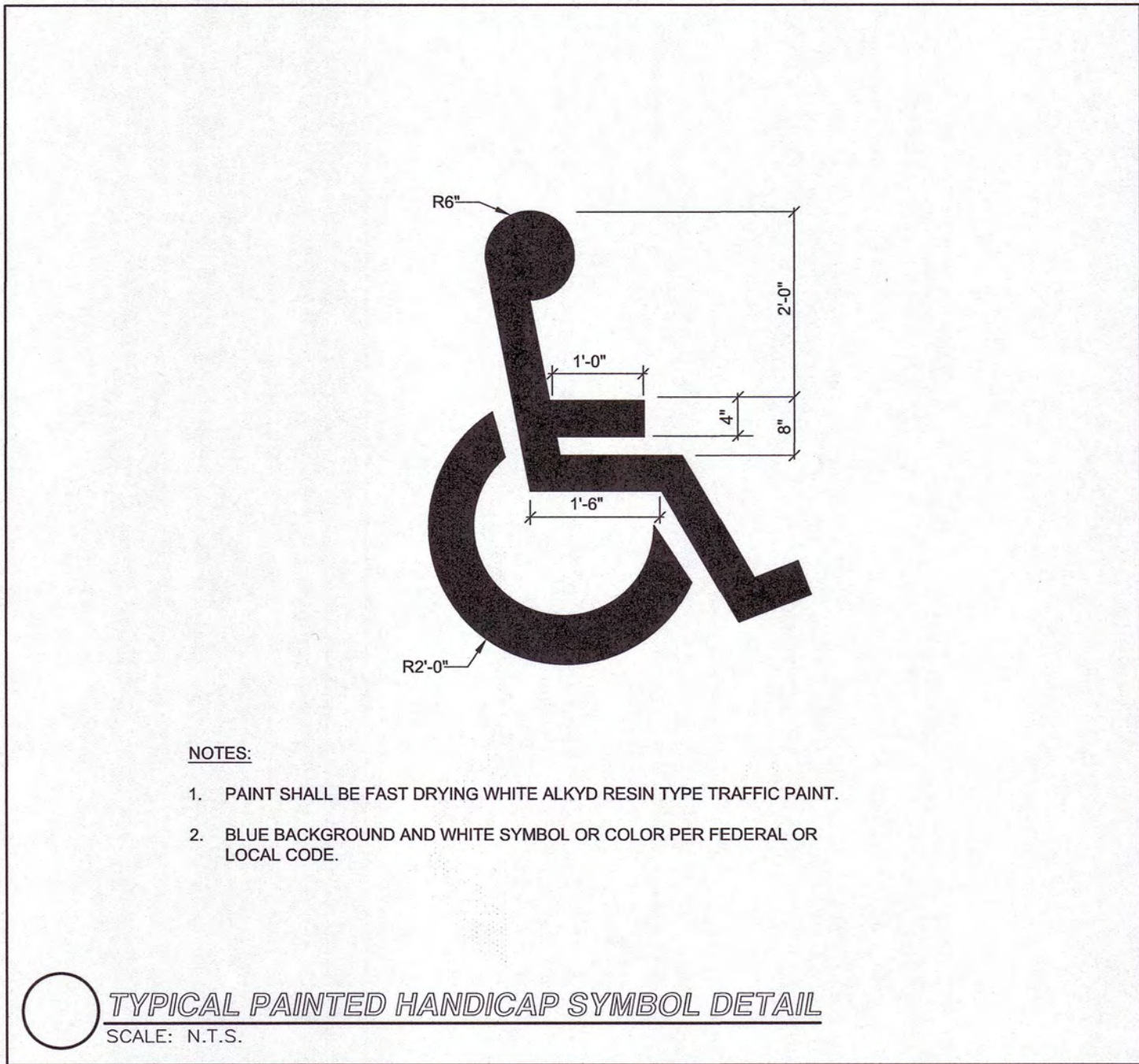
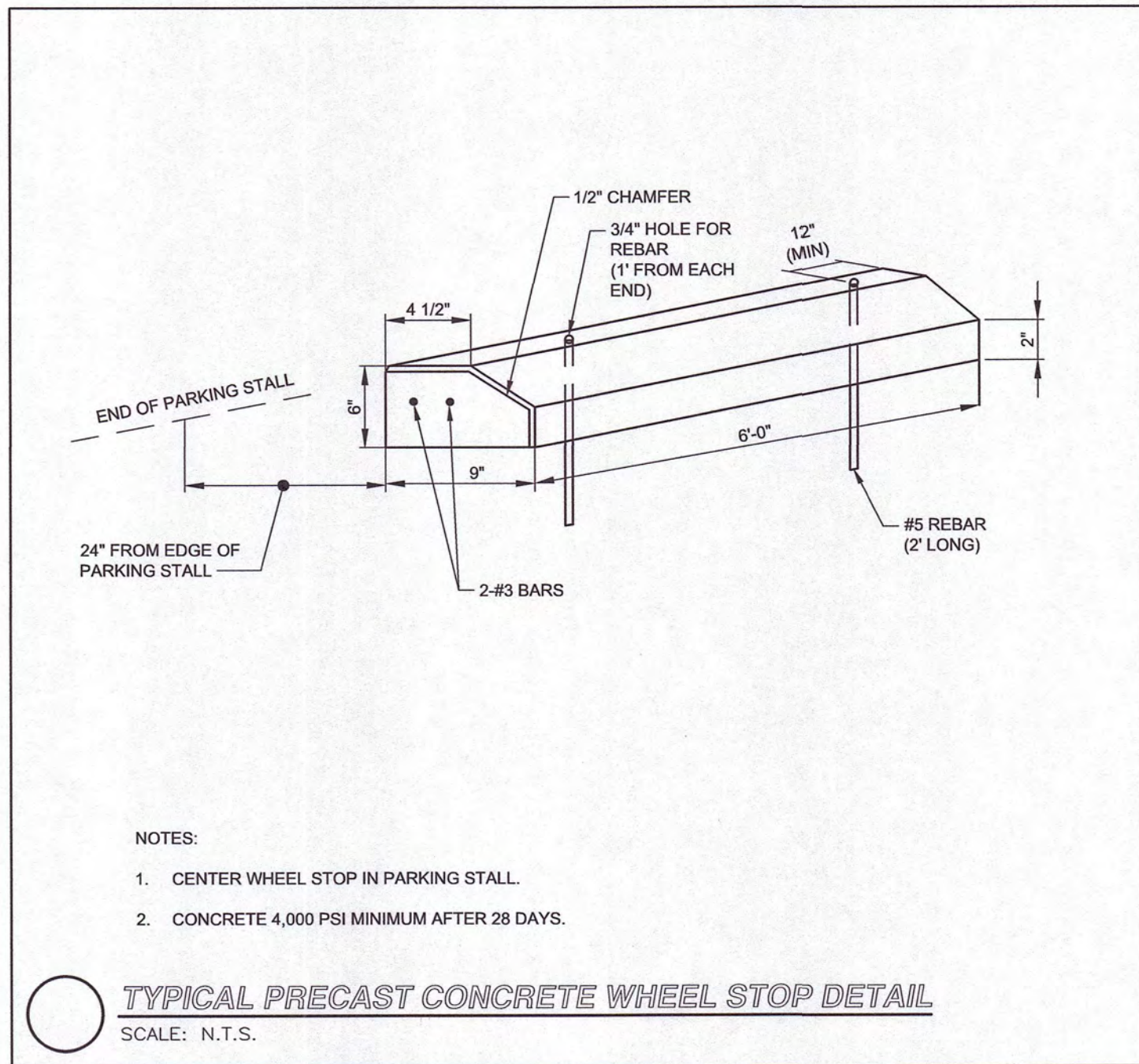
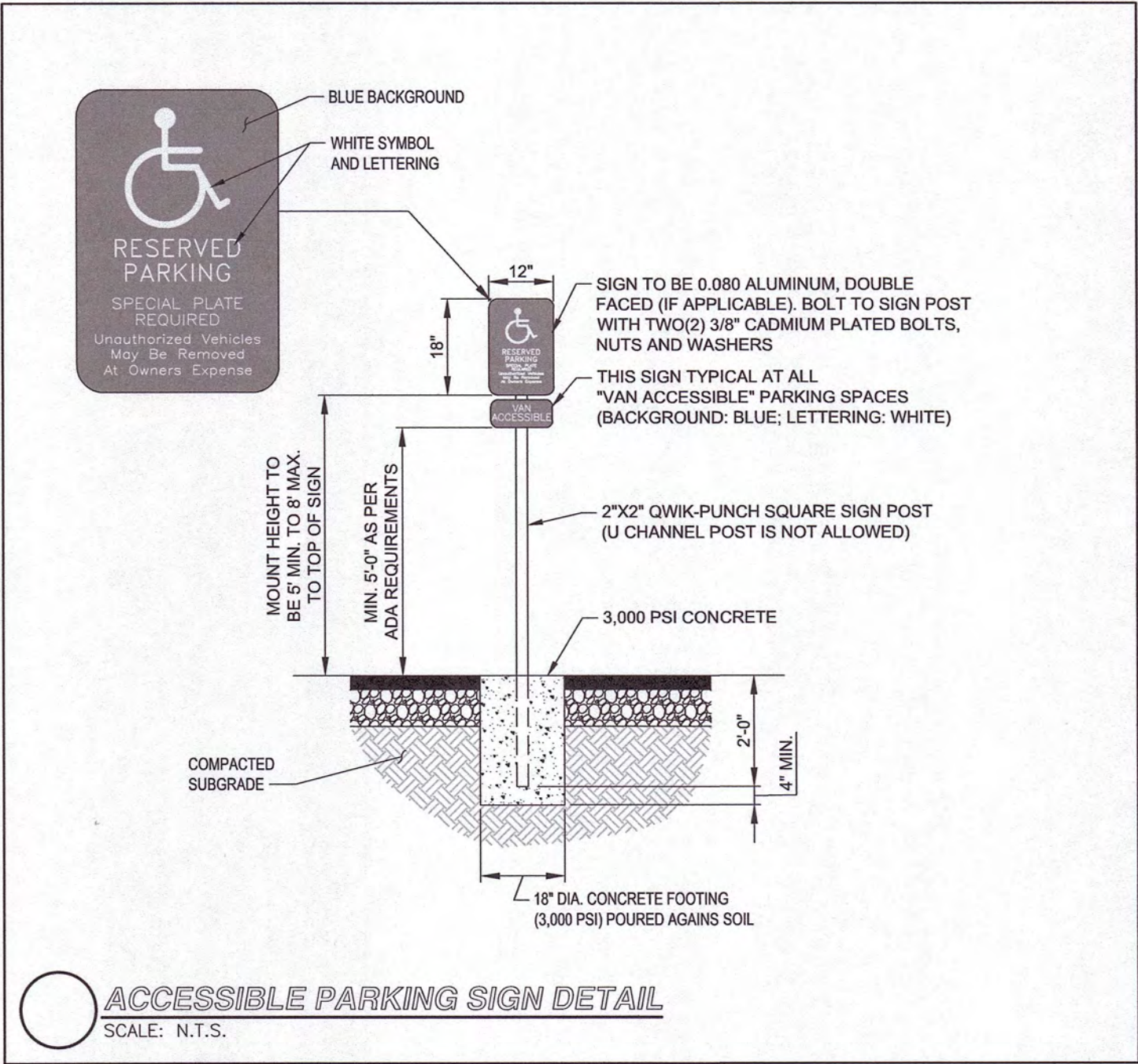
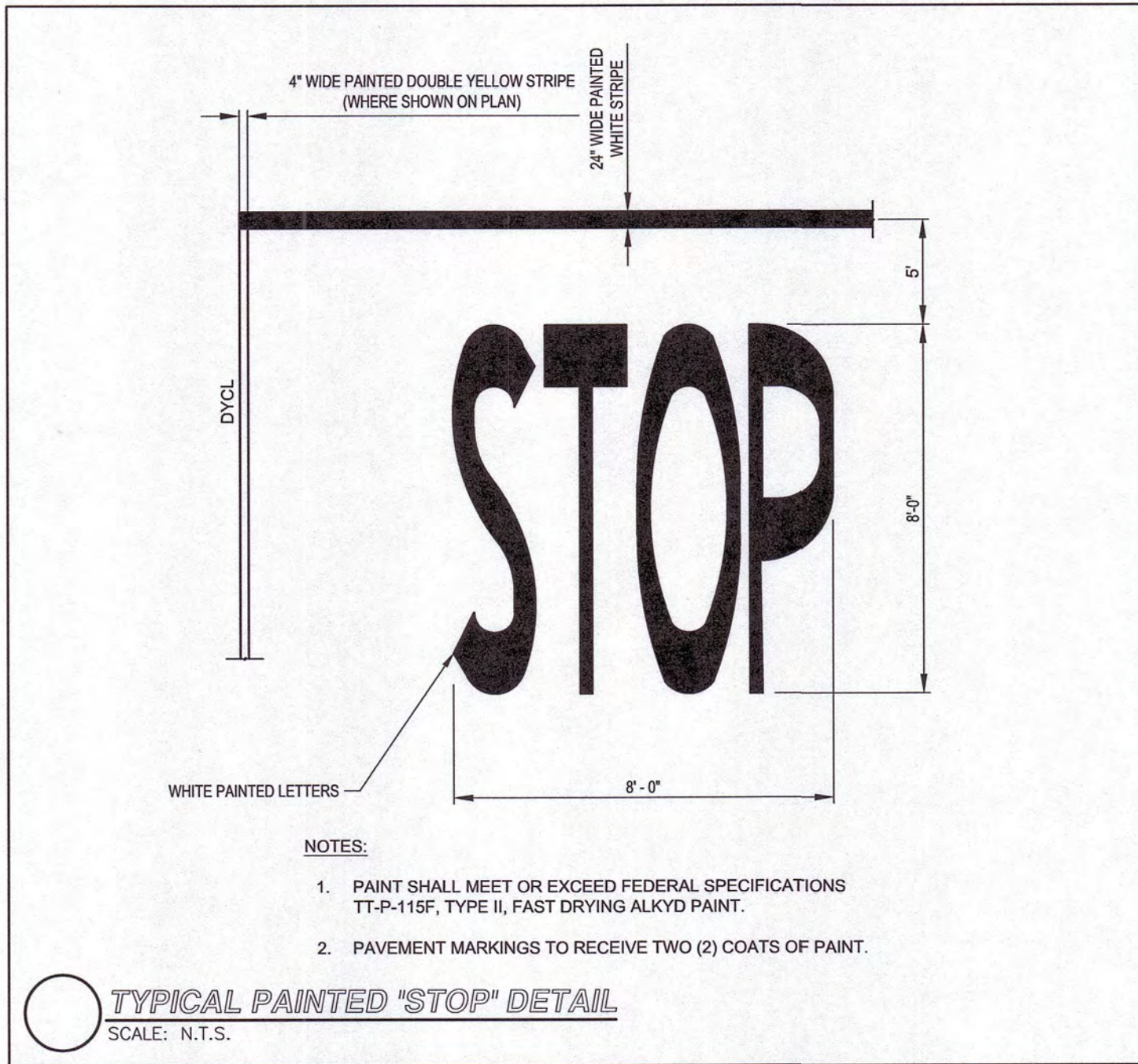
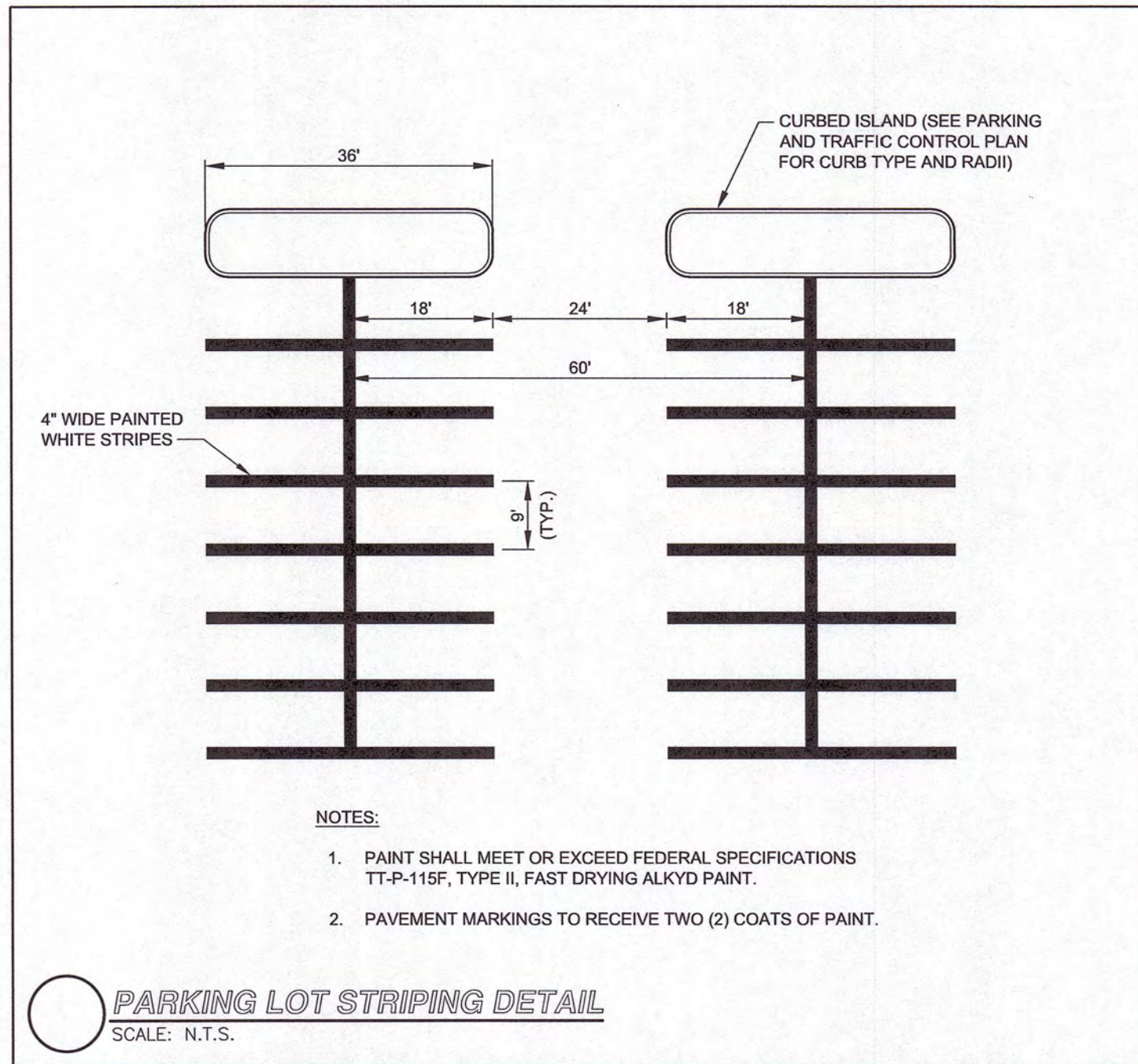
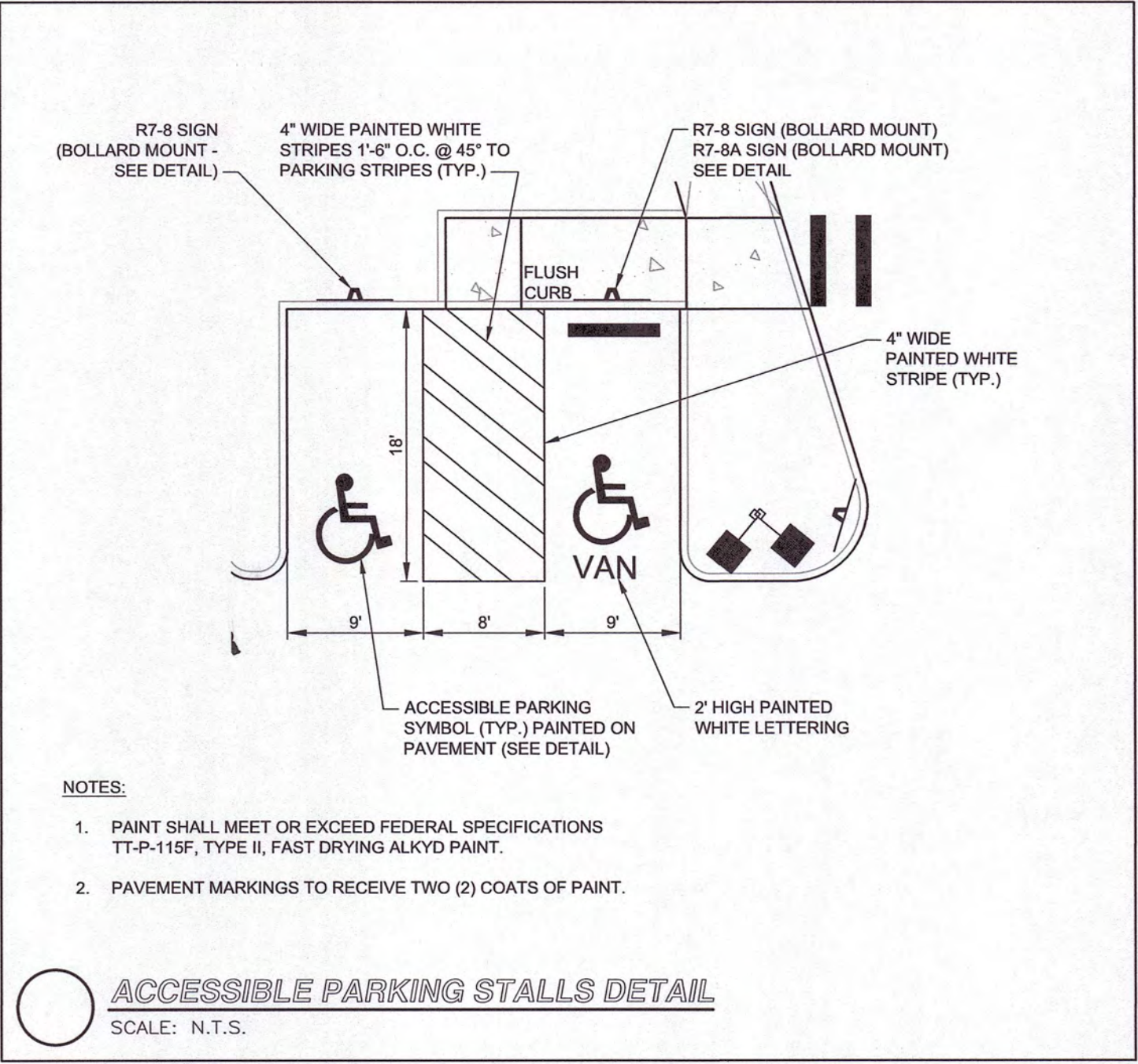
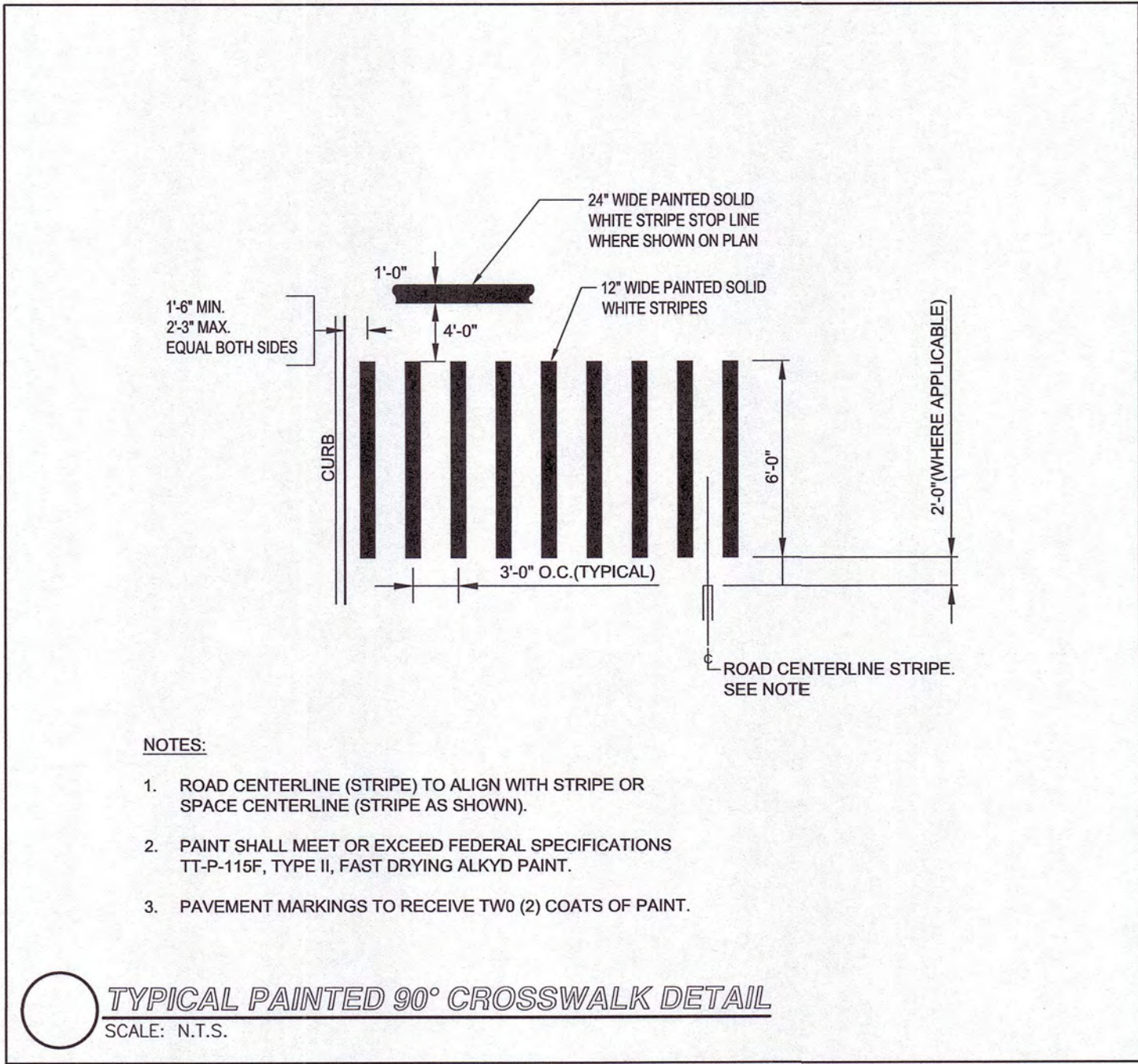
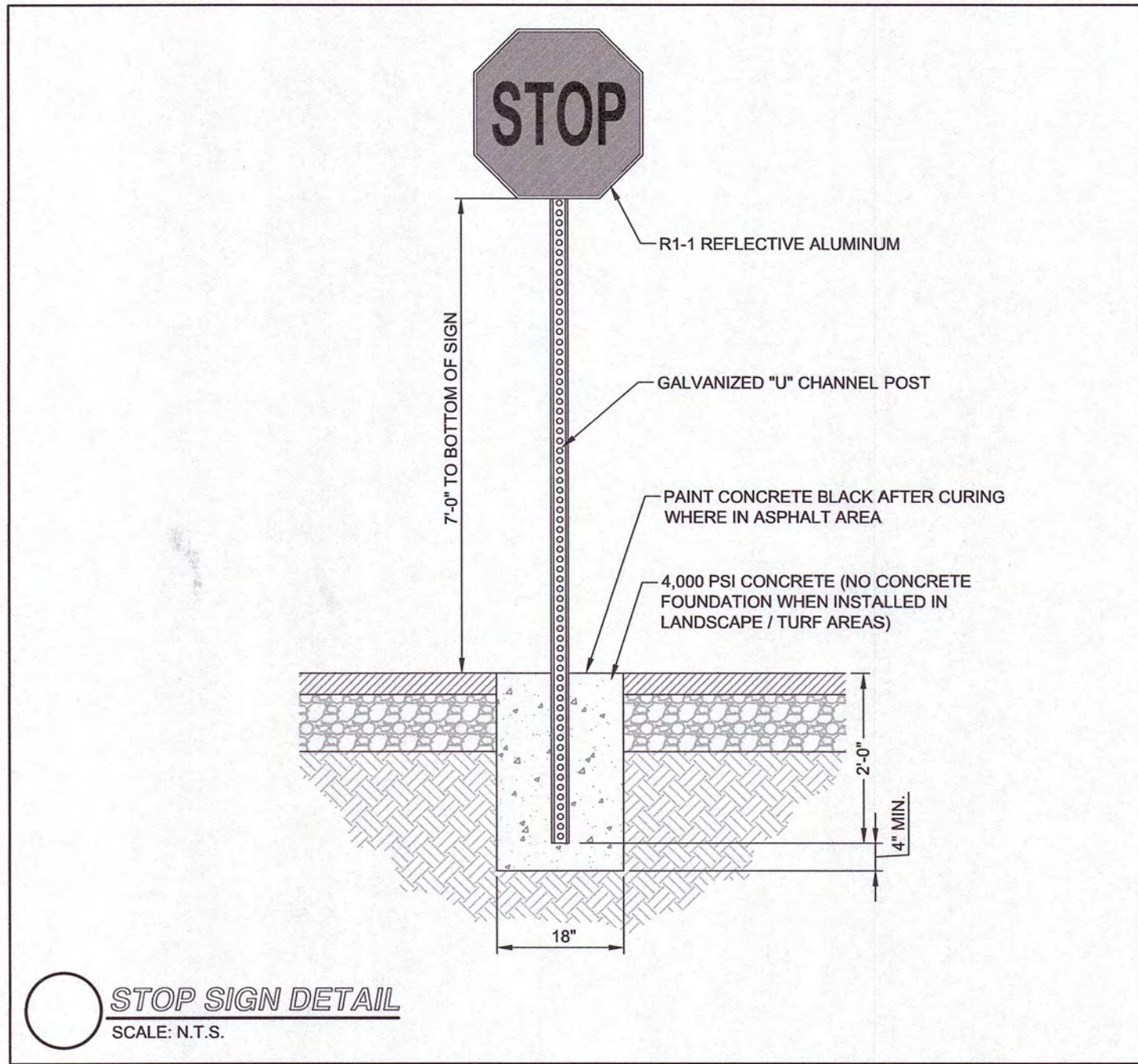
DRAWING NUMBER:

C-8

PROJECT NUMBER:

23001

Copyright © 2023 by R.J. O'Connell & Associates, Inc.



NO.	DATE	REVISION	DATE

PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCONEILL.COM

PREPARED FOR:
KINCORA WATERFORD, LLC
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

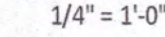
PROJECT NAME:
**122-124 BOSTON POST ROAD
WATERFORD, CT**

SEAL:

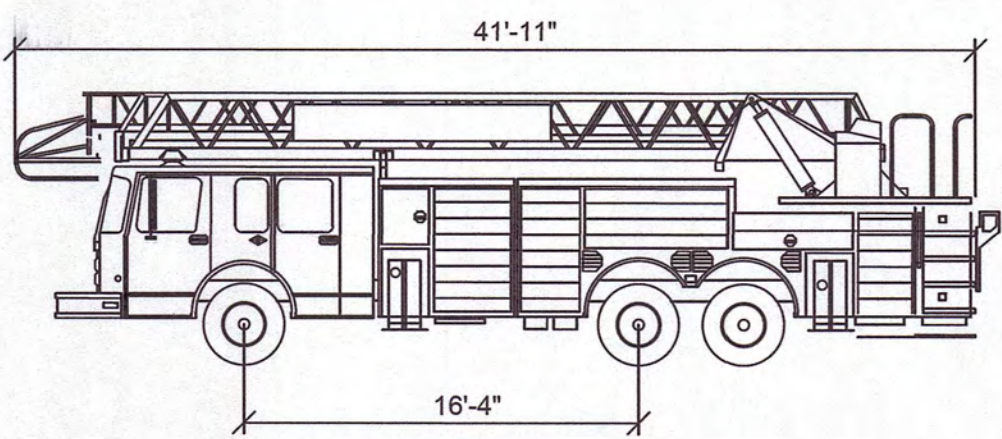
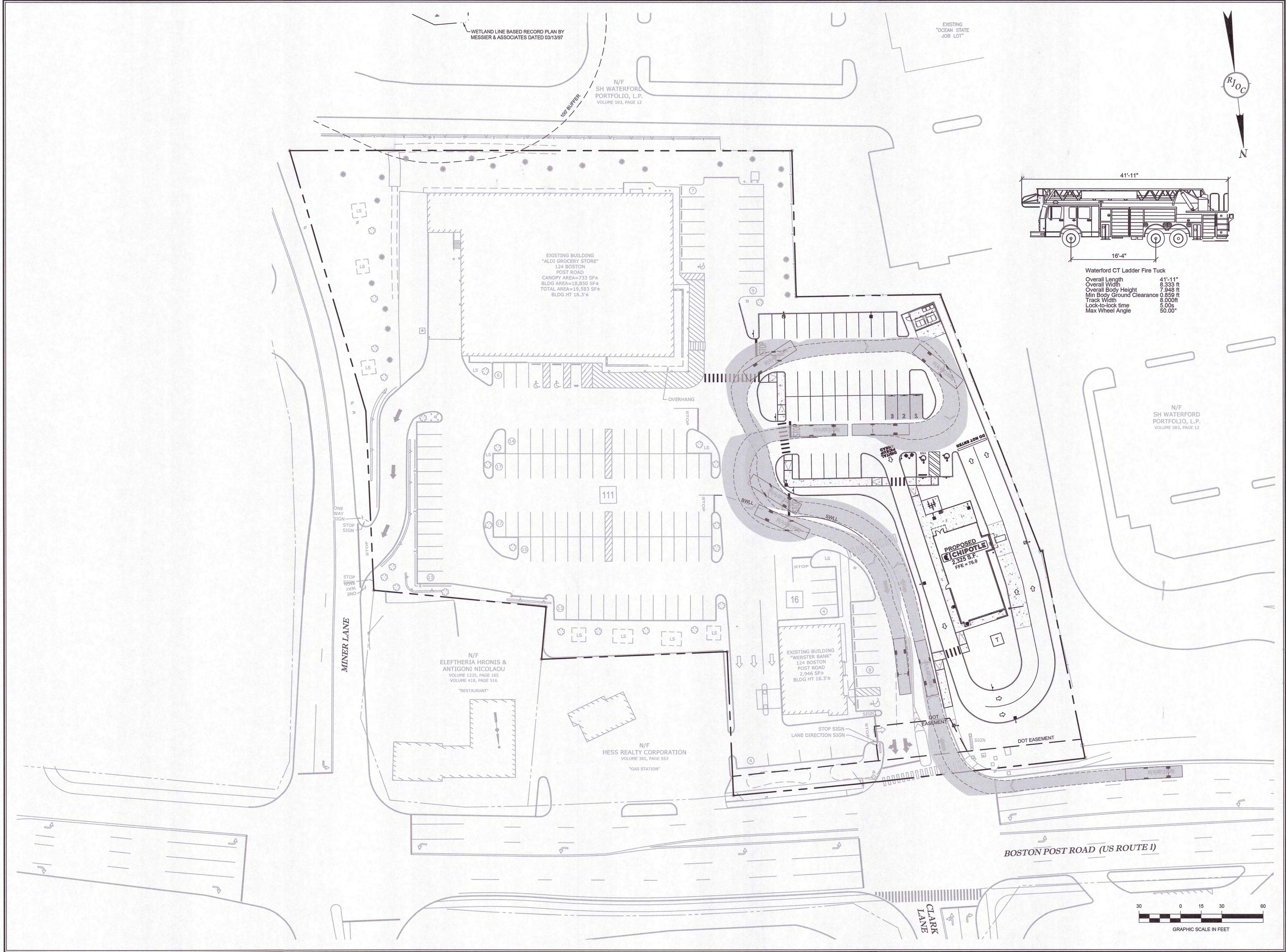
DESIGNED BY: DRG
DRAWN BY: MCR
REVIEWED BY: BJM
SCALE: N.T.S.
DATE: 06/22/2023
DRAWING NAME:

DETAILS - V
DRAWING NUMBER: **C-9**
PROJECT NUMBER: **23001**
Copyright © 2023 by R.J. O'Connell & Associates, Inc.

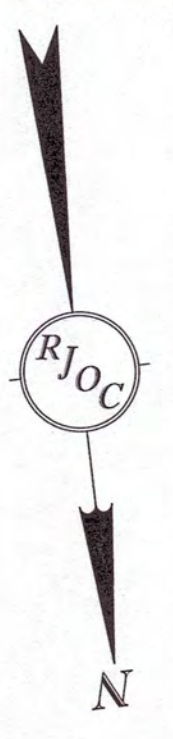
Copyright © 2023 by R.J. O'Connell & Associates, Inc.



Drawing name: G:\CT\Waterford\Kincora Development\122-124 Boston Post Road\Water\23001_FT-1 Fire Truck Turn Plan.dwg
Jun 22, 2023 - 16:55pm



Waterford CT Ladder Fire Truck
Overall Length 41'-11"
Overall Width 8.333 ft
Overall Body Height 7.948 ft
Min Body Ground Clearance 0.859 ft
Track Width 8.000 ft
Lock-to-lock time 5.00s
Max Wheel Angle 50.00°



RJOC

	DATE
	REVISION
	NO.
	DATE
	REVISION
	NO.

PREPARED BY:
RJO'CONNELL & ASSOCIATES, INC.
CIVIL ENGINEERS, SURVEYORS & LAND PLANNERS
80 MONTVALE AVENUE, SUITE 201 STONEHAM, MA 02180
PHONE: 781.279.0180 RJOCNNELL.COM

PREPARED FOR:
KINCORA WATERFORD, LLC
c/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

PROJECT NAME:
**122-124 BOSTON POST ROAD
WATERFORD, CT**

SEAL:

DESIGNED BY: DRG
DRAWN BY: MCR
REVIEWED BY: BJM
SCALE: 1" = 30'
DATE: 06/22/2023
DRAWING NAME:

FIRE TRUCK
TURN PLAN

DRAWING NUMBER:
FT-1

PROJECT NUMBER:
23001

Copyright © 2023 by R.J. O'Connell & Associates, Inc.

PREPARED FOR:

KINCORA
WATERFORD, LLC
/o KINCORA DEVELOPMENT, LLC
170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

SEAL:



DESIGNED BY: DRG
DRAWN BY: MCR
REVIEWED BY: BJM
SCALE: 1" = 30'
DATE: 06/22/2023
DRAWING NAME:

DRAWING NUMBER:

TT-1A

PROJECT NUMBER:

23001

WETLAND LINE BASED RECORD PLAN BY
MESSIER & ASSOCIATES DATED 03/13/97

N/F
SH WATERFORD
PORTFOLIO, L.P.
VOLUME 583, PAGE 12

100' BUFFER

EXISTING BUILDING
"ALDI GROCERY STORE"
124 BOSTON
POST ROAD
CANOPY AREA=733 SF±
BLDG AREA=18,850 SF±
TOTAL AREA=19,583 SF±
BLDG HT 16.3'±

EXISTING BUILDING
"WEBSTER BANK"
124 BOSTON
POST ROAD
2,946 SF±
BLDG HT 16.3'±

PROPOSED
CHIPOTLE
2,325 S.F.
FFE = 76.0

MINER LANE

N/F
ELEFThERIA HRONIS &
ANTIGONI NICOLAOU
VOLUME 1235, PAGE 165
VOLUME 418, PAGE S16
"RESTAURANT"

N/F
HESS REALTY CORPORATION
VOLUME 381, PAGE S53
"GAS STATION"

STOP SIGN
LANE DIRECTION SIGN

DOT EASEMENT

BOSTON POST ROAD (US ROUTE 1)

CLARK
LANE

WB-67 - Interstate Semi-Trailer

Overall Length	73.501ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.334ft
Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle	28.40°

GRAPHIC SCALE IN FEET

PREPARED FOR:

**KINCORA
WATERFORD, LLC**

o KINCORA DEVELOPMENT, LL

170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481

DESIGNED BY: _____
DRAWN BY: _____
REVIEWED BY: _____
SCALE: _____
DATE: _____
DRAWING NAME: _____

06/22/2013

1" = _____

DR: _____
MC: _____
BU: _____

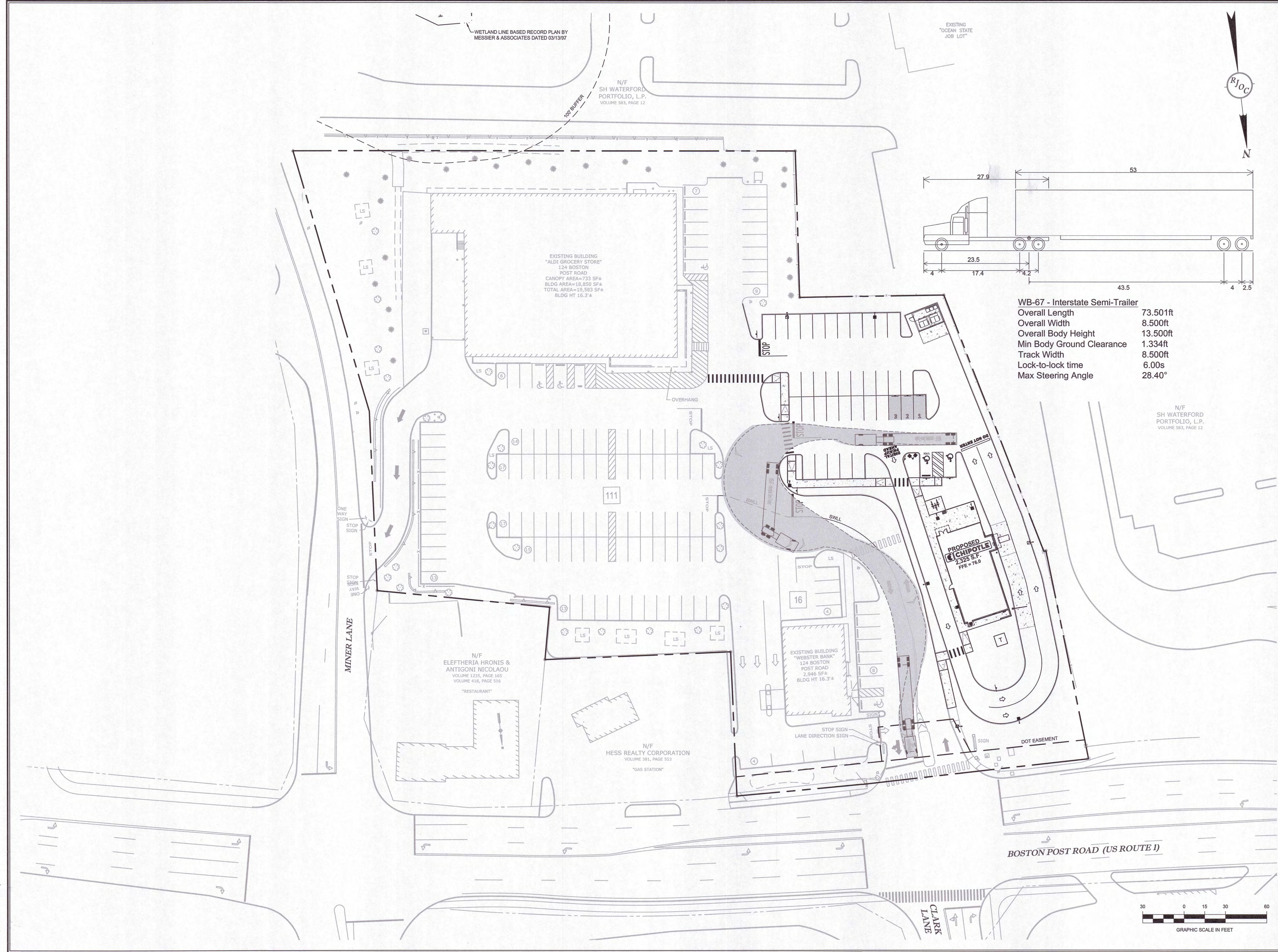
6.22.23



SEAL: _____

DRAWING NUMBER: **TT-1B**

PROJECT NUMBER: 2300



PREPARED FOR:

**KINCORA
WATERFORD, LLC**

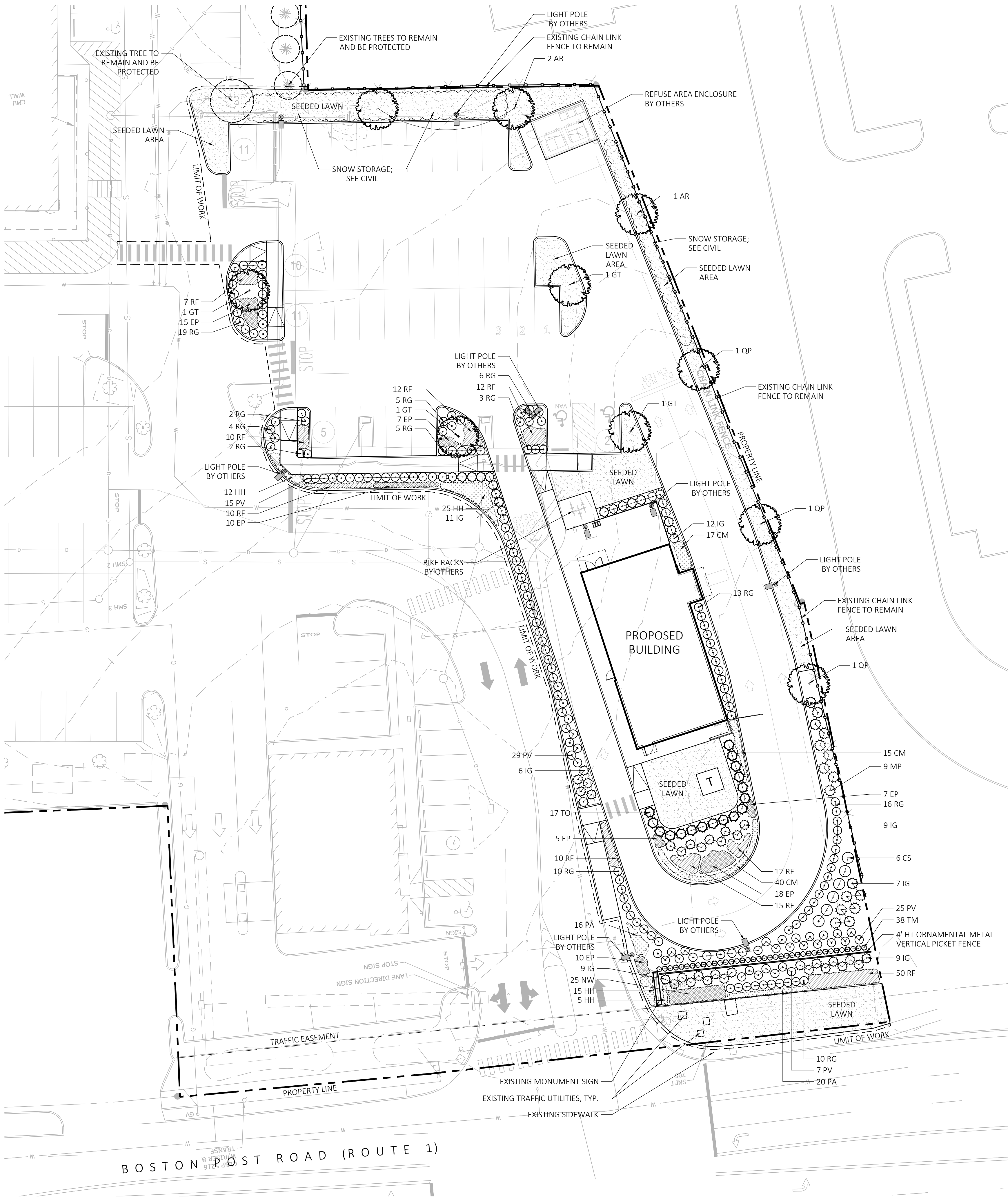
/o KINCORA DEVELOPMENT, LLC

**170 WORCESTER STREET
SUITE 204
WELLESLEY, MA 02481**

SEAL:	
DESIGNED BY:	DRG
DRAWN BY:	MCF
REVIEWED BY:	BJH
SCALE:	1" = 30'
DATE:	06/22/2023
DRAWING NAME:	

DRAWING NUMBER: **TT-1C**

PROJECT NUMBER: **2300**



1 OVERALL LANDSCAPE PLAN

SCALE: 1" = 20'-0"

PLANT SCHEDULE					
SYMBOL	QTY.	LATIN NAME	COMMON NAME	SIZE	NOTES
TREES					
AR	3	ACER RUBRUM 'RED SUNSET'	RED SUNSET MAPLE	2.5"-3" CAL.	B&B, 6' CLEAR BRANCHING
GT	4	GLEDITSIA TRIACANTHOS INERMIS 'SKYLINE'	SKYLINE HONEYLOCUST	2.5"-3" CAL.	B&B, 6' CLEAR BRANCHING
TO	17	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ABORVITAE	7'-8' TALL	B&B, MATCHING
QP	3	QUERCUS PALUSTRIS	PIN OAK	2.5"-3" CAL.	B&B, 6' CLEAR BRANCHING
SHRUBS					
CS	6	CORNUS STOLONIFERA 'ARCTIC FIRE'	ARCTIC FIRE RED TWIG DOGWOOD	5 GAL	48" O.C. B&B
IG	63	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	5 GAL	36" O.C. B&B
MP	9	MYRICA PENNSYLVANICA	NORTHERN BAYBERRY	5 GAL	36" O.C. B&B
RG	95	RHUS 'GRO LOW'	GROW LOW SUMAC	3 GAL	36" O.C. B&B
TM	38	TAXUS X MEDIA 'HICKSII'	HICKS YEW	4' HT.	4' HT. B&B
PERENNIALS AND ORNAMENTAL GRASSES					
CM	72	CAREX MORROWII 'ICE DANCE'	ICE DANCE SEDGE	1 GAL	18" O.C. CONTAINER
EP	72	ECHINACEA PURPUREA	PURPLE CONEFLOWER	1 GAL	24" O.C. CONTAINER
HH	57	HEMEROCALLIS 'HAPPY RETURNS'	HAPPY RETURNS DAYLILY	1 GAL	18" O.C. CONTAINER
NW	25	NEPETA X FAASSENII 'WALKERS LOW'	WALKERS LOW CATMINT	1 GAL	24" O.C. CONTAINER
PA	36	PENNISETUM ALOPECUROIDES 'HAEMEL'	DWARF FOUNTAIN GRASS	1 GAL	24" O.C. CONTAINER
PV	76	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	2 GAL	36" O.C. CONTAINER
RF	138	RUDBECKIA FULGIDA 'GOLDSTURM'	BLACK EYE SUSAN	1 GAL	24" O.C. CONTAINER

PLANTING NOTES:

- DURING CONSTRUCTION, PROTECT ALL EXISTING SITE FEATURES, STRUCTURES AND UTILITIES.
- PLANTS SHALL BE TRUE TO SPECIES AND VARIETY SPECIFIED AND NURSERY GROWN IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT. SUBSTITUTIONS WILL BE PERMITTED ONLY IF APPROVED BY THE LANDSCAPE ARCHITECT.
- LANDSCAPE ARCHITECT APPROVAL IS REQUIRED BEFORE PLANT MATERIAL IS PURCHASED. LANDSCAPE ARCHITECT RESERVES THE RIGHT TO SEE ALL MATERIAL IN PERSON AT THE NURSERY. IF TRAVEL OUTSIDE OF MA IS REQUIRED, LANDSCAPE ARCHITECT'S TRAVEL COSTS SHALL BE PAID FOR BY THE CONTRACTOR.
- ALL EXPOSED BURLAP, WIRE BASKETS AND OTHER MATERIALS ATTACHED TO PLANTS SHALL BE REMOVED PRIOR TO PLANTING. CARE SHALL BE TAKEN NOT TO DISTURB THE ROOT BALL OF PLANTS.
- THOROUGHLY WATER ALL PLANTS IMMEDIATELY AFTER PLANTING.
- WHERE DISCREPANCIES IN QUANTITIES OCCUR, DRAWINGS SUPERCEDE PLANT NOTES AND SCHEDULE.
- TRANSPLANTING SHALL BE DONE IN ACCORDANCE WITH THE AMERICAN STANDARD FOR NURSERY STOCK.
- LOAM USED IN PLANT BEDS SHALL BE UNIFORM IN COMPOSITION, FREE FROM SUBSOIL, STONES LARGER THAN 1", NOXIOUS SEEDS AND SUITABLE FOR THE SUPPORT OF VEGETATIVE GROWTH. THE pH VALUE SHALL BE BETWEEN 5.5 AND 6.5.
- MULCH IN TREE AND SHRUB BEDS SHALL BE NATURAL, NATIVE HEMLOCK MULCH FREE OF GROWTH OR GERMINATION INHIBITING INGREDIENTS. SUBMIT SAMPLES FOR APPROVAL.
- LOCATIONS FOR PLANTS AND/OR OUTLINE OF AREAS TO BE PLANTED ARE TO BE STAKED OUT AT THE SITE FOR APPROVAL BY THE LANDSCAPE ARCHITECT.
- SOIL DEPTHS: a.) SHRUBS AND PERENNIAL BEDS: 18" MIN.; b.) GROUND COVER: 6" MIN.; c.) TREES: SEE DETAIL; d.) SOD/SEED: 6" MIN.
- PROVIDE A SUBSURFACE ROOTBALL ANCHOR BY PLATIPUS EARTH ANCHORS, SIZE FOR CAULPER

MDLA
MICHAEL D'ANGELO landscape architecture

MICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC
840 SUMMER STREET
SUITE 201A
BOSTON, MA 02127
T. 203.592.4788
WWW.MD-LA.COM

122-124 BOSTON POST ROAD
WATERFORD, CT

STAMP



REV. NO.	DATE	DESCRIPTION
1	6/22/23	ISSUED FOR SITE PLAN REVIEW

OVERALL
LANDSCAPE
PLAN

DRAWN:

MR

CHECKED:

MD

SCALE:

AS NOTED

DATE:

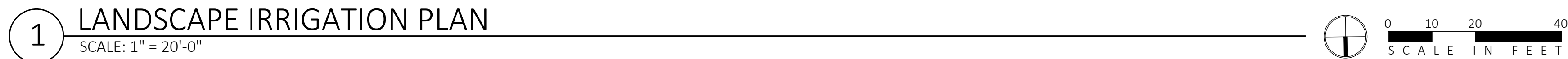
06/22/2023

L1

SHEET 1 OF 3

NOT FOR CONSTRUCTION

plot date: 6/22/2023



SYMBOL	DESCRIPTION
	DRIP IRRIGATION
	SPRAY IRRIGATION

1. IRRIGATION PLAN SHOW IS DIAGRAMMATIC FOR DESIGN-BUILD INSTALLATION. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR FINAL LAYOUT OF IRRIGATION SHOWING LOCATIONS AND SIZES OF MAIN LINES AND LATERAL LINES, ZONES, RAIN AND SOIL SENSORS, AND CUT SHEETS FOR CONTROLLER SYSTEM AND COMPONENTS. INCLUDING ANY NECESSARY SLEEVING.
2. IRRIGATION CONTRACTOR SHALL VERIFY PSI/GPM REQUIREMENTS AT THE SITE BEFORE STARTING CONSTRUCTION.
3. TREES SHOULD BE ON A SEPARATE ZONE.
4. PROVIDE A REMOTE RAIN SENSOR ON A ROOF AREA THAT IS NOT OBSTRUCTED FROM THE OPEN SKY.
5. COORDINATE WITH OWNER FOR POINT OF CONNECTION LOCATION.
6. COORDINATE WITH OWNER FOR IRRIGATION CONTROLLER LOCATION.
7. INSTALL DRAIN TUBING, 65PH, 12" CENTERS, STAMPED EVERY TURN OR EVERY 4'
8. COORDINATE WITH OWNER FOR BACKFLOW PREVENTION LOCATION.
9. INSTALLER SHALL INSTALL LIGHTNING AND SURGE PROTECTION DEVICES THROUGHOUT SYSTEM AS PER MANUFACTURER'S HIGHEST SPECIFICATION LEVELS.
10. INSTALLER SHALL ADHERE TO ALL MANUFACTURER'S SPECIFICATIONS RELATED TO CONTROLLER SYSTEM INSTALLATION.
11. IN ADDITION TO BID, CONTRACTOR TO VERIFY THAT ALL MATERIALS, INSTALLATION PARAMETERS, AND OPERATIONS CONFORM TO ALL APPLICABLE CODES AND ORDINANCES. NO LATER THAN FIVE DAYS BEFORE BID SUBMITTALS CONTRACTOR SHALL NOTIFY DESIGNER AND OWNER OF ANY CHANGES REQUIRED DUE TO CURRENT CODE OR ORDINANCE DISCREPANCIES.

MICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC

840 SUMMER STREET
SUITE 201A
BOSTON, MA 02127
t. 203.592.4788
www.m-d-l-a.com

122-124 BOSTON POST ROAD
WATERFORD, CT

REV. NO.	DATE	DESCRIPTION
1	6/22/23	ISSUED FOR SITE PLAN REVIEW

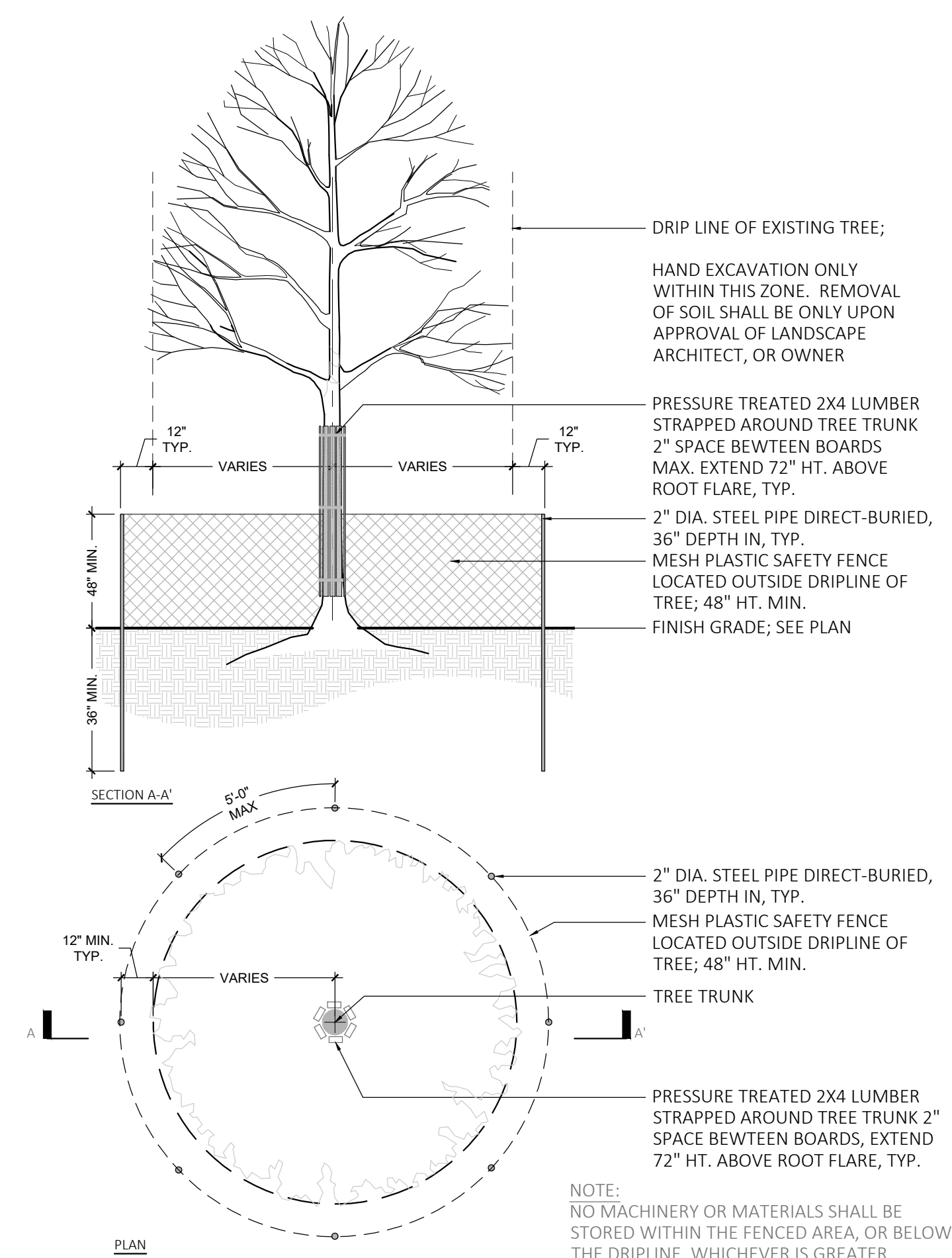
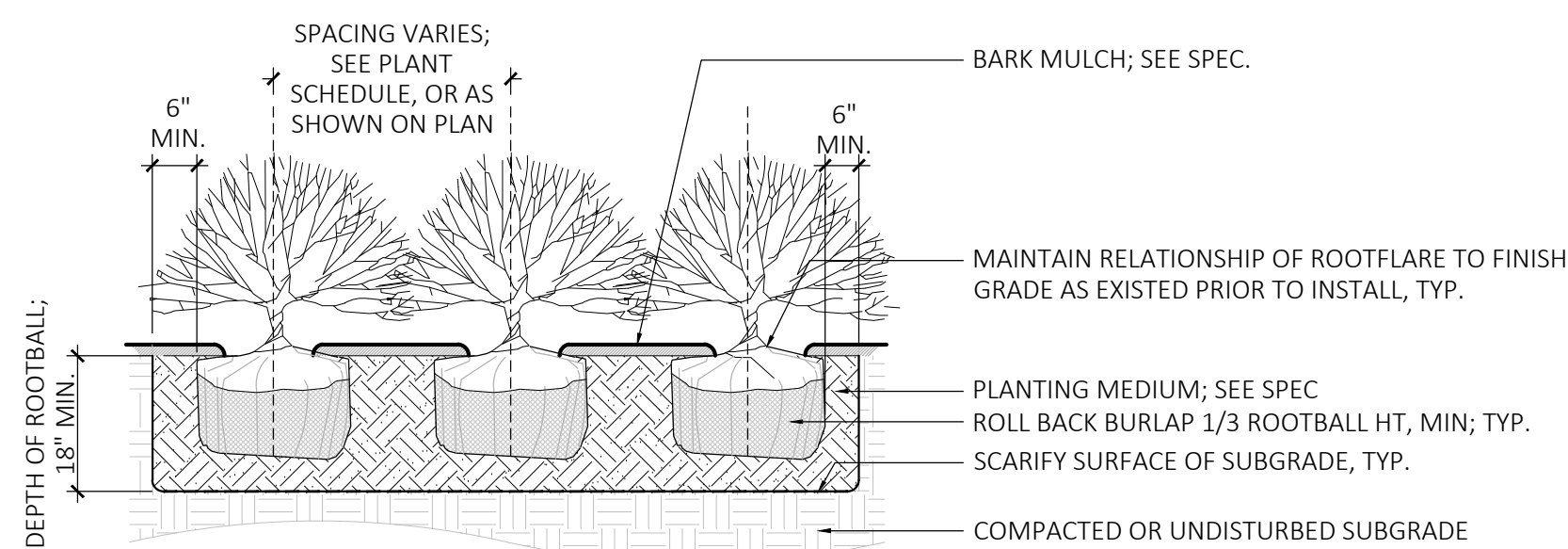
LANDSCAPE
IRRIGATION
PLAN

L2

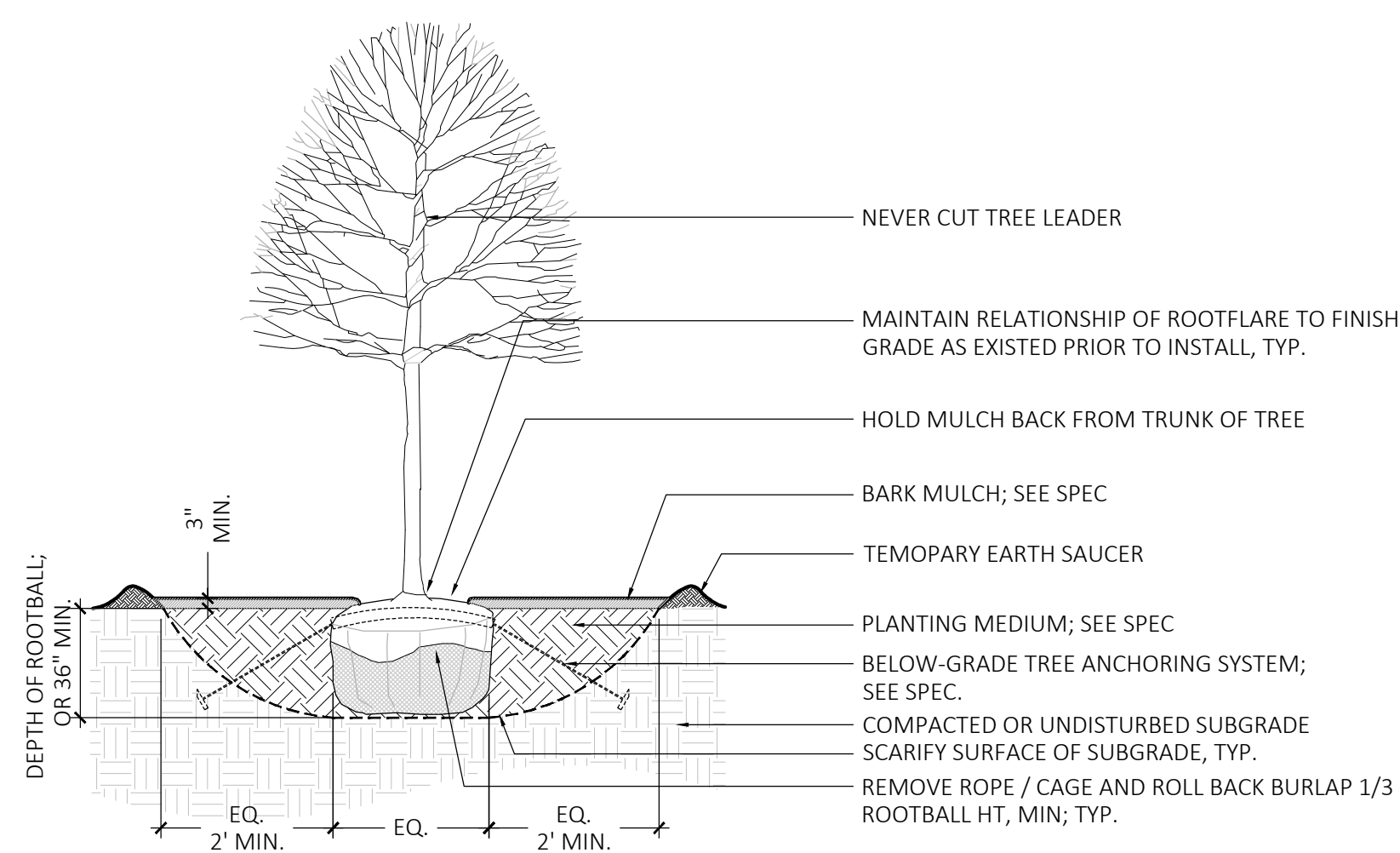
plot date: 6/22/2023

NOT FOR CONSTRUCTION

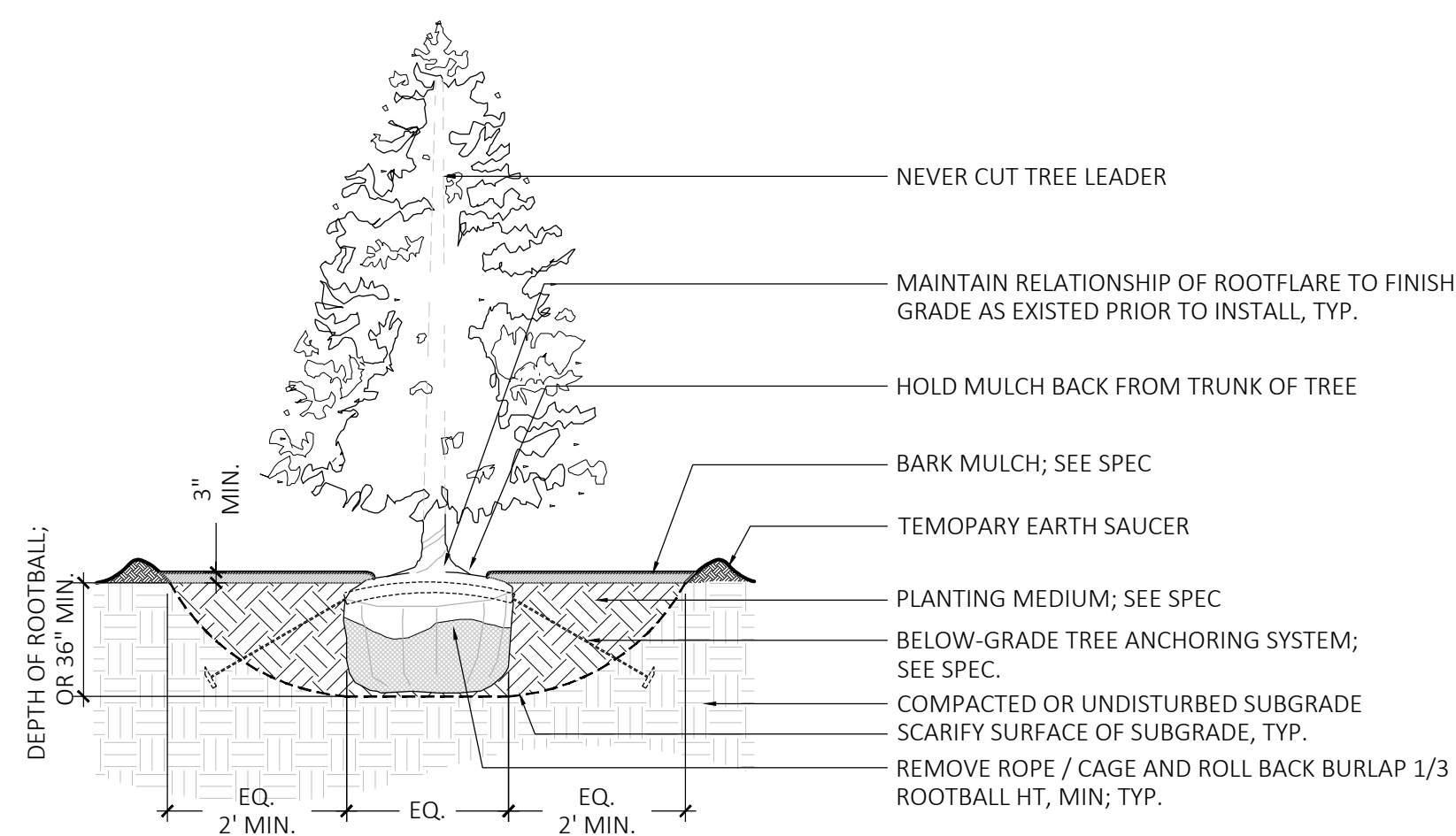
1 SHRUB PLANTING
NOT TO SCALE



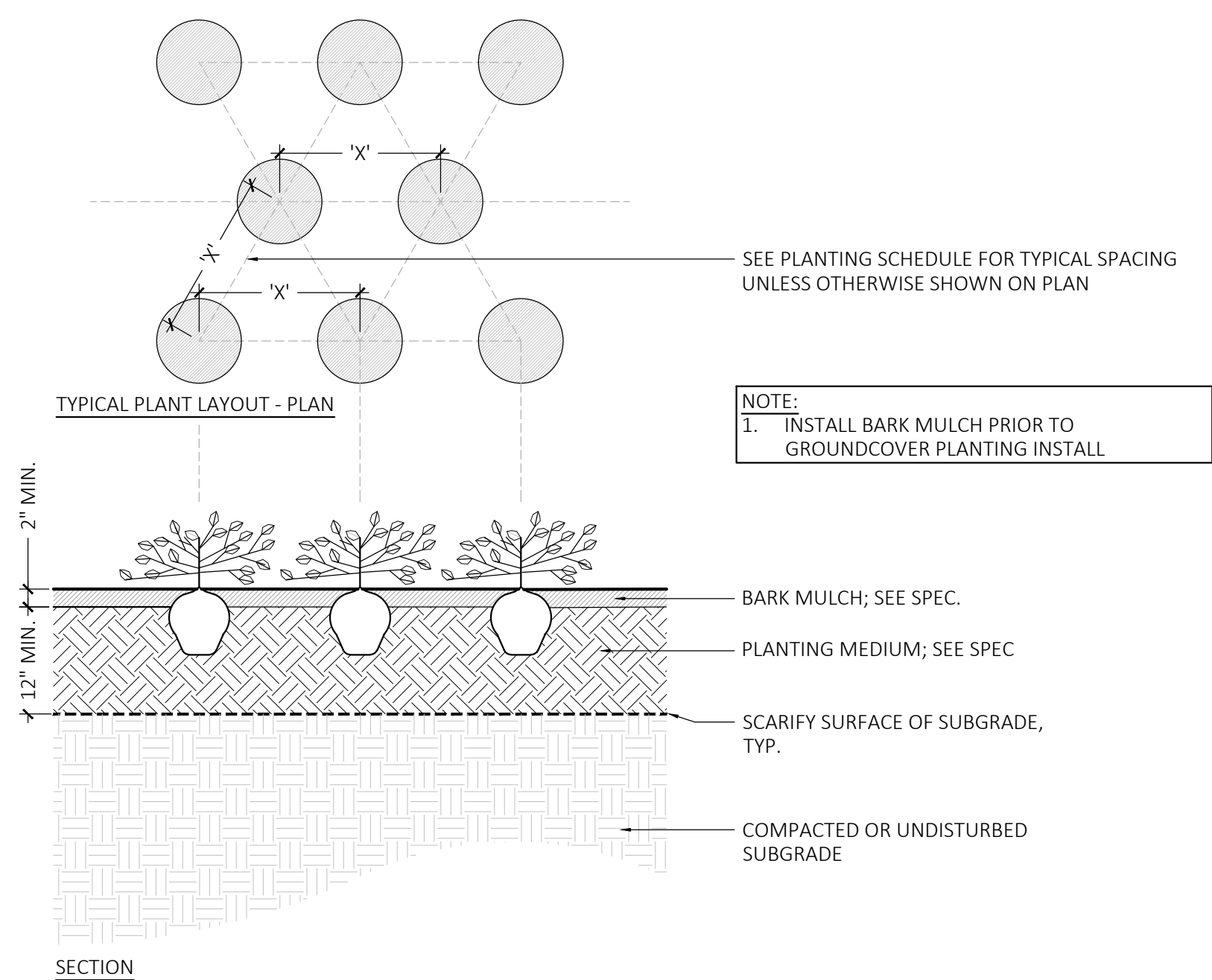
4 EXISTING TREE PROTECTION



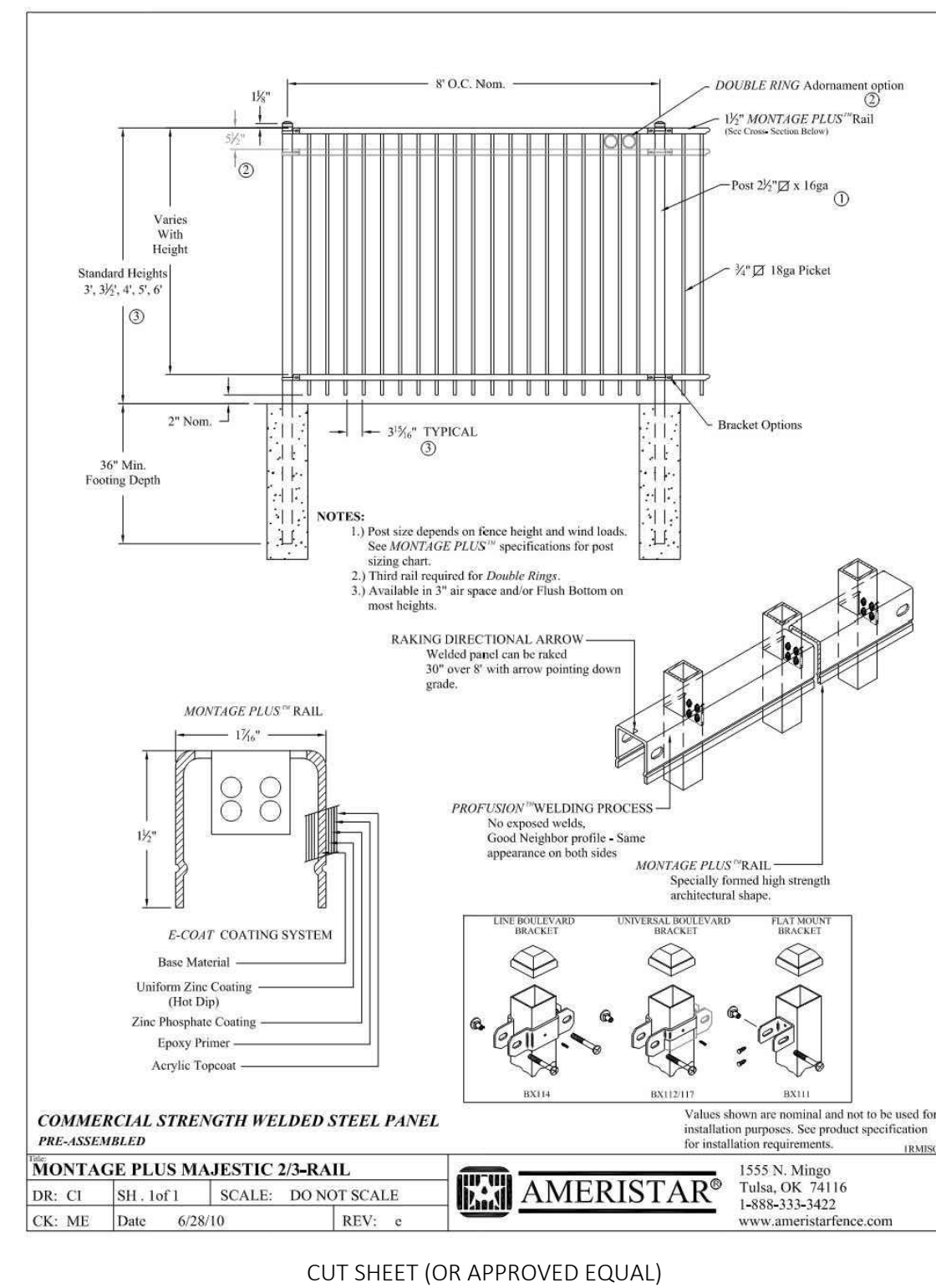
2 DECIDUOUS TREE PLANTING



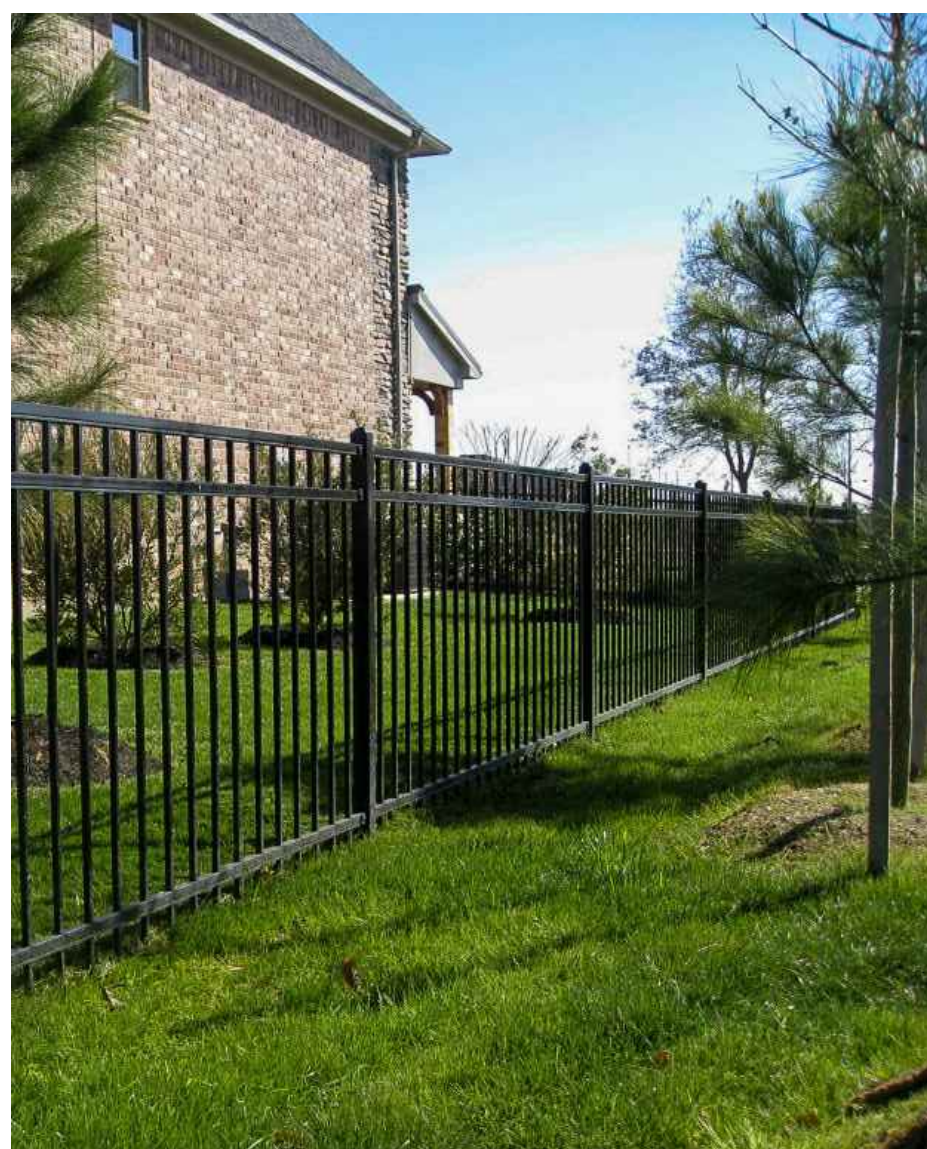
3 EVERGREEN TREE PLANTING
NOT TO SCALE



5 GROUND COVER PLANTING
NOT TO SCALE



6 4' HT ORNAMENTAL METAL FENCE
NOT TO SCALE

MDLA
MICHAEL D'ANGELO landscape architectureMICHAEL D'ANGELO
LANDSCAPE ARCHITECTURE LLC

840 SUMMER STREET
SUITE 201A
BOSTON, MA 02127
t. 203.592.4788
www.m-d-l-a.com

122-124 BOSTON POST ROAD
WATERFORD, CT

STAMP



REV. NO.	DATE	DESCRIPTION
1	6/22/23	ISSUED FOR SITE PLAN REVIEW

LANDSCAPE
DETAILS

DRAWN:	L 3
MR	
CHECKED:	
MD	
SCALE:	
AS NOTED	
DATE:	
06/22/2023	

SHEET 3 OF 3

plot date: 6/22/202

NOT FOR CONSTRUCTION

Luminaire Schedule "Did you know that utility rebates can cover 25% or more of a product's cost? Email rebates@cree.com to get help on your project!"										
Project: Project 1										
Symbol	Qty	Label	Arrangement	Lumens/Lamp	LLF	Description	Lum. Watts	Total Watts	Dark Sky Compliant	BUG Rating
	6	L23	SINGLE	N.A.	1.000	AL-42WLED-UD-CG-120 W/ RS9062-DO-CS&	43	258	Yes	B1-U5-G0
	5	L31B	SINGLE	9747	1.000	OSQ-A-NM-4ME-A-57K-UL-CS W/ OSQ-DACS W/ OSQ-BLSMF	112	560	Yes w/ Louver Kit	B2-U0-G2
	1	L31	SINGLE	11412	1.000	OSQ-A-NM-4ME-A-57K-UL-CS W/ OSQ-DACS	112	112	Yes	B2-U0-G2
	2	L32	BACK-BACK	11412	1.000	OSQ-A-NM-4ME-A-57K-UL-CS W/ OSQ-DACS	112	448	Yes	B2-U0-G2
	1	L32B	2 @ 90 DEGREES	11412	1.000	OSQ-A-NM-4ME-A-57K-UL-CS W/ OSQ-DACS	112	224	Yes	B2-U0-G2
	2	L34	4 @ 90 DEGREES	11412	1.000	OSQ-A-NM-4ME-A-57K-UL-CS W/ OSQ-DACS	112	896	Yes	B2-U0-G2
	4	L31-wBLS NEW	SINGLE	8575	1.000	OSQL-B-11L-57K7-4M-UL-NM-CS- w OSQ-BLSMF & OSQ-ML-B-DACS	72	288	Yes	B1-U0-G2
	1	OSQ-3ME	SINGLE	11175	1.000	OSQL-B-11L-57K7-3M-UL-NM-CS- w OSQ-ML-B-DACS	72	72		B2-U0-G2
	2	L21 NEW	SINGLE	4270	1.000	XSPW-B-WM-3ME-4L-57K-UL-CS	31	62		B1-U0-G1
	6	L21	SINGLE	4109	1.000	XSPW A03MC-UCSP	42	252		B1-U0-G1

Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
Calc Pts	0.10	7.5	0.0	N.A.	N.A.
Chipotle	2.56	16.7	0.5	5.12	33.40
Pavement	2.34	9.9	0.2	11.70	49.50
Property Line	0.17	1.8	0.0	N.A.	N.A.

NATIONAL ACCOUNT PRICING, PLEASE CALL ELVIR SULJIC AT CREE LIGHTING:
262-884-3332 OR ESULJIC@CREELIGHTING.COM

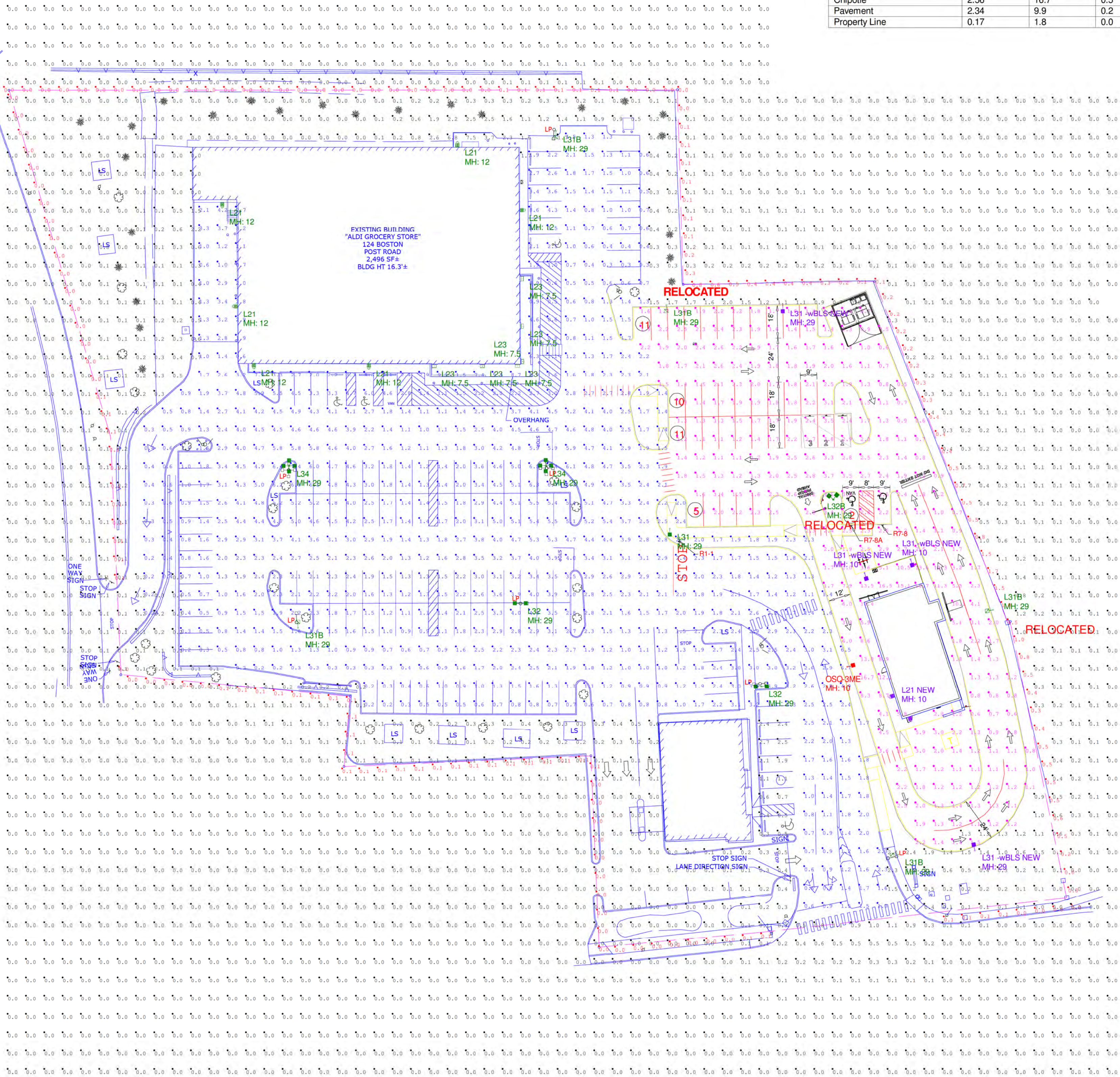
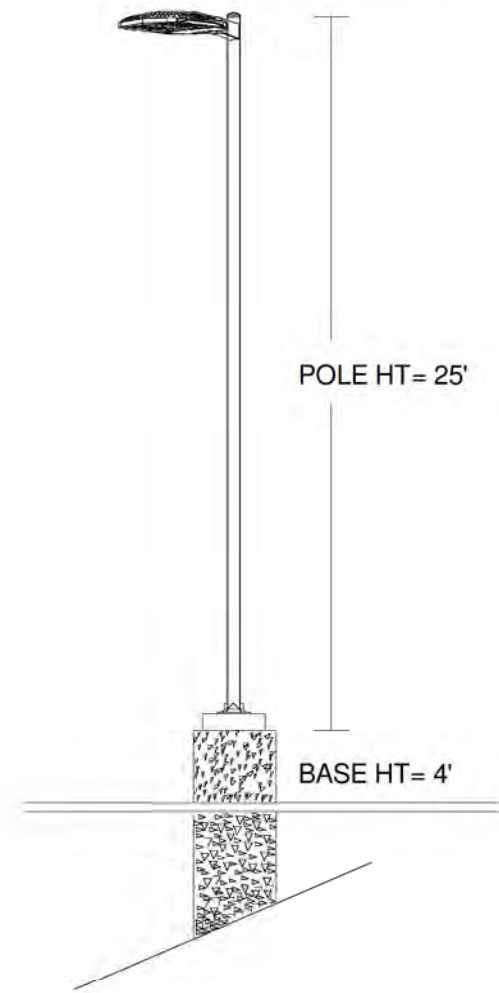
Additional Required Equipment:
***** (11) POLES EXISTING *****

- (2) CL-SSP-4011-25-D1-PS - (25' x 4" Steel Square Pole, Single) NEW
(3) CL-SSP-4011-10-D1-PS (10 X 4" STEEL SQUARE POLE) NEW

Proposed Poles Meets 120MPH Sustained Winds.
Mount 25' Pole on a 4' Concrete Base.
10' Pole no Base

Additional Equipment
(5) OSQ-ML-B-DACS (DIRECT ARM MOUNT)
(4) OSQ-BLSMF (BACK LIGHT SHIELD)

OSQ Area Luminaire



Customer responsible to verify ordering information/
catalogue number prior to placing order.



1200 92nd Street - Sturtevant, WI 53177
www.cree.com - (800) 236-6800

Project Name: Aldi- Waterford, CT

CASE # 00558170 (SR: 15520)

Date: 6/21/2023

Scale: N.T.S.

Footcandles calculated at grade

Filename: ALD-160620WACTABMR9.AGI

Layout by: Amy McIntosh

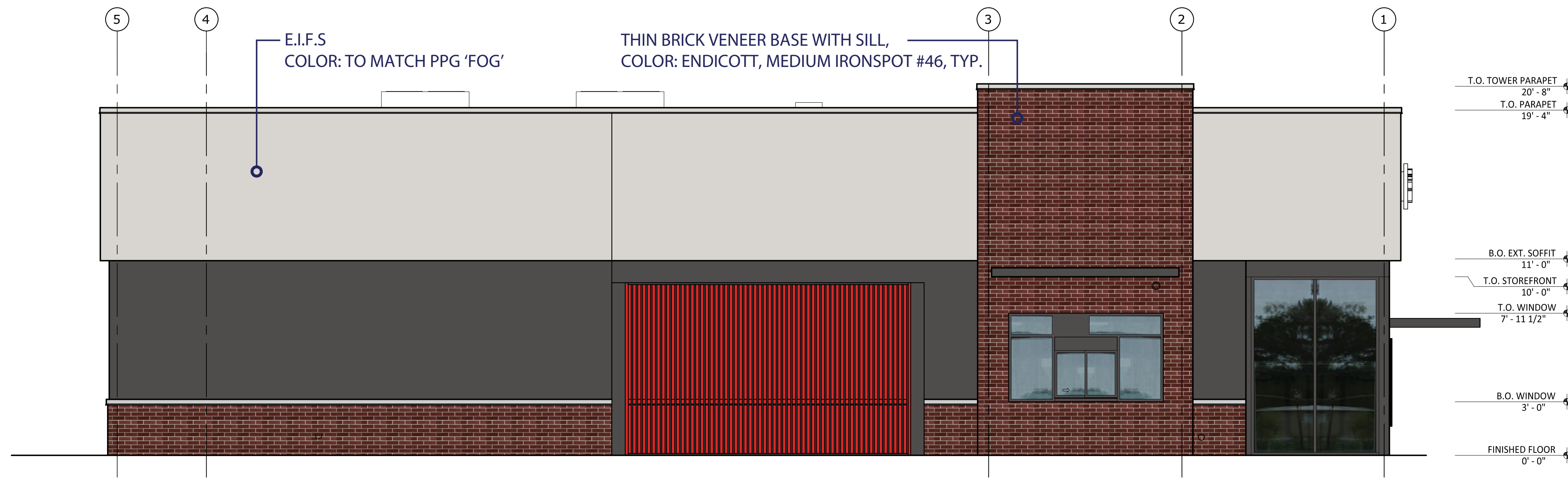
Illumination results shown on this lighting design are based on project parameters provided to Cree, Inc. used in conjunction with luminaire test procedures conducted under laboratory conditions. Actual project conditions differing from these design parameters may affect field results. The customer is responsible for verifying dimensional accuracy along with compliance with any applicable electrical, lighting, or energy code.



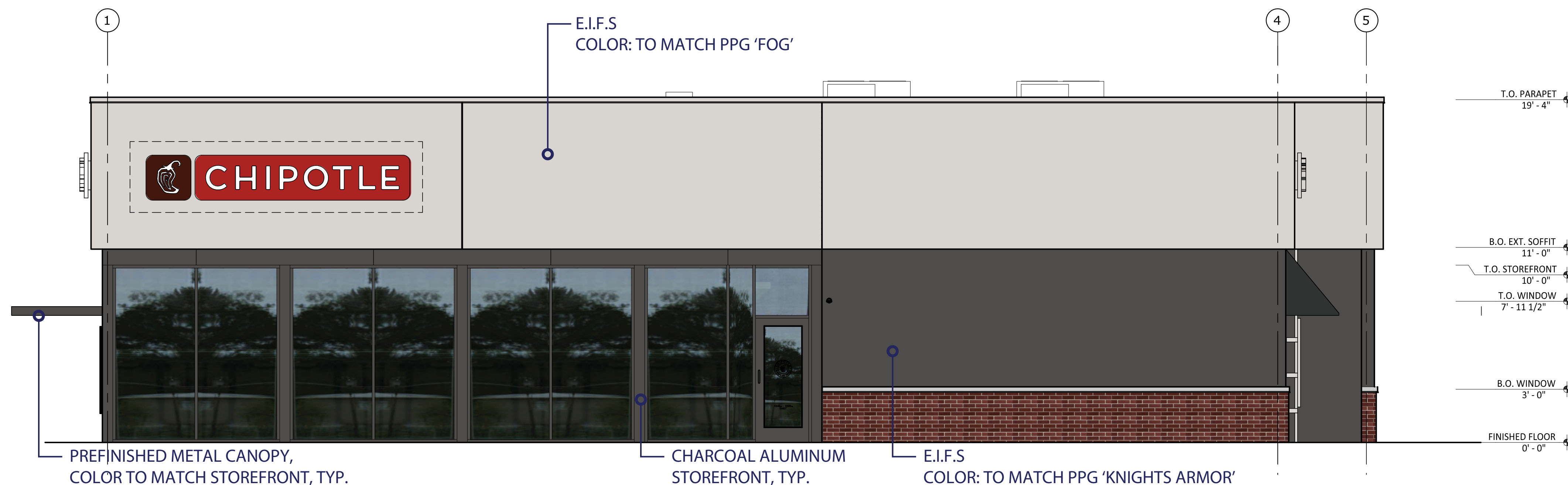
4	REAR ELEVATION SCALE: 1/4" = 1'-0"
----------	--



3	FRONT ELEVATION SCALE: 1/4" = 1'-0"
----------	---



2 LEFT SIDE ELEVATION



1	RIGHT SIDE ELEVATION SCALE: 1/4" = 1'-0"
----------	---

