

# SITE DEVELOPMENT PLANS

## 501 & 600 GRIFFIN BROOK DRIVE

### METHUEN, MASSACHUSETTS

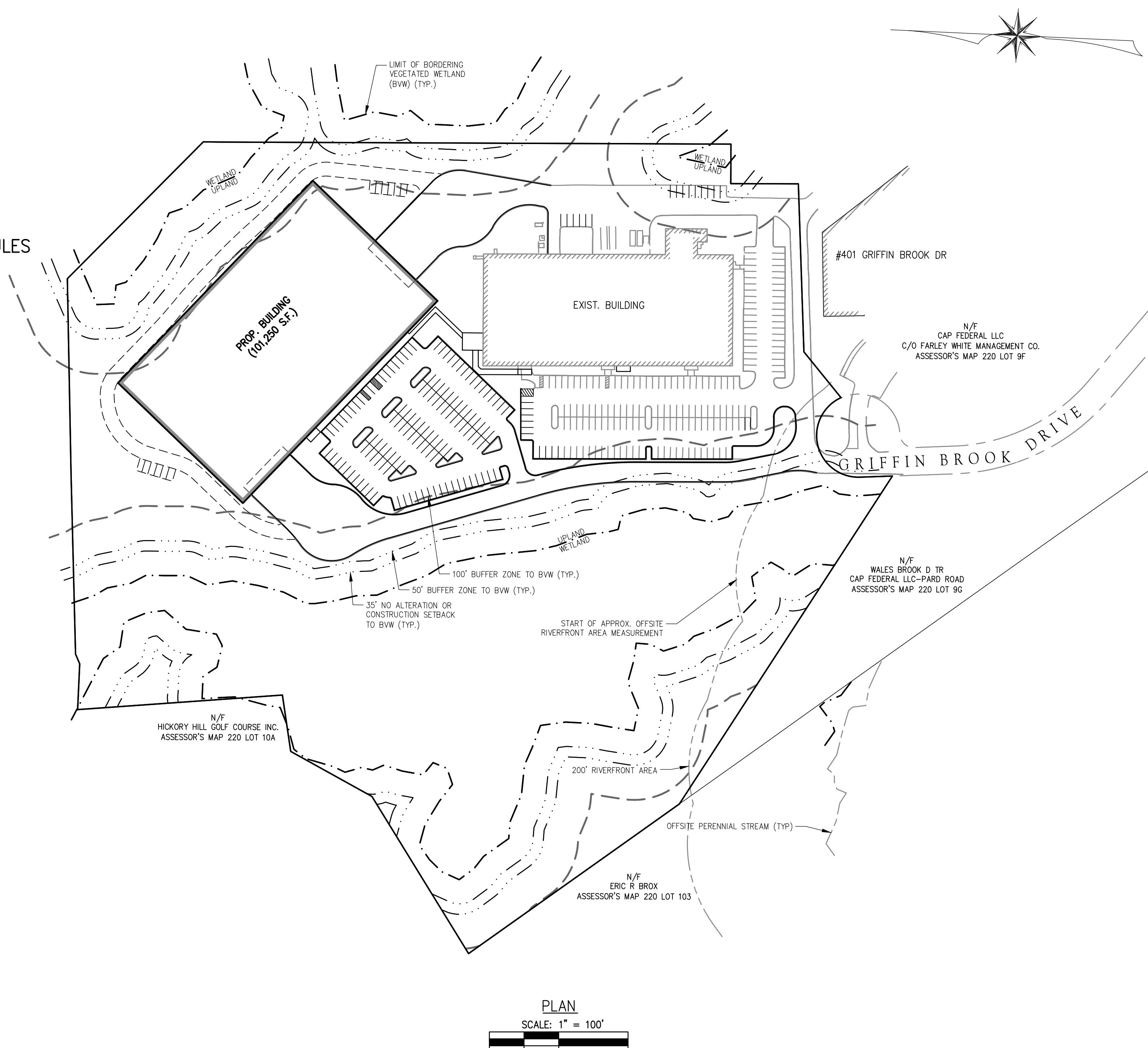
(ASSESSOR'S MAP 220, LOT 9D & 9E)

SCHEDULE OF PLAN SET DRAWINGS:

CS-1 COVER SHEET  
 C-1 GENERAL NOTES, ABBREVIATIONS, & LEGEND  
 C-2 SHEET INDEX & EROSION CONTROL PLAN  
 C-3 EXISTING CONDITIONS PLAN  
 C-4 EXISTING CONDITIONS PLAN  
 C-5 SITE LAYOUT PLAN  
 C-6 GRADING AND DRAINAGE PLAN  
 C-7 DRAINAGE SCHEDULE  
 C-8 UTILITY PLAN  
 C-9 EROSION CONTROL DETAILS  
 C-10 SITE DETAILS  
 C-11 UTILITY DETAILS  
 C-12 DRAINAGE DETAILS  
 C-13 DRAINAGE DETAILS  
 C-14 DRAINAGE DETAILS  
 C-15 DRAINAGE DETAILS  
 C-16 TEST HOLE LOGS

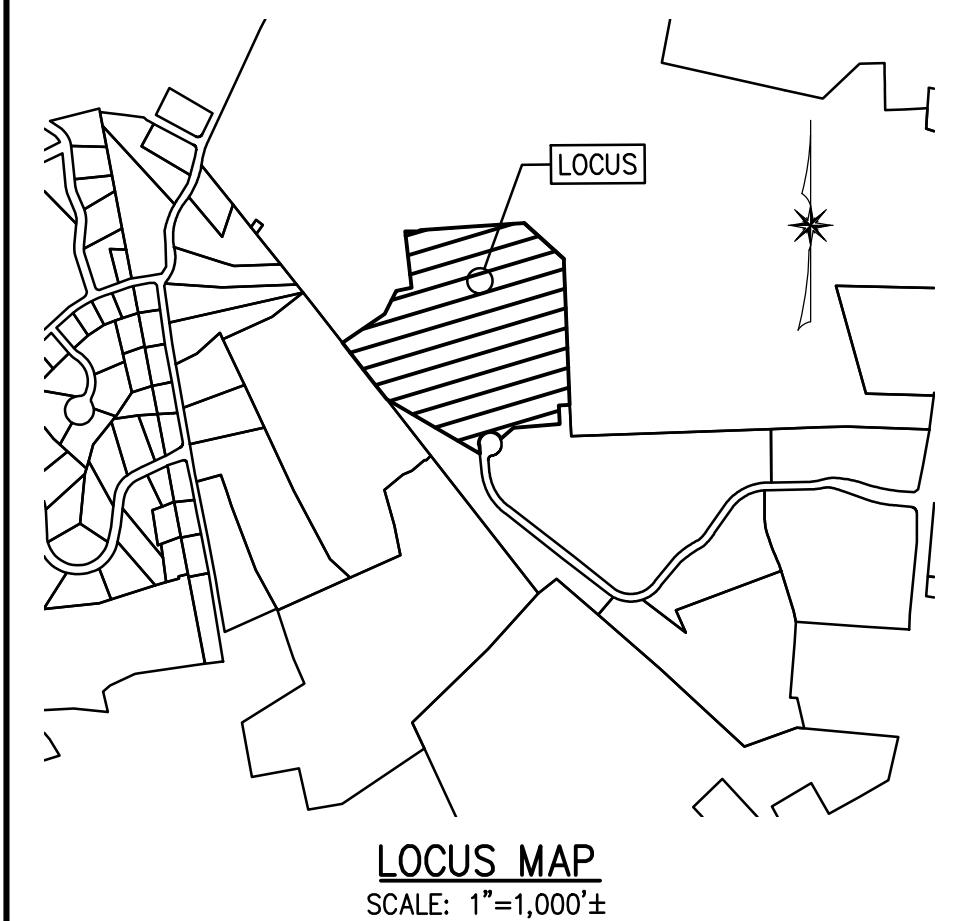
L1.0 LANDSCAPE PLAN  
 L1.1 LANDSCAPE PLAN ENLARGEMENT AND PLANTING SCHEDULES  
 L1.2 LANDSCAPE DETAILS AND PLANTING NOTES  
 L2.0 LIGHTING PLAN

A1.2 BUILDING ELEVATIONS



**GENERAL NOTE:**  
 THESE PLANS ARE PREPARED FOR PERMITTING WITH THE CITY OF METHUEN. THE PLANS SHALL NOT BE USED FOR CONSTRUCTION OR FOR ANY OTHER PURPOSES WITHOUT WRITTEN PERMISSION FROM THE MORIN-CAMERON GROUP, INC.

ISSUED APRIL 6, 2022



**APPLICANT/OWNER:**  
 GRIFFIN BROOK DRIVE OWNER LLC  
 55 CAMBRIDGE STREET  
 BURLINGTON, MA 01803

**CIVIL ENGINEER:**  
 THE MORIN-CAMERON GROUP, INC.  
 25 KENOVA AVENUE  
 HAVERHILL, MA 01830  
 PHONE: 978-777-8586

**ARCHITECT:**  
 GSD ASSOCIATES, LLC  
 146 MAIN STREET, 2ND FLOOR  
 NORTH ANDOVER, MA 01845  
 PHONE: 978-688-5422



The  
Morin-Cameron  
GROUP, INC.

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS  
LAND SURVEYORS | LAND USE PLANNERS

**LANDSCAPE ARCHITECT:**  
 RADNER DESIGN ASSOCIATES, INC.  
 3 ALLIED DRIVE, SUITE 303  
 DEDHAM, MA 02026  
 PHONE: 508-736-6144



**WETLAND SCIENTIST:**  
 LEC ENVIRONMENTAL CONSULTANTS, INC.  
 380 LOWELL STREET, SUITE 101  
 WAKEFIELD, MA 01880  
 PHONE: 781-245-2500

**LEC**

**TRANSPORTATION ENGINEER:**  
 BAYSIDE ENGINEERING  
 600 UNICORN PARK DRIVE  
 WOBURN, MA 01810  
 PHONE: 781-932-3201



REVISIONS		
NO.	DESCRIPTION	DATE
1	REVISIONS PER PEER REVIEW AND NOI	05-20-2022

SURVEY BY: MCG  
 DRAFTED BY: CM/LO  
 CHECKED BY: SPC  
 APPROVED BY: SPC  
 SCALE: AS NOTED  
 DATE: APRIL 6, 2022

COVER SHEET

CS-1

**RECORD OWNER:**  
501 & 600 GRIFFIN BROOK DRIVE  
ASSESSOR'S MAP 220 LOTS 9D & 9E  
GRIFFIN BROOK DRIVE OWNER LLC  
55 CAMBRIDGE STREET  
BURLINGTON, MA 01803  
BOOK 16943, PAGE 196

**GENERAL NOTES:**

- THESE PLANS ARE PREPARED FOR OUR CLIENT'S USE ONLY FOR THE PURPOSE OBTAINING PERMITS AND ARE NOT TO BE USED OR RELIED FOR CONSTRUCTION WITHOUT THE WRITTEN CONSENT OF THE MORIN-CAMERON GROUP, INC.
- EXISTING CONDITIONS, WETLAND AND BOUNDARY INFORMATION SHOWN HEREON LOCATED BY FIELD INSTRUMENT SURVEY PERFORMED BY THE MORIN-CAMERON GROUP, INC. IN JULY, 2021.

**FLOOD NOTE:**

THE SUBJECT PROPERTY IS MOSTLY LOCATED IN A ZONE "X" AS ILLUSTRATED ON FLOOD INSURANCE RATE MAP #25009C0203F, WHICH HAS AN EFFECTIVE DATE OF JULY 3, 2012. A SMALL PORTION OF THE PROPERTY IS LOCATED IN A ZONE "AE" AS DEPICTED ON THE PLAN.

**ZONING DISTRICT:**

LIMITED INDUSTRIAL (IL) ZONING DISTRICT

**WETLAND NOTE:**

WETLAND RESOURCE AREA DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS, INC. IN MAY 2021. APPROVED UNDER AN ORDER OF RESOURCE AREA DELINEATION DEP FILE #219-1265, DATED OCTOBER 6, 2021.

**GENERAL UTILITY NOTES:**

- THE GENERAL CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE GENERAL CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 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 SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK.
- THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC, CABLE AND TELEPHONE COMPANIES, GAS PROVIDER AND METHUEN MUNICIPAL UTILITY DEPARTMENTS TO VERIFY THE LOCATION, SIZE AND TYPE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- THE EXCAVATING OF TRENCHES, THE METHODS AND MATERIALS OF BACKFILLING, AND ALL OTHER MATTERS RELATING TO THE INSTALLATION OF WATER PIPES, SEWER LINES, STORM DRAINS, SUBSURFACE DRAINS, AND ALL OTHER UNDERGROUND UTILITIES SHALL BE CONSISTENT WITH GOOD CONSTRUCTION PRACTICES AND SHALL AT ALL TIMES BE SUBJECT TO THE INSPECTION BY THE APPLICABLE CITY DEPARTMENTS.
- ALL TRENCHES SHALL BE TAMPED WITH A POWER TAMPER AT INTERVALS NOT GREATER THAN ONE (1) FOOT.
- ALL UTILITY PENETRATIONS AT THE FOUNDATIONS SHALL BE ADJUSTED BASED ON THE FINAL CONSTRUCTION DRAWINGS.

**SITE PREPARATION NOTES:**

- ALL MATERIALS REMOVED FROM THE PREMISES SHALL BE DONE SO IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS FOR HAULING AND DISPOSAL.
- COORDINATE ANY UTILITY DIS-CONNECTIONS WITH APPROPRIATE SERVICE PROVIDERS.
- ALL TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. AVOID HEAVY MACHINERY WITHIN ROOT BALL FOOTPRINT.
- COORDINATE WITH CITY OF METHUEN WATER AND SEWER DIVISION.

**CONSTRUCTION SEQUENCE:**

- TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPALS FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE.
- THE GENERAL CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY WITH THE OWNER (OWNER'S REPRESENTATIVE), PLANNING DEPARTMENT REPRESENTATIVE AND ANY OTHER INTERESTED CITY DEPARTMENT REPRESENTATIVES.
  - STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. PLACE EROSION CONTROLS AT LOCATIONS INDICATED ON THE SITE DEVELOPMENT PLANS. AN EPA CONSTRUCTION GENERAL PERMIT AND STORMWATER POLLUTION PREVENTION PLAN MUST BE ACTIVATED PRIOR TO CONSTRUCTION ACTIVITIES.
  - IN PREPARING TO REMOVE MATERIALS FROM THE WORK AREA ON THE SITE, CAREFUL CONSIDERATION SHOULD BE MADE TO THE EXTENT OF DISTURBANCE SO AS NOT TO DISTURB MORE OF THE SITE THAN WHAT IS INTENDED TO BE IMMEDIATELY DEVELOPED AND RE-STABILIZED.
  - LOAM AND TOP SOIL EXCAVATED FROM THE WORK AREA SHALL BE STOCKPILED AT THE LOCATIONS SHOWN ON THE PLANS. IF MATERIALS ARE STOCKPILED ON THE SITE WHERE THEY WILL NOT INTERFERE WITH CONSTRUCTION ACTIVITIES, THEY SHALL BE LOCATED SO AS TO MINIMIZE THE POTENTIAL FOR EROSION INTO EXISTING DRAINAGE INFRASTRUCTURE OR WETLAND RESOURCE AREAS. STOCKPILES SHALL BE STABILIZED WITH STRAW BALES, SILT FENCING OR EQUIVALENT. STOCKPILES LEFT FOR GREATER THAN 14 DAYS SHALL BE SEEDED WITH AN EROSION CONTROL MIX. STOCKPILES SHALL BE SITUATED OUTSIDE THE WETLAND BUFFER ZONES WHEREVER POSSIBLE.
  - REMOVAL OF ALL DEBRIS OR MATERIAL FROM THE WORK AREA SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS UNDER THE OVERSIGHT OF A LICENSED SITE PROFESSIONAL (LSP) HIRED BY THE OWNER IF APPLICABLE.
  - CONSTRUCT STABILIZED CONSTRUCTION ENTRANCES AT THE LOCATIONS NOTED.
  - ALL CATCH BASINS SHALL BE PROTECTED WITH SILT SACK SEDIMENT TRAPS.
  - REMOVAL OF ALL EXISTING UTILITIES TO BE CUT AND CAPPED, AND COORDINATED WITH APPROPRIATE UTILITY COMPANIES.

**CONSTRUCTION PRACTICES:**

- ALL CONSTRUCTION SHALL BE CARRIED OUT IN ACCORDANCE WITH THE FOLLOWING CONDITIONS:
- ALL REASONABLE ACTION SHALL BE TAKEN TO MINIMIZE THE NEGATIVE EFFECTS OF CONSTRUCTION ON ABUTTERS. ADVANCE NOTICE SHALL BE PROVIDED TO ALL ABUTTERS IN WRITING AT LEAST 72 HOURS PRIOR TO COMMENCEMENT OF CONSTRUCTION OF THE PROJECT.
  - ALL CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE COMMUNITY PLANNING COMMISSION, AND IN ACCORDANCE WITH ANY AND ALL RULES, REGULATIONS, AND ORDINANCES OF THE CITY OF METHUEN.
  - THE OWNER SHALL PROMPTLY NOTIFY THE BOARD OF HEALTH OF ANY ENVIRONMENTAL CONDITIONS ENCOUNTERED DURING CONSTRUCTION THAT MAY ADVERSELY IMPACT THE ABUTTERS TO THE SITE.
  - ALL PROVISIONS IN THE MUNICIPAL CODE OF METHUEN, ARTICLE VI, SECTION 9-62, NOISE POLLUTION CONTROL ORDINANCE, SHALL BE STRICTLY ADHERED TO. IF STRICTER MEASURES ARE REQUIRED BY THIS DECISION, THE STRICTER MEASURES SHALL APPLY.
  - WHERE PRACTICAL, ALL ON SITE MATERIAL SHALL BE USED AS BACK FILL AND FOR OTHER USES ON SITE.
  - ALL CONSTRUCTION VEHICLES LEFT OVERNIGHT AT THE SITE MUST BE LOCATED COMPLETELY ON THE SITE.
  - ALL CONSTRUCTION VEHICLES SHALL BE CLEANED PRIOR TO LEAVING THE SITE SO THAT THEY DO NOT LEAVE DIRT AND/OR DEBRIS ON SURROUNDING ROADWAYS.
  - ALL CONSTRUCTION WILL OCCUR ON SITE; NO CONSTRUCTION WILL OCCUR OR BE STAGED WITHIN CITY RIGHT OF WAY. ANY DEVIATION FROM THIS SHALL BE APPROVED BY THE DEPARTMENT OF PLANNING AND COMMUNITY DEVELOPMENT PRIOR TO CONSTRUCTION.
  - ANY ROADWAYS, DRIVEWAYS, SIDEWALKS, OR LANDSCAPING DAMAGED DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL CONDITION BY THE OWNER. THE CITY ENGINEER, ALONG WITH THE CLERK OF THE WORKS SHALL DETERMINE THE CONDITION OF THE ROADWAYS DIRECTLY IMPACTED BY CONSTRUCTION AND RELATED TRAFFIC AND DETERMINE THE TYPES OF REPAIRS REQUIRED BY THE OWNER.

**EROSION AND SEDIMENTATION CONTROL:**

WIDELY ACCEPTED PRACTICES FOR REDUCING EROSION AND SEDIMENTATION WILL BE EMPLOYED IN THE DEVELOPMENT OF THIS SITE. REFER TO THE STORMWATER POLLUTION PREVENTION PLAN FOR THE PROJECT.

- THE DEVELOPMENT OF THE SITE HAS BEEN PLANNED TO MATCH EXISTING TOPOGRAPHY AND GROUND COVER. EXISTING DRAINAGE PATTERNS OF THE SITE HAVE BEEN MAINTAINED TO THE EXTENT PRACTICABLE.
- NATURAL WETLANDS WILL BE PRESERVED AND PROTECTED, AND EXISTING VEGETATION WILL BE RETAINED AND PROTECTED TO THE EXTENT POSSIBLE.
- STEEP SLOPES, WHERE POSSIBLE, WILL NOT BE DISTURBED.
- THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED LAND TO THE EXTENT FEASIBLE.
- SEDIMENT CONTROL MEASURES WILL BE APPLIED TO CONTROL ANY SEDIMENTS THAT MAY BE PRODUCED AS A RESULT OF SITE CONSTRUCTION ACTIVITIES. EROSION AND DEPOSITION OF SEDIMENT WILL BE CLOSELY MONITORED DURING CONSTRUCTION.
- TEMPORARY EROSION CONTROL MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO, FILTER FABRIC SILT FENCES, SEEDING AND MULCHING, SEEDED FILTER STRIPS AND SILT SACKS IN CATCH BASINS (EXISTING AND NEWLY INSTALLED).
- TOPSOIL STRIPPED FROM THE SITE WILL BE STOCKPILED FOR LOAMING AND SEEDING AT LATER CONSTRUCTION STAGES. THE STOCKPILES SHALL BE LOCATED SO AS TO ACT AS TEMPORARY DIVERSIONS, GENERALLY ON AN UPHILL SLOPE.
- SITE DEVELOPMENT WILL NOT COMMENCE UNTIL ALL TEMPORARY EROSION CONTROL MEASURES ARE IN PLACE. THESE MEASURES SHALL BE EMPLOYED UNTIL FINAL PAVING AND ADEQUATE VEGETATION HAS BEEN ESTABLISHED.
- THE CONSTRUCTION PHASE MUST COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PROTOCOLS. AN EPA NOTICE OF INTENT SHALL BE FILLED OUT AT LEAST 2 WEEKS PRIOR TO THE START OF CONSTRUCTION.
- NOTIFY THE CITY OF METHUEN AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.

**STORM DRAIN NOTES:**

- STORMWATER CONVEYANCE PIPES SHALL BE HDPE (ADDS N-12) UNLESS OTHERWISE NOTED.
- BACKFILL SHALL BE COMPAKTED TO 95% MAXIMUM DRY DENSITY BY AASHTO T-180D METHOD.
- SEEETING, IF USED, SHALL BE REMOVED PRIOR TO BACKFILLING TRENCH.
- UNSUITABLE SOIL BELOW THE INVERT (CLAY, ORGANICS, DEBRIS, ETC) SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL AND SHALL NOT BE REUSED AS BACKFILL.
- ROOF DRAINS SHALL BE DIRECTED TO THE DRAINAGE SYSTEM IN THE LOCATIONS SHOWN. COORDINATE LOCATIONS WITH THE PROJECT ARCHITECT AND LANDSCAPE ARCHITECT.
- REPAIR BROKEN OR DAMAGED DRAIN PIPES IN KIND.

**RECORD KEEPING, AS-BUILTS & LAYOUT NOTES:**

- THE SITE CONTRACTOR SHALL MAINTAIN TIES AND EXTENSIVE PHOTOS OF ALL BURIED UTILITIES. WHENEVER POSSIBLE, THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER OF INSPECTION MILESTONES SO UTILITIES CAN BE INSPECTED PRIOR TO BACKFILLING.
- ALL AS-BUILT SURVEYS AND LAYOUT NECESSARY DURING CONSTRUCTION SHALL BE COORDINATED WITH THE SURVEYOR. PROVIDE AT LEAST 72 HOURS ADVANCED NOTICE.

**SEWER NOTES:**

- A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN SANITARY SEWER PIPES AND WATER PIPES. WHENEVER CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET TO A WATER PIPE, THE WATER PIPE SHALL BE SLEVED FOR A DISTANCE OF AT LEAST 10' ON EACH SIDE.
- ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 UNLESS OTHERWISE NOTED.
- WHERE SANITARY SEWERS CROSS WATER SERVICES, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER PIPE. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER PIPE SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER PIPE AND THE SEWER PIPE 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.
- SANITARY SEWER LINES WITH LESS THAN 4 FEET OF COVER SHALL BE INSULATED TO PREVENT FREEZING.

**LEGEND:**

— 80 —	CONTOUR
— +80.0 —	SPOT GRADE
— D —	DRAIN LINE
— G —	GAS LINE
— S —	SEWER LINE
— UGE —	UNDERGROUND ELECTRIC LINE
— W —	WATER LINE
— X X X —	CHAIN LINK FENCE
— X —	WOOD GUARD RAIL
— — — — —	VERTICAL GRANITE CURB LINE
— — — — —	CAPE COD BERM
— — — — —	SNOW STORAGE AREA
— — — — —	ACCESSIBLE PARKING SPACE
— — — — —	PARKING SPACE QUANTITY
— — — — —	SIGN
— — — — —	LIGHT POLE
— — — — —	HYDRANT
— — — — —	WATER GATE
— — — — —	SEWER MANHOLE (SMH)
— — — — —	DRAIN MANHOLE (DMH)
— — — — —	CATCH BASIN (CB)
— — — — —	CDS HYDRODYNAMIC SEPARATOR (ST-2)
— — — — —	TELEPHONE BOX
— — — — —	SUBSURFACE STRUCTURE
— — — — —	SOIL TEST PIT

**DEMOLITION NOTES:**

- CONTRACTOR TO CUT AND CAP ALL EXISTING UTILITY SERVICES PROPOSED TO BE REMOVED AT THE MAIN, IN ACCORDANCE WITH CITY BUILDING DEMOLITION REGULATIONS, PRIOR TO CONSTRUCTION. TEE SERVICE CONNECTIONS SHALL BE REMOVED FROM THE MAIN AND REPLACED WITH A MINIMUM OF 4 FT. OF NEW CLDI PIPE.
- HYDRANT CONNECTIONS FOR WATER USE DURING DEMOLITION SHALL BE COORDINATED WITH THE CITY OF METHUEN ENGINEERING DEPARTMENT.

**WATER NOTES:**

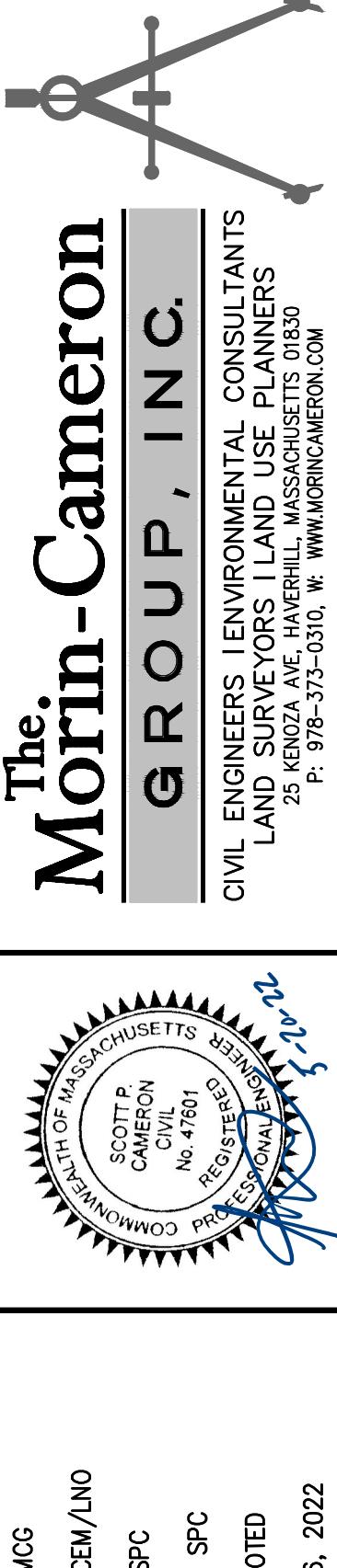
- WATER LINES WILL HAVE AT LEAST FIVE (5) FEET OF COVER.
- THERE MUST BE AT LEAST SIX (6) INCHES OF CLEARANCE BETWEEN A NEW WATER LINE AND ANY UNDERGROUND ROCK FORMATION.
- INSTALLATION IN CLAY/SILT SOILS: ALL WATER MAIN COMPONENTS SHALL MEET AWWA STANDARDS. "ALL DUCTILE IRON PIPE SHALL BE COATED WITH A LAYER OF ARC-SPRAYED ZINC PER ISO 8179. THE MASS OF THE ZINC APPLIED SHALL BE 200 G/FT<sup>2</sup>. A FINISHING TOPCOAT SHALL BE APPLIED TO THE ZINC. INTERIOR LINING FOR POTABLE WATER MAIN SHALL HAVE AN INTERIOR PROTECTIVE LINING OF CEMENT-MORTAR IN ACCORDANCE WITH ANSI/AWWA A21.4/C104 "WATER AND FIRE PROTECTION MAINS FOUR (4) INCH AND GREATER SHALL BE CLASS 52 DUCTILE IRON CEMENT LINED PIPE AND ZINC COATED. WHERE SOIL CONDITIONS ARE DETERMINED BY THE DEPARTMENT TO BE CORROSIVE, POLY WRAP WILL BE INSTALLED AS ADDITIONAL MEANS OF PROTECTION. POLYETHYLENE ENCASEMENT: POLYETHYLENE ENCASEMENT SHALL BE POLYETHYLENE CONSISTING OF THREE LAYERS OF CO-EXTRUDED LINEAR LOW DENSITY POLYETHYLENE (LLDPE), FUSED INTO A SINGLE THICKNESS OF NOT LESS THAN 8 (EIGHT) MILS."
- ALL MECHANICAL JOINT COMPONENTS WILL BE INSTALLED USING RETAINING GLANDS, SUCH AS, GRIP RING, MEGA LUG OR STAR CRIP. METAL WEDGES MUST BE USED AT ALL BELL JOINTS TO ENSURE CONTINUITY FOR TRACING. ALL FITTINGS (TEES, BENDS, SOLID SLEEVE ETC) WILL BE ZINC COATED AS WELL FOR PROTECTION PER ISO 8179-2. ZINC RICH PAINT SHALL HAVE A ZINC CONTENT OF AT LEAST 85% BY WEIGHT AND SHALL BE FINISHED WITH AN EXTERIOR BITUMINOUS COATING." A MINIMUM 307SS (STAINLESS STEEL) T-BOLTS WILL BE USED TO CONNECT ANY APPURTENANCE THAT REQUIRES THE USE OF "T" BOLTS FOR ASSEMBLY.
- THE SERVICE CONNECTIONS SHALL BE PERPENDICULAR TO THE MAIN AND FOLLOW A STRAIGHT LINE INTO THE BUILDING.
- INSTALLATION IN CLAY/SILT SOILS: GATE VALVES WILL BE DUCTILE IRON EPOXY COATED (AWWA C550), WITH O-RING SEALS, URETHANE COATED WEDGE, STAINLESS STEEL NUTS AND BOLTS, AND ANTI-ROTATION SEATS TO PREVENT T-BOLTS FROM TURNING. VALVES WILL BE OPEN RIGHT USING A TWO (2) INCH OPERATING NUT WITH AN ARROW CAST IN THE METAL.
- ALL WATER VALVE BOX COVERS SHALL BE LABELED "WATER".
- ALL WATER METERS MUST BE PURCHASED FROM THE METHUEN WATER & SEWER DEPARTMENT. SHUT OFF VALVES ARE REQUIRED BOTH BEFORE AND AFTER THE METER. ALL METERS MUST BE INSTALLED OR REMOVED BY AN EMPLOYEE OF THE METHUEN WATER & SEWER DEPARTMENT ONLY. ALL METERS MUST BE LOCATED WITHIN THREE (3) FEET OF WHERE THE SERVICE ENTERS THE BUILDING AND SHALL BE ACCESSIBLE FOR READING, MAINTENANCE AND REPAIR.
- NO WATER WILL BE SUPPLIED TO ANY CONTRACTOR OR BUILDER THROUGH A WATER SERVICE WHICH HAS NOT BEEN PLACED "IN SERVICE" BY THE METHUEN WATER & SEWER DEPARTMENT. NO DISTRIBUTION SYSTEM COMPONENT WILL BE OPERATED BY ANYONE OTHER THAN METHUEN WATER & SEWER DEPARTMENT PERSONNEL.
- WATER LINES (MAINS AND SERVICE CONNECTIONS) SHALL BE PRESSURE TESTED TO 150 PSI AND HELD FOR ONE HOUR AND WITNESSED BY THE METHUEN WATER & SEWER DEPARTMENT CONSTRUCTION FOREMAN OR HIS DESIGNEE. ALL INSTALLATIONS MUST BE INSPECTED BY THE WATER CONSTRUCTION FOREMAN OR HIS DESIGNEE. PROVIDE THE METHUEN WATER & SEWER DEPARTMENT WITH AT LEAST 72 HOURS NOTICE FOR THE INSPECTION.
- AS-BUILT PLANS (HARD COPIES AND DIGITAL) ARE REQUIRED PRIOR TO PLACING A NEW WATER SYSTEM IN SERVICE. AS-BUILT PLANS (CORNER TIES) AND PAYMENTS ARE DUE PRIOR TO TURNING A WATER SERVICE ON. CONTACT THE SURVEYOR AT LEAST 72 HOURS PRIOR TO INSTALLATION TO COORDINATE AN AS-BUILT SURVEY.

**ABBREVIATION:**

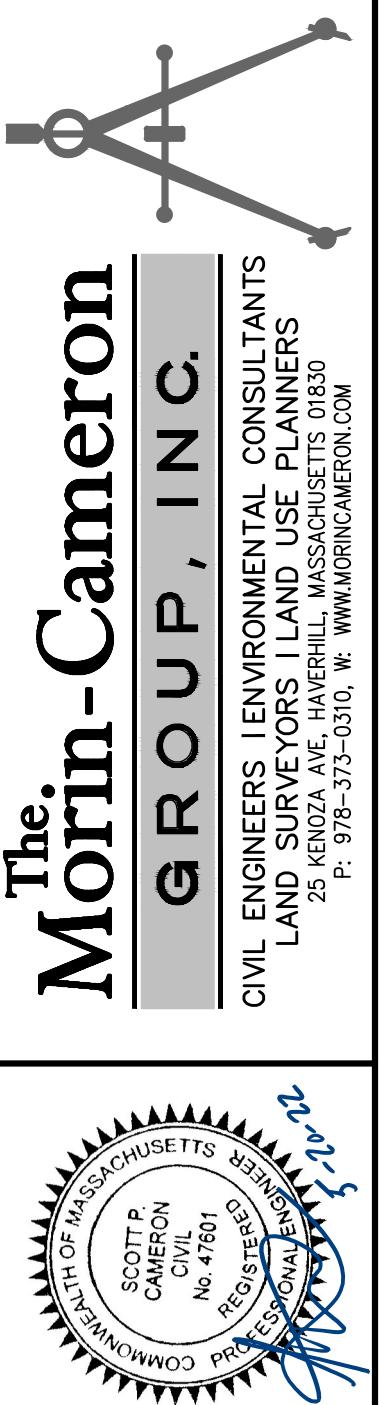
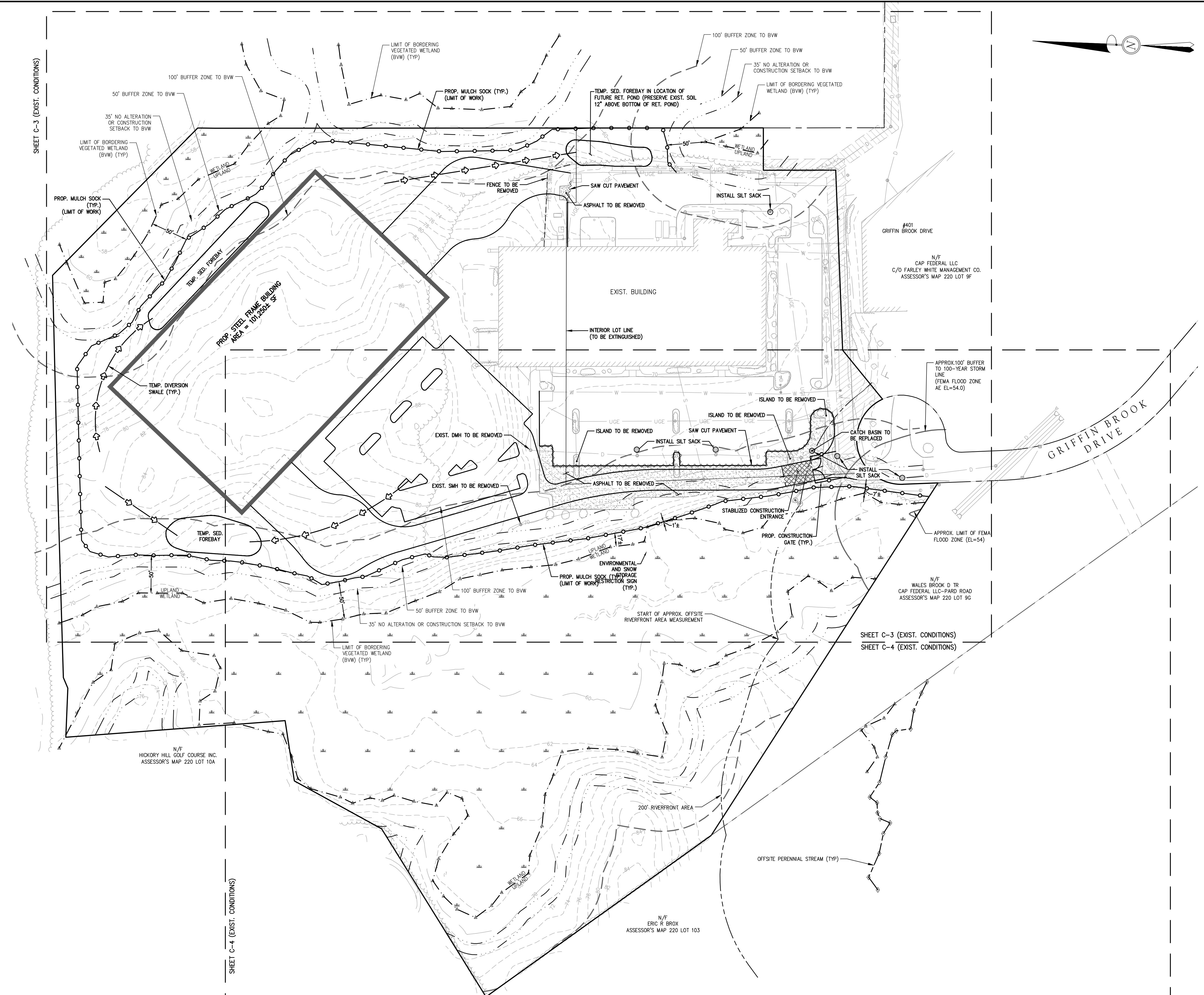
REVISIONS	SURVEY BY:	MCG
NO.	DRAFTED BY:	CEM/LNO
1	CHECKED BY:	SPC
	APPROVED BY:	SPC
	SCALE:	AS NOTED
	DATE:	APRIL 6, 2022

**SITE DEVELOPMENT PLANS**  
IN MASSACHUSETTS  
501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 9D & 9E)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER LLC

GENERAL NOTES,  
LEGEND &  
ABBREVIATION  
DRAWING NO.  
C-1



CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS  
LAND SURVEYORS | LAND USE PLANNERS  
25 KINZIA AVE, HAVERHILL, MASSACHUSETTS  
P: 978-375-0510, W: www.morincameron.com



# The Morin-Cameron

---

**G R O U P , I N C.**

---

CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS  
LAND SURVEYORS | LAND USE PLANNERS  
25 KENOZA AVE, HAVERHILL, MASSACHUSETTS 01830  
P: 978-373-0310, W: [WWW.MORINCAMERON.COM](http://WWW.MORINCAMERON.COM)

**SHEET INDEX  
& EROSION  
CONTROL**

---

**RAWING NO.**

**C-2**

**SITE DEVELOPMENT PLANS  
IN  
METHUEN, MASSACHUSETTS  
501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 9D & 9E)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER LLC**

# SITE DEVELOPMENT PLANS IN METHUEN, MASSACHUSETTS

**501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 9D & 9E)**  
PREPARED FOR:  
**GRIFFIN BROOK DRIVE OWNER LLC**

**SHEET INDEX  
& EROSION  
CONTROL**

---

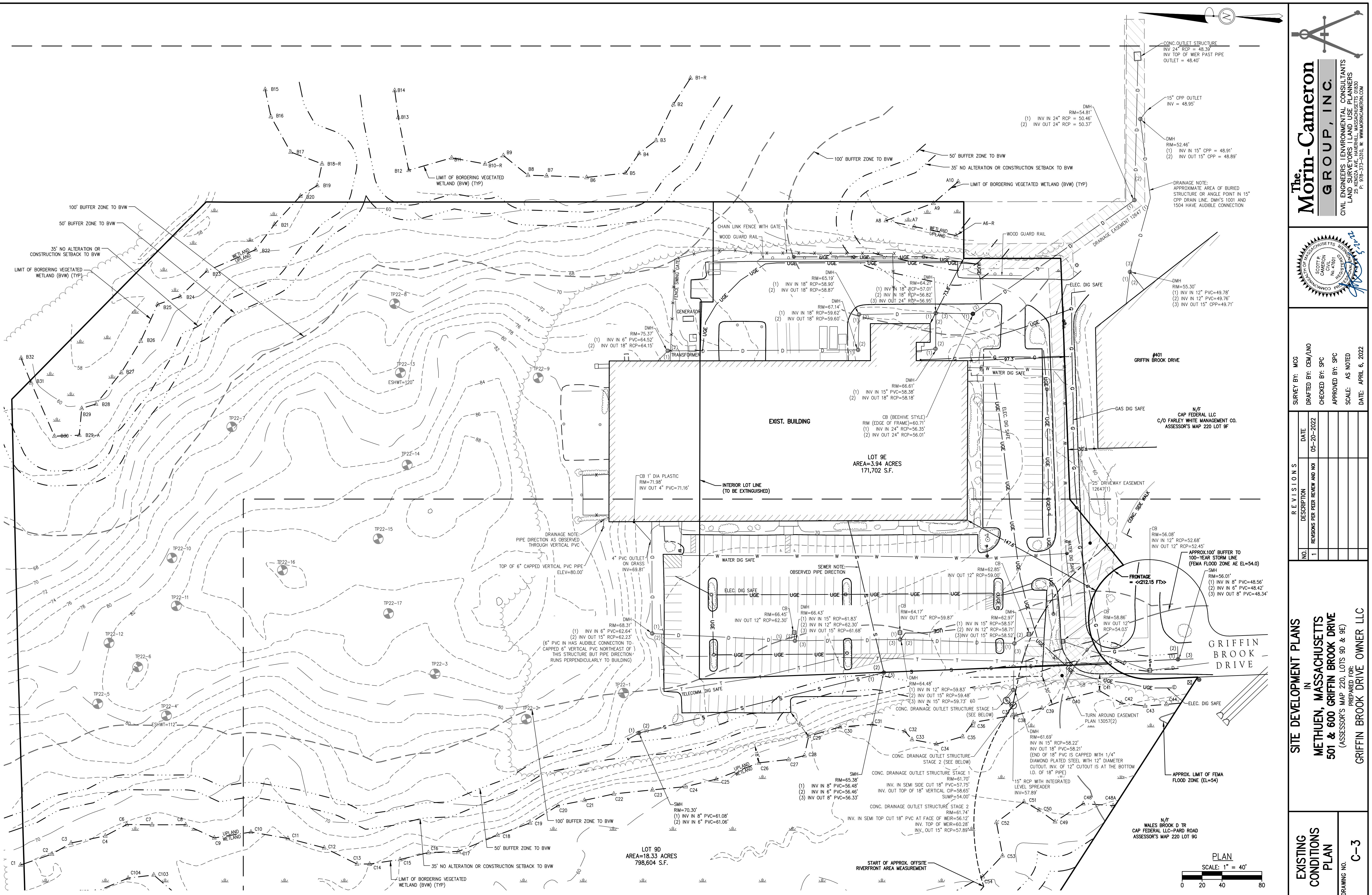
**C-2**

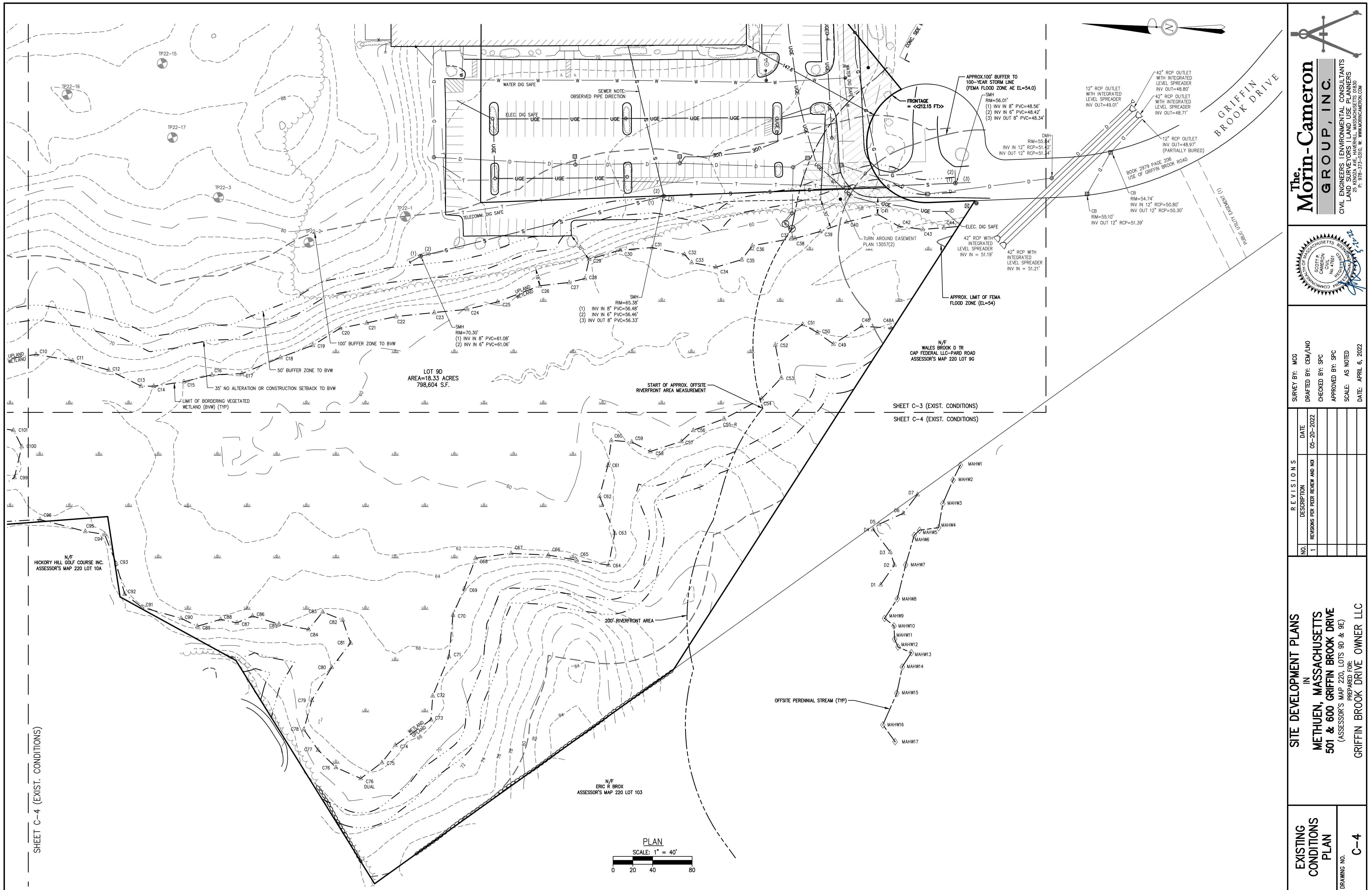
**DRAWING NO.**

PLAN

SCALE: 1" = 60'

0 30 60 120





<u>ZONING MATRIX: IL DISTRICT</u>		
SETBACK	REQUIRED	PROPOSED LOT 5B & 5C
LOT AREA (SF)	40,000	970,306
FRONTAGE (FT)	100	212.15
LOT WIDTH (FT)	100	318±
YARD SETBACK: FRONT (FT)	60	147±
YARD SETBACK: SIDE (FT)	30	97±
YARD SETBACK: REAR (FT)	30	55±
NUMBER OF STORIES	4 (MAXIMUM)	1
BUILDING HEIGHT (FT)	45 (MAXIMUM)	<40 (EXIST.) 67 (PROP.) *
LOT COVERAGE (%)	35% (MAXIMUM)	35%

<u>PARKING REQUIREMENTS</u>				
DESCRIPTION	PARKING EQUATION	BUILDING SIZE (SF)	REQUIRED	PROVIDED
EXIST. BUILDING (RESEARCH AND DEVELOPMENT)	1 SPACE/ 300 SF	59,917	200	200
PROP. BUILDING (INDUSTRIAL) PROP. BUILDING (WAREHOUSE)	1 SPACE/ 600 SF 1 SPACE/ 1,200 SF	101,250 (55,000 INDUSTRIAL) (46,250 WAREHOUSE)	131	131
TOTAL			331	331

SCHEDULE OF BUFFER ZONE IMPACTS & RESTORATION		
WETLAND SETBACK	NEW PAVEMENT (S.F.)	RESTORED BUFFER ZONE (S.F.)
0-35'	205	5,500±
35-50'	965	4,100±
OTHER	--	2,300±

NOTE: 340± S.F. OF EXIST. PAVEMENT REMOVED FROM 0-35' SETBACK  
986± S.F. OF EXIST. PAVEMENT REMOVED FROM 35-50' SETBACK

# NO SNOW STOCKPILING

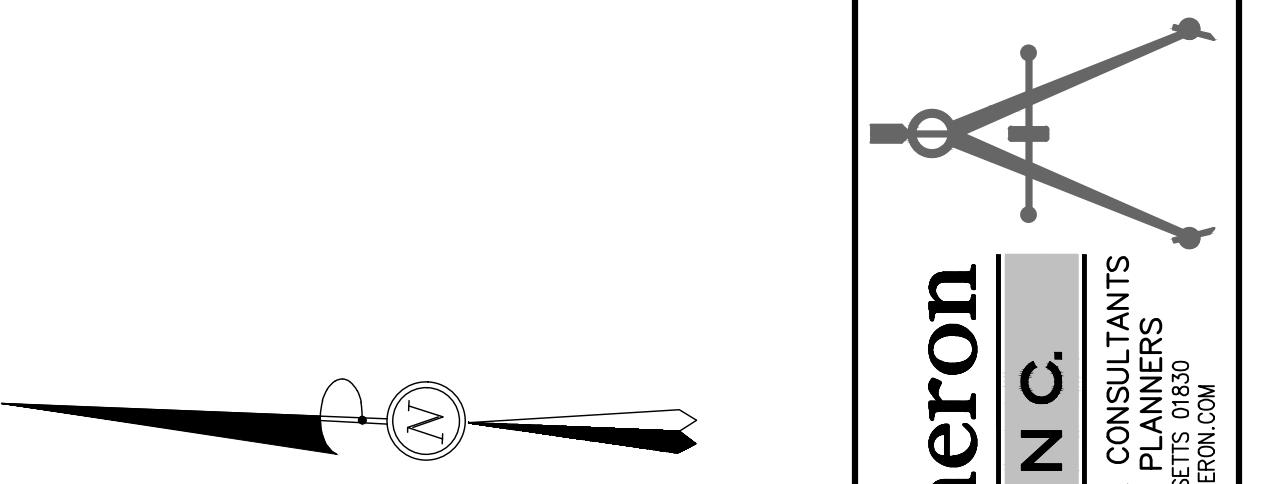
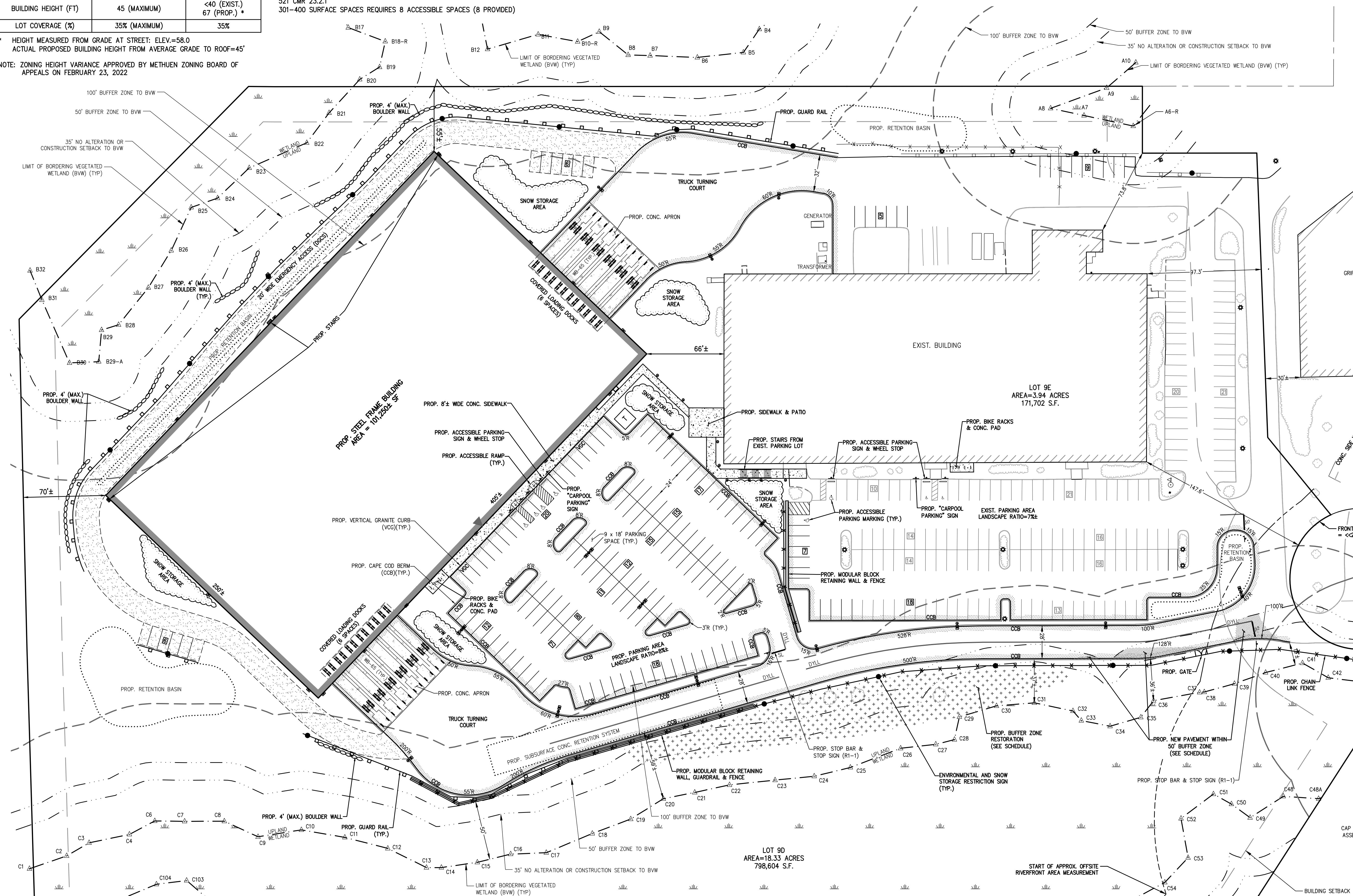
ENVIRONMENTALLY  
SENSITIVE AREA  
NO DISTURB  
NO SNOW STOCKPILING

SNOW STORAGE  
RESTRICTION SIGN      ENVIRONMENTAL & SNOW  
STORAGE RESTRICTION SIGN  
(PLACE 100' ON CENTER)

ENVIRONMENTAL & SNOW  
STORAGE RESTRICTION SIGN  
(PLACE 100' ON CENTER)

HEIGHT MEASURED FROM GRADE AT STREET: ELEV.=58.0  
ACTUAL PROPOSED BUILDING HEIGHT FROM AVERAGE GRADE TO ROOF=45'

NOTE: ZONING HEIGHT VARIANCE APPROVED BY METHUEN ZONING BOARD OF APPEALS ON FEBRUARY 23, 2022



# The Morin-Cameron GROUP, INC.

---

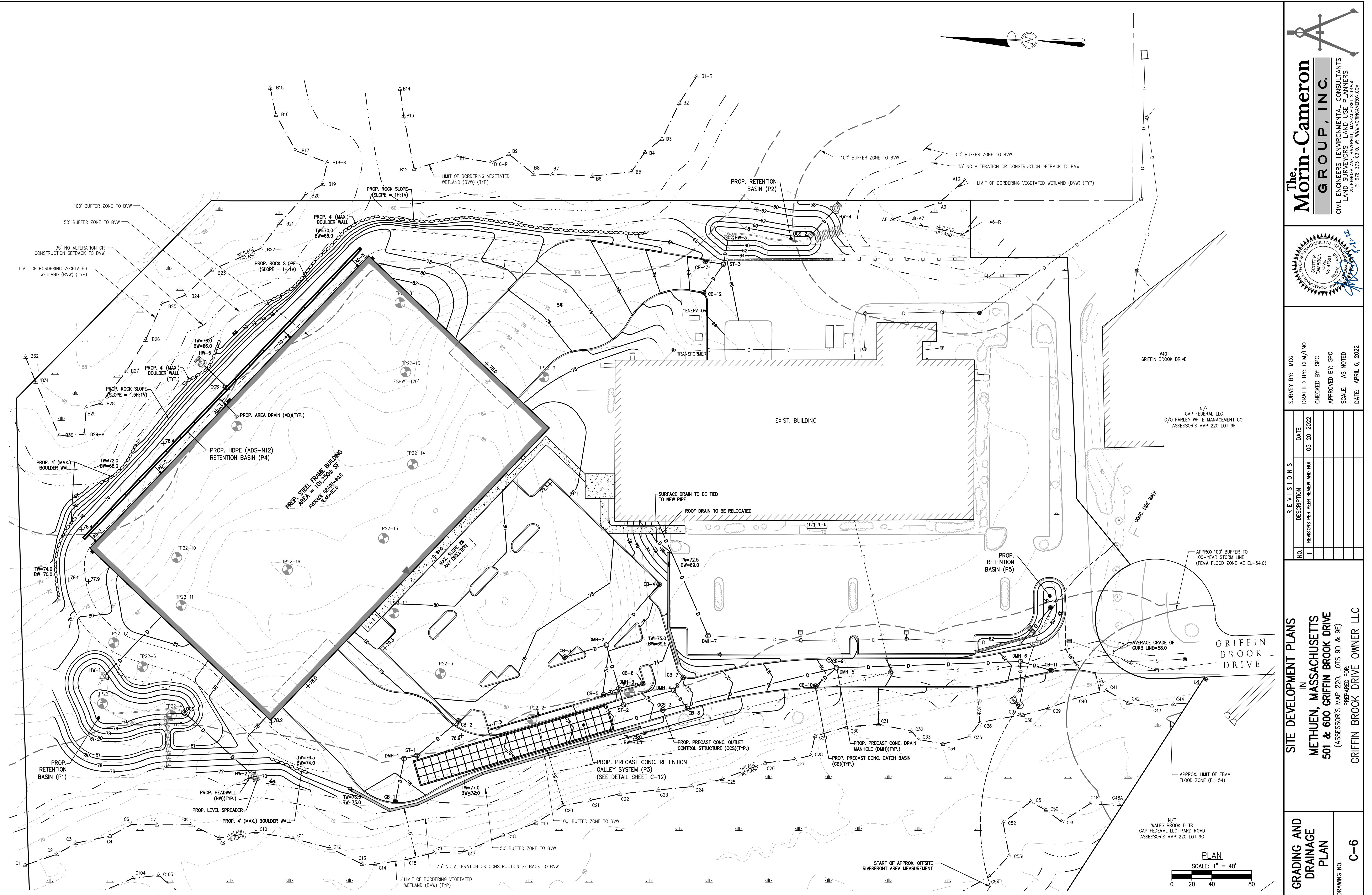
**CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS  
LAND SURVEYORS | LAND USE PLANNERS**  
25 KENOZA AVE, HAVERHILL, MASSACHUSETTS 01830  
P: 978-373-0310, W: [WWW.MORINCAMERON.COM](http://WWW.MORINCAMERON.COM)

**SITE LAYOUT  
PLAN**

**SITE DEVELOPMENT PLANS**  
**IN**  
**METHUEN, MASSACHUSETTS**  
**501 & 600 GRIFFIN BROOK DRIVE**  
**(ASSESSOR'S MAP 220, LOTS 9D & 9E)**

**DRAWING NO.** C-5

**PREPARED FOR:**  
**GRIFFIN BROOK DRIVE OWNER LLC**



UPSTREAM			CONNECTING PIPE		DOWNSTREAM STRUCTURE	PIPE INFORMATION				
ID	RIM	SUMP	INV. START	INV. END		LENGTH	DIAMETER	SLOPE	TYPE	NOTES
CB-1	75.8	65	69.00	68.81	DMH-1	38	12	0.005	HDPE	DOUBLE RIM
DMH-1	76.3	63.8	67.81	67.76	ST-1	10	12	0.005	HDPE	CONTECH CDS
CB-2	77.6	65	69.06	68.81	ST-1	50	12	0.005	HDPE	CONTECH CDS
ST-1	76.4	63.6	67.66	67.60	TANK	3	15	0.020	HDPE	
CB-3	77.0	64.5	68.57	68.375	DMH-2	38	12	0.005	HDPE	
CB-4	76.3	64.7	68.76	68.375	DMH-2	77	12	0.005	HDPE	
DMH-2	76.3	64.2	68.28	68.07	DMH-3	41	12	0.005	HDPE	
CB-5	76.0	64.1	68.14	68.07	DMH-3	13	12	0.005	HDPE	
CB-6	76.7	64.1	68.18	68.07	DMH-3	21	12	0.005	HDPE	
DMH-3	75.5	63.9	67.97	67.84	ST-2	13	12	0.010	HDPE	CONTECH CDS
CB-7	72.0	64.4	68.48	68.42	DMH-4	12	12	0.005	HDPE	
CB-8	72.1	64.5	68.52	68.42	DMH-4	19	12	0.005	HDPE	
DMH-4	72.5	64.3	68.32	67.84	ST-2	48	12	0.010	HDPE	CONTECH CDS
ST-2	75.5	63.7	67.74	67.60	P3	14	15	0.010	HDPE	POND 3
OCS3	75.5	60	64.00	61.30	DMH-5	175	18	-0.004	HDPE	
DMH-5	66.5	57.9	61.97	58.368	DMH-6	180	12	0.02	HDPE	
CB-9	66.0	58.1	62.10	62.068	DMH-5	7	12	0.005	HDPE	
CB-10	66.0	58.1	62.19	62.068	DMH-5	24	12	0.005	HDPE	
CB-11	61.7	54.5	58.51	58.368	DMH-6	28	12	0.005	HDPE	
DMH-6	61.9	54.2	58.27	58.22	EXIST. DMH	24	18	0.002	HDPE	DMH BY WETLAND
CB-12	68.0	56.6	60.65	60.50	ST-3	30	12	0.005	HDPE	CONTECH CDS
CB-13	68.0	56.5	60.57	60.50	ST-3	14	12	0.005	HDPE	CONTECH CDS
ST-3	65.8	56.4	60.40	60.20	HW-3	22	12	0.001	HDPE	HEADWALL
CB-14	60.0	54.5	58.56	58.52	Exist. DMH	43	12	0.001	HDPE	
AD-1	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-2	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-3	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-4	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
AD-5	78.5	63.7	67.74	67.70	P4	8	6	0.005	HDPE	
ROOF			88.74	75.80	HW-1	647	12	0.02	HDPE	

PLAN  
SCALE: 1" = 40'



11 of 11 pages

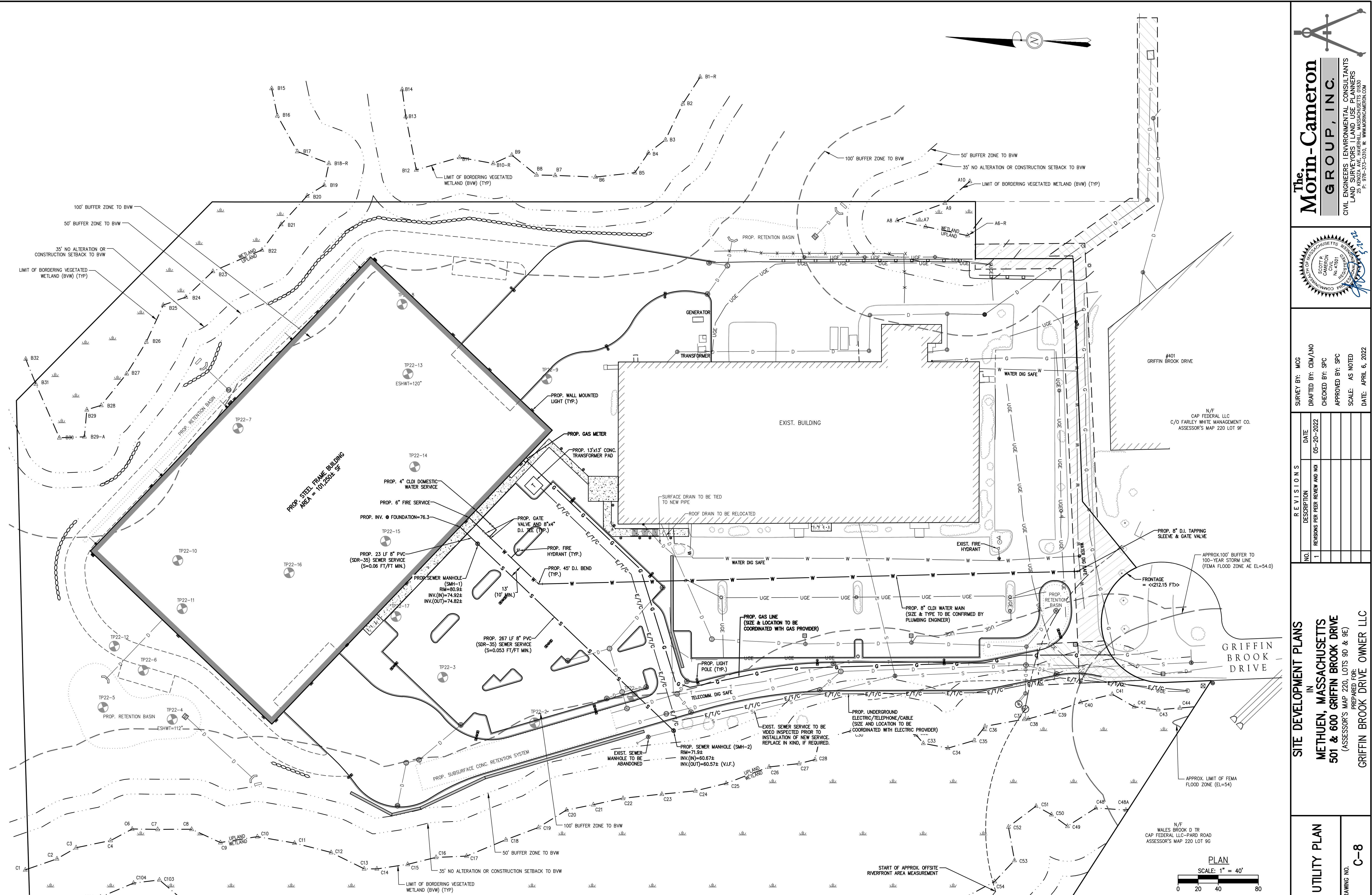
RECEIVED BY: CEM/LNO  
CHECKED BY: SPC  
APPROVED BY: SPC  
E: AS NOTED  
APRIL 6, 2022

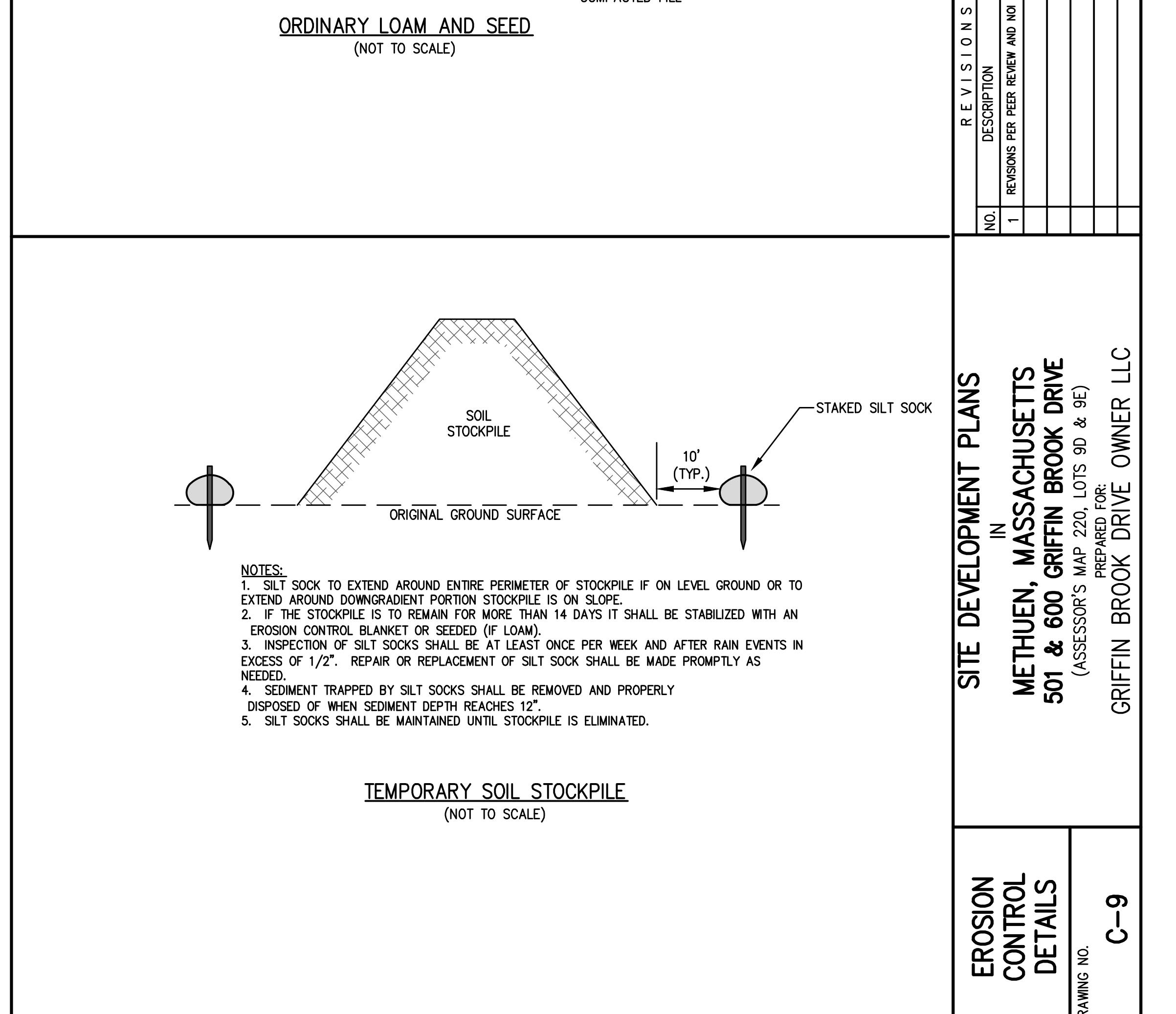
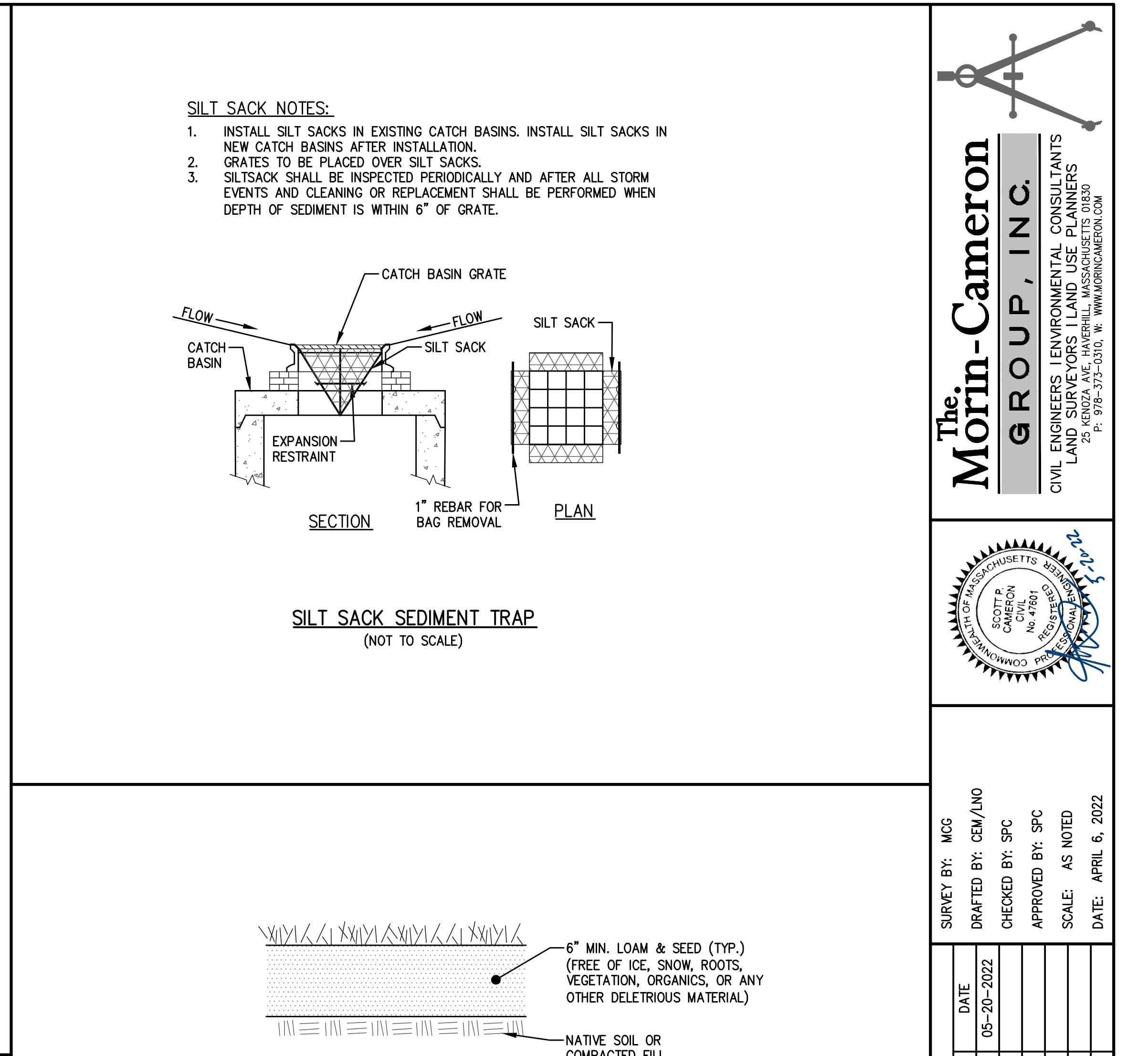
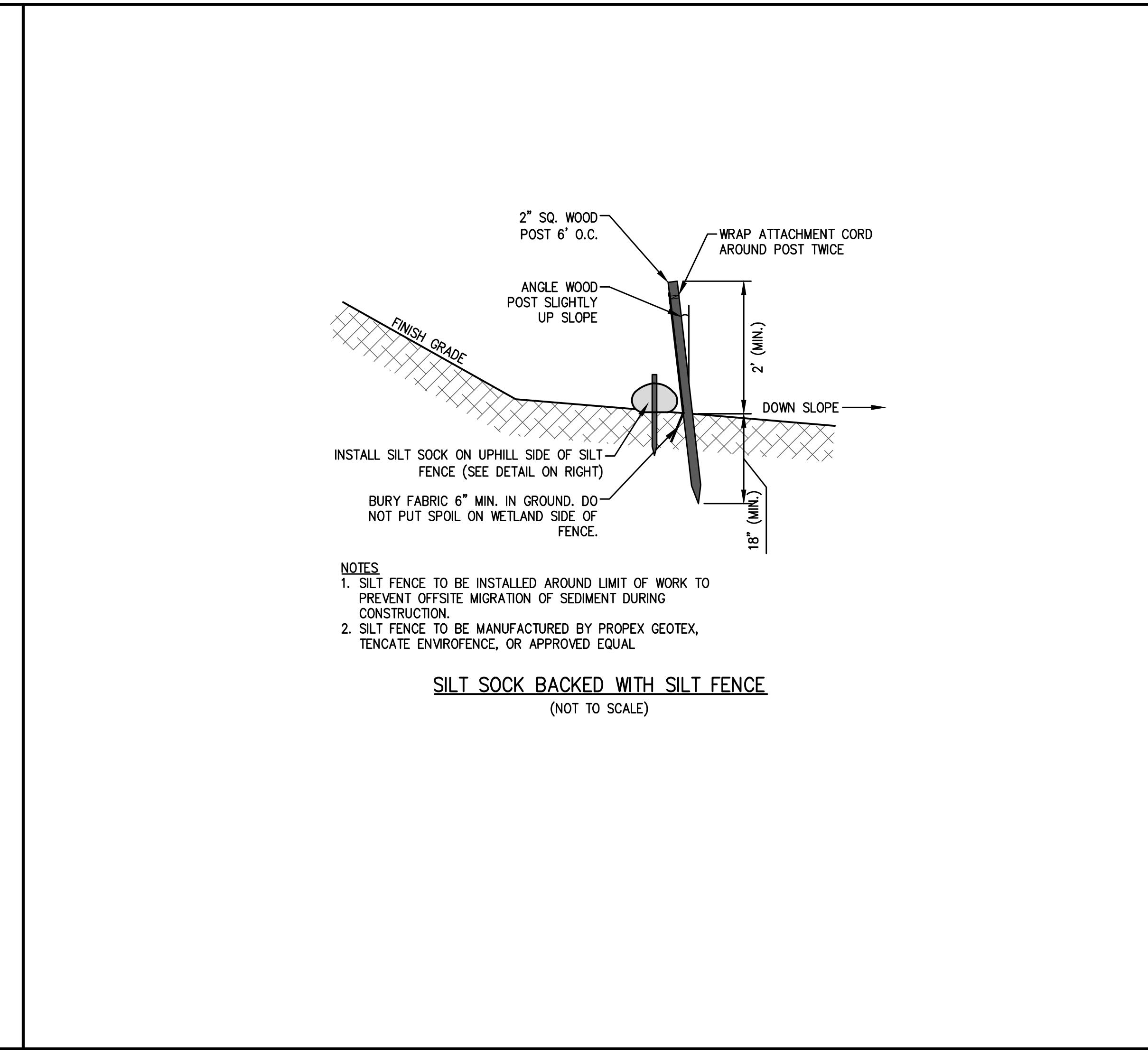
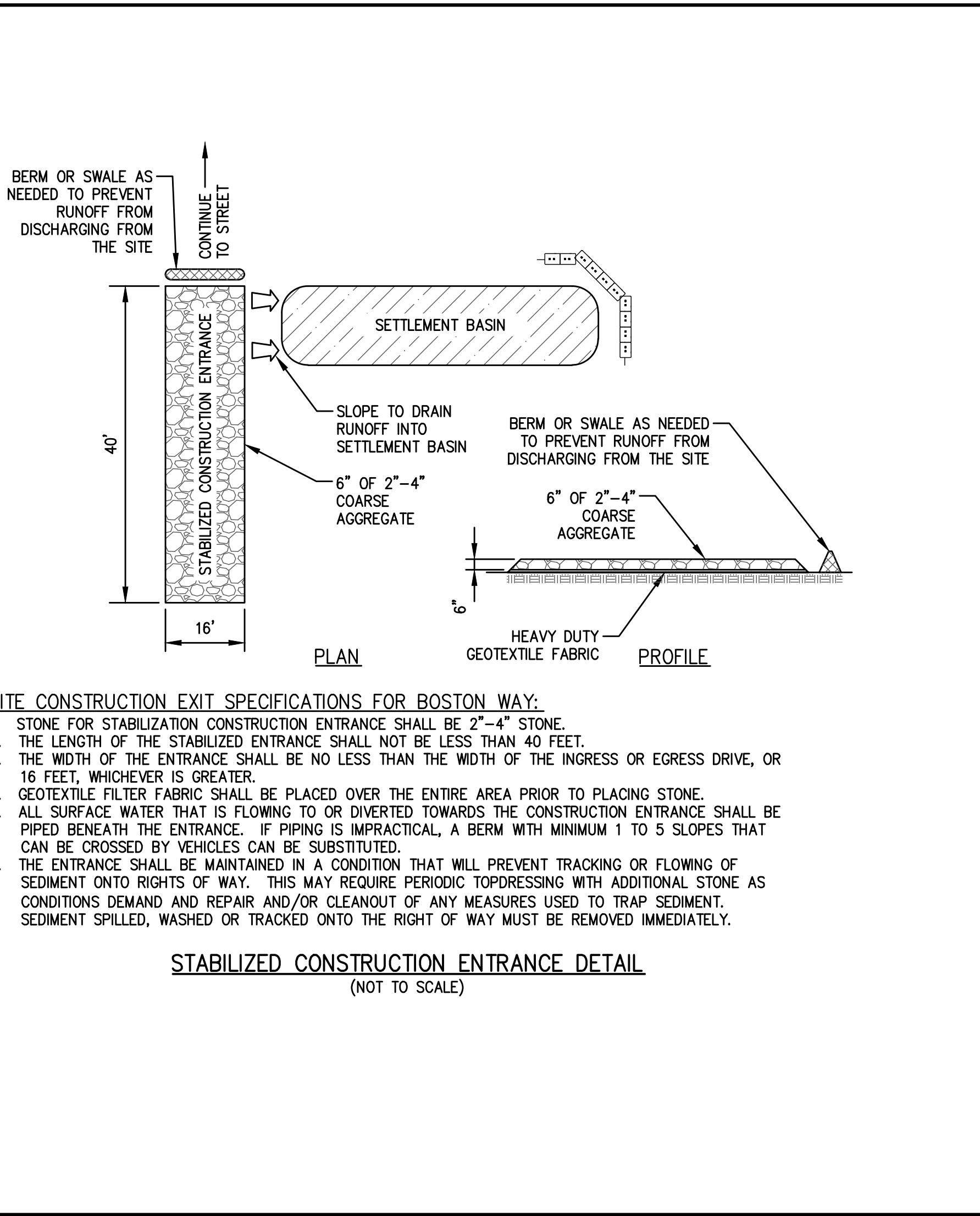
STL DEVELOPMENT PLANS  
IN  
**METHUEN, MASSACHUSETTS**  
**501 & 600 GRIFFIN BROOK DRIVE**  
(ASSESSOR'S MAP 220, LOTS 9D & 9E)  
PREPARED FOR:  
**GRIFFIN BROOK DRIVE OWNER LLC**

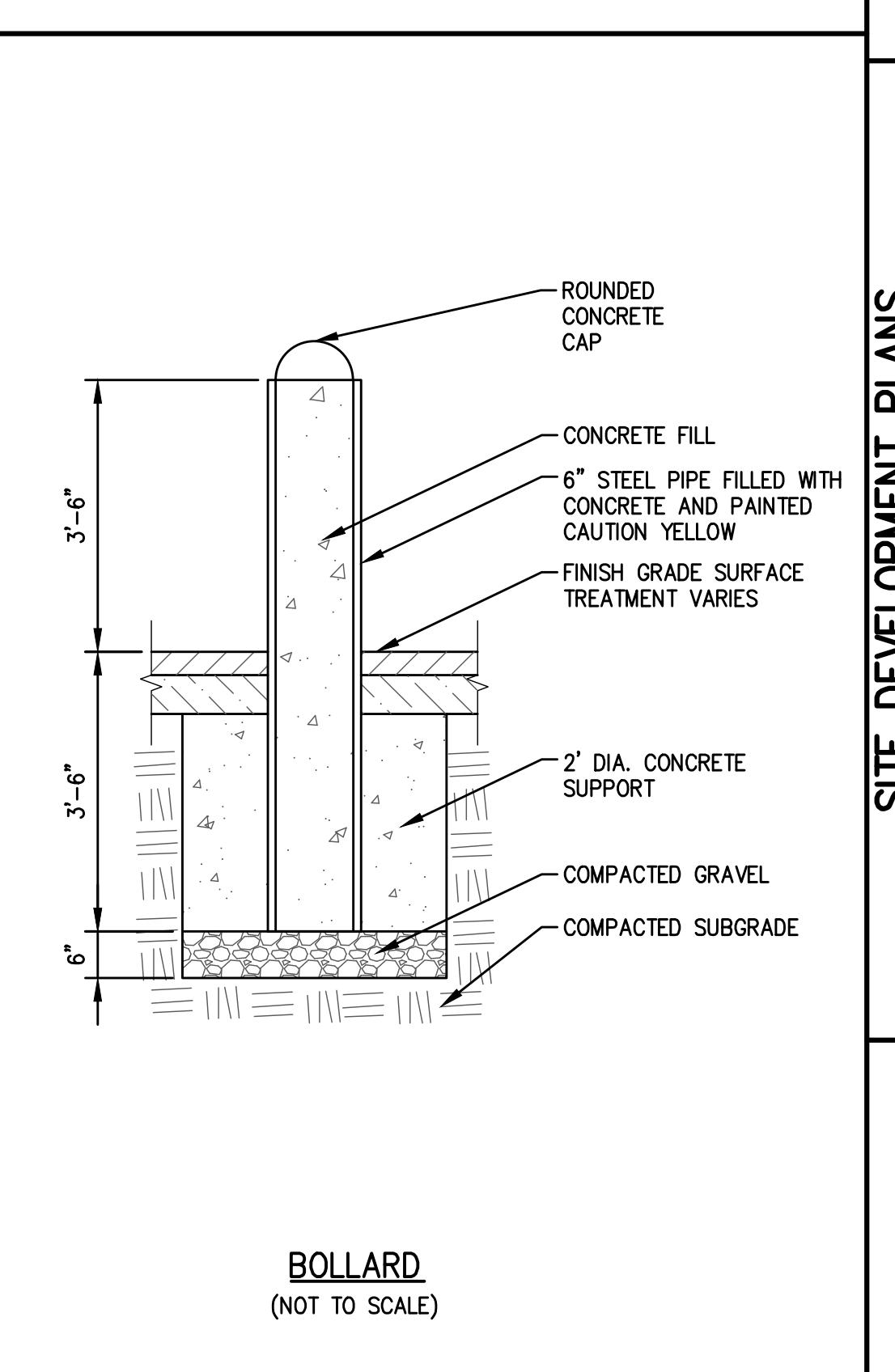
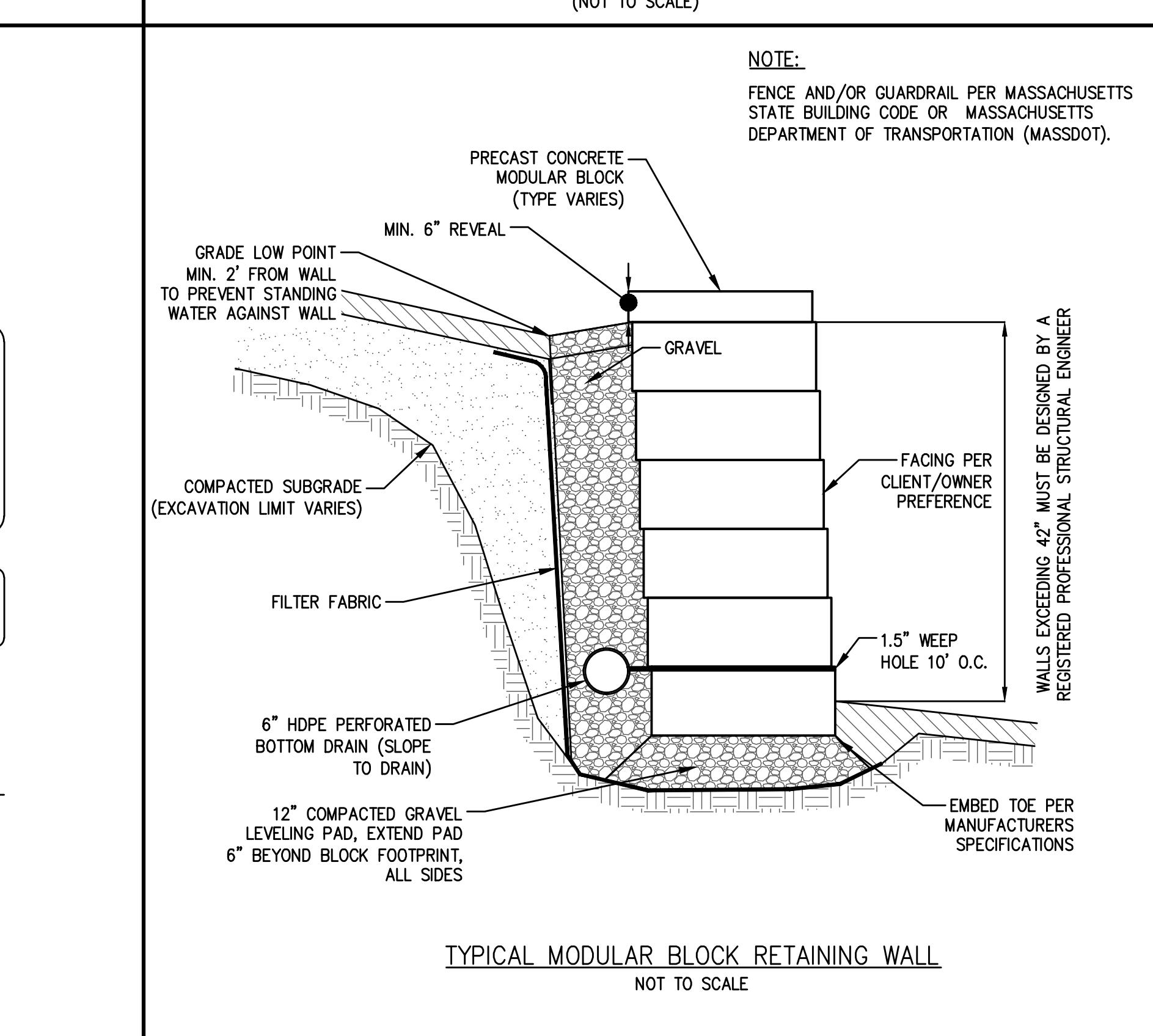
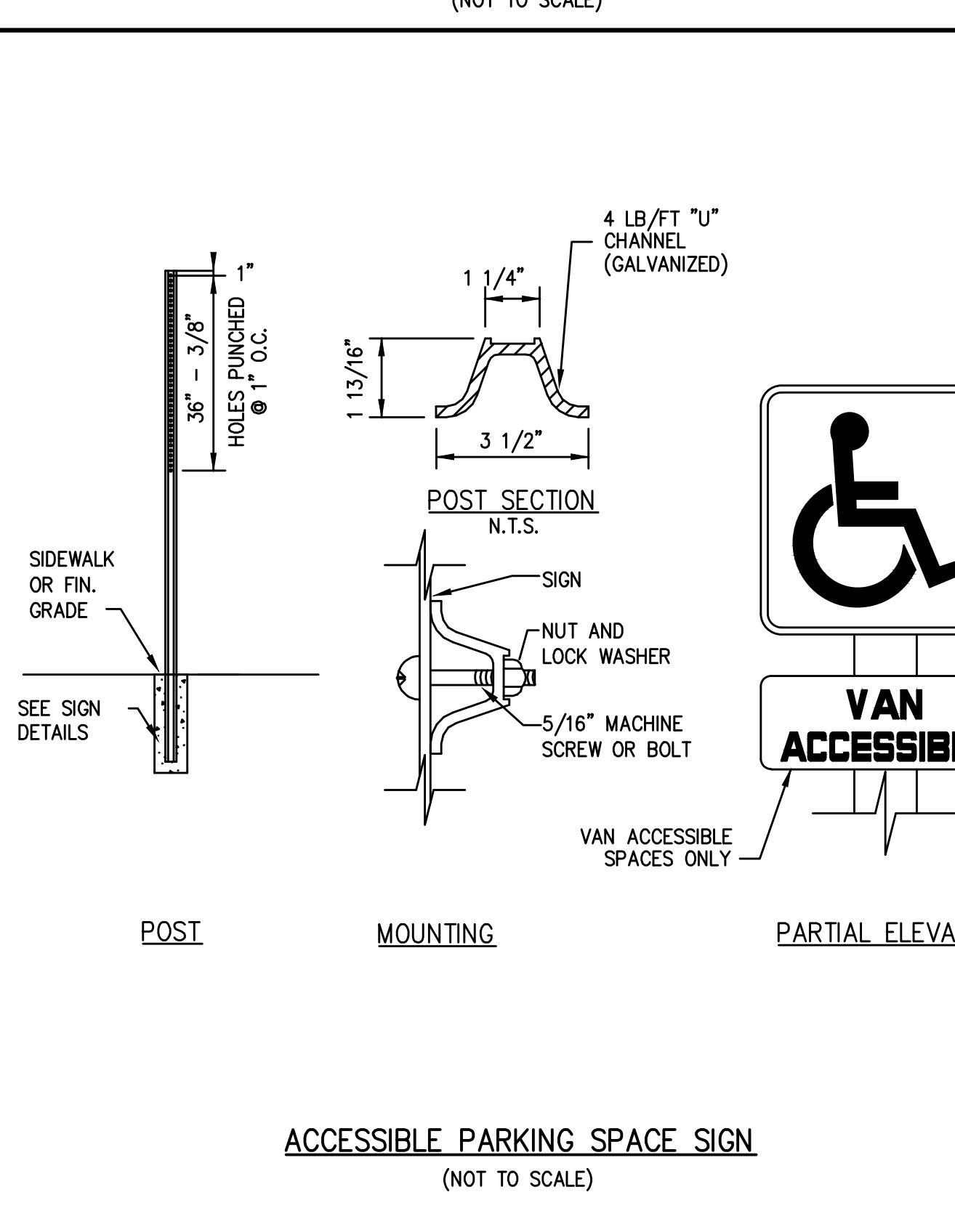
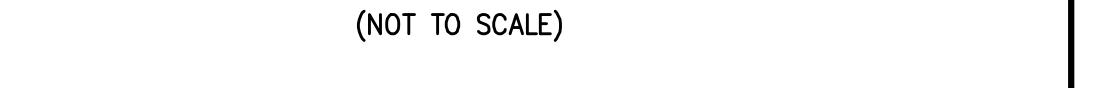
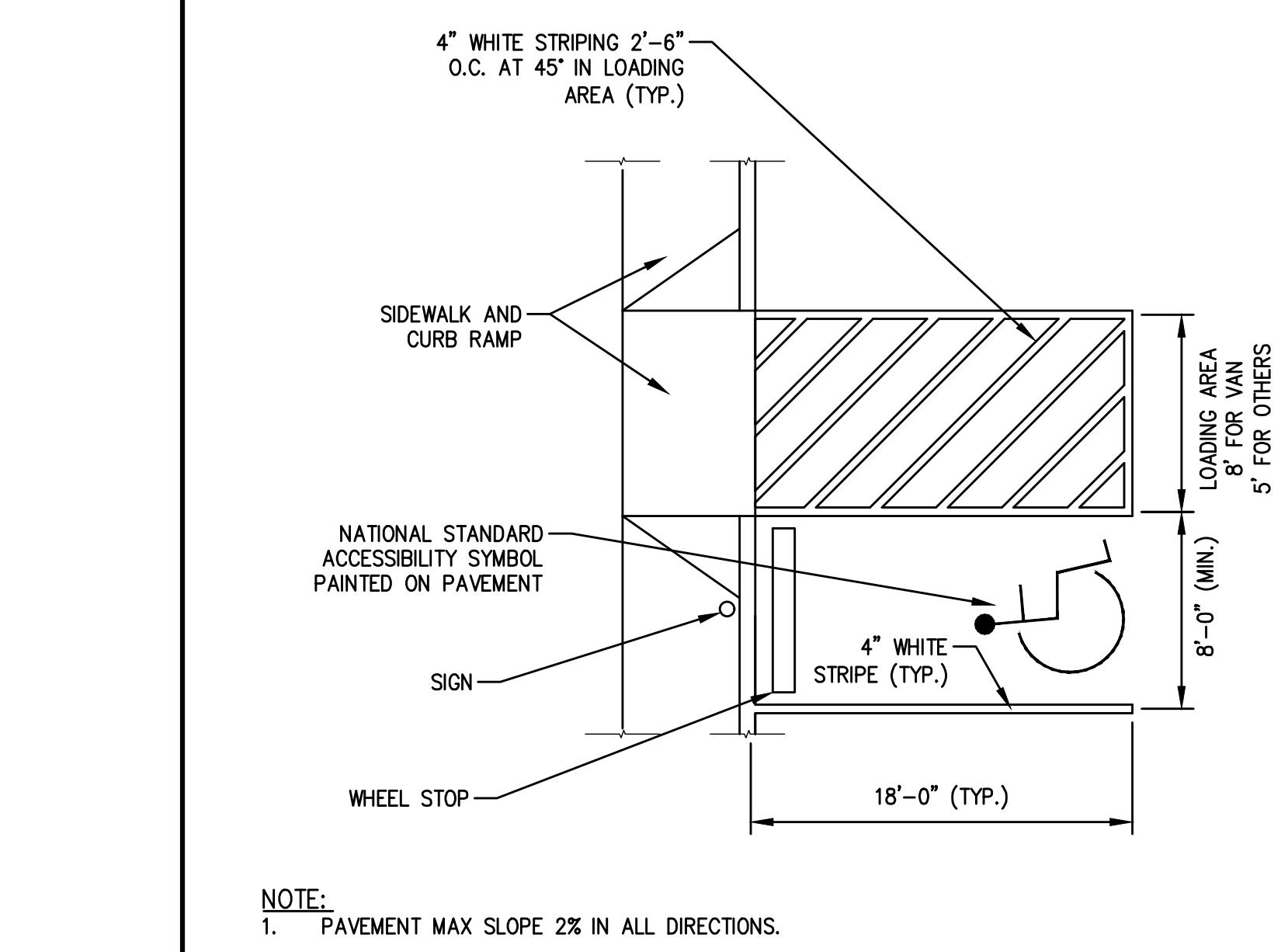
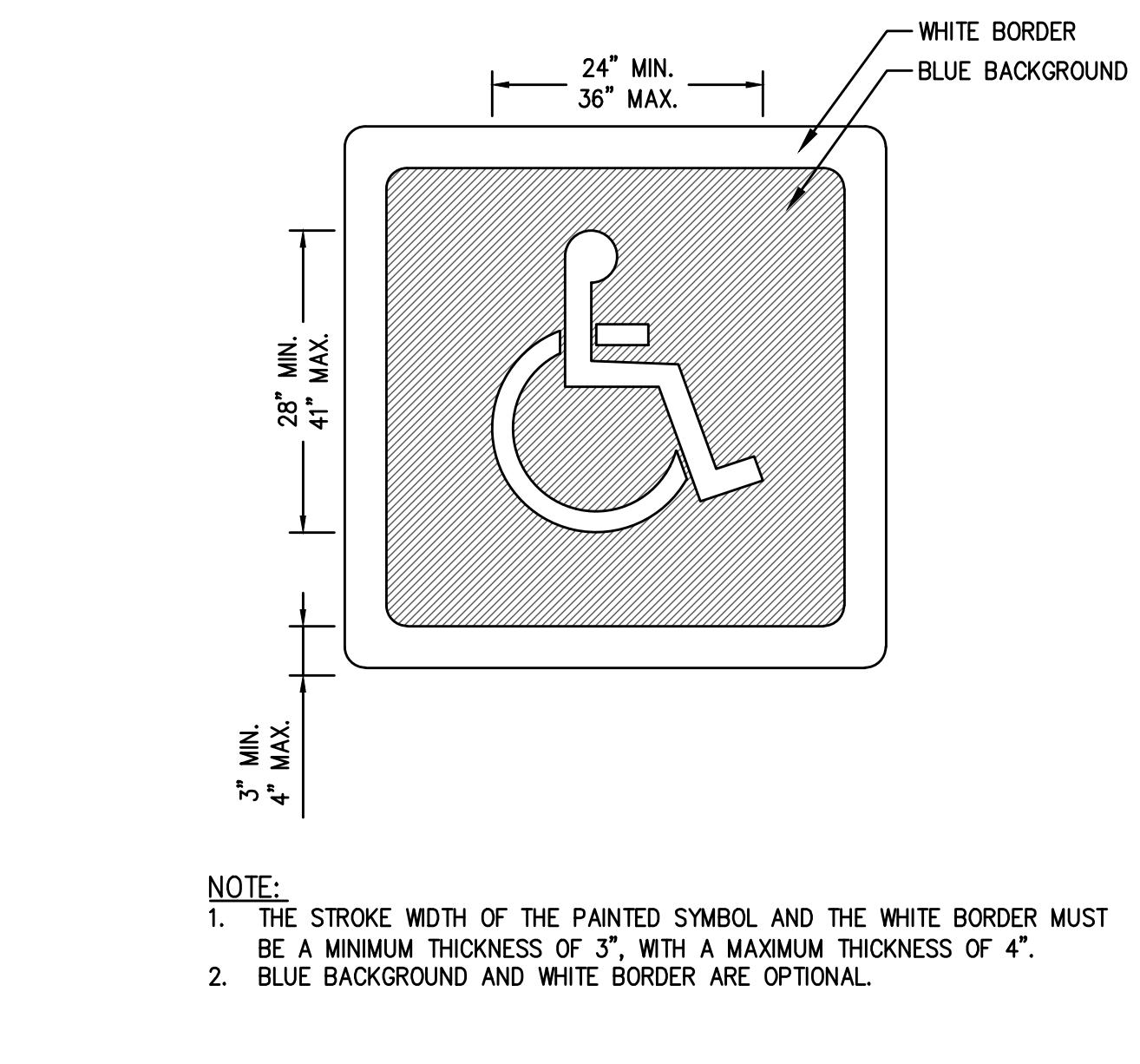
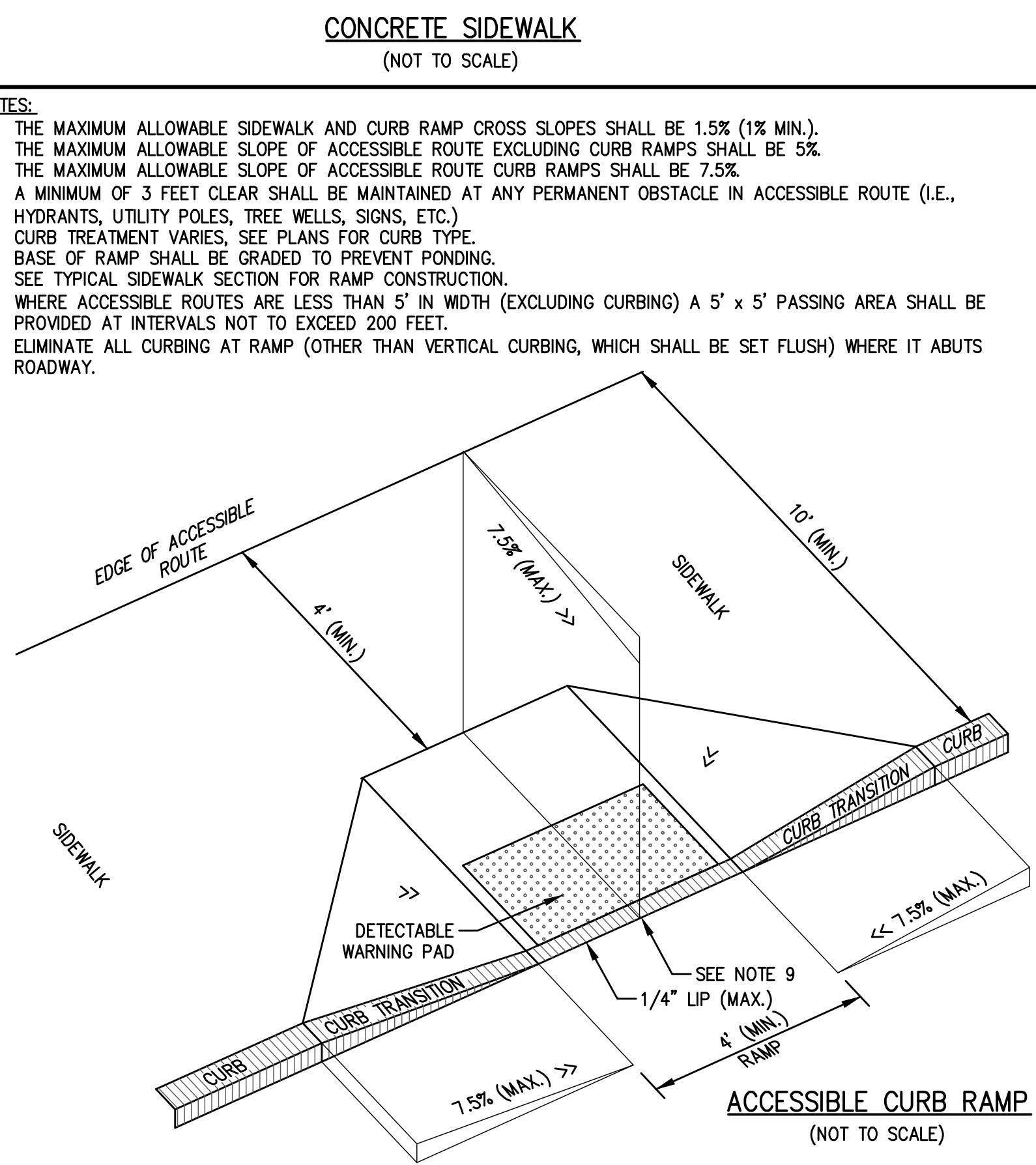
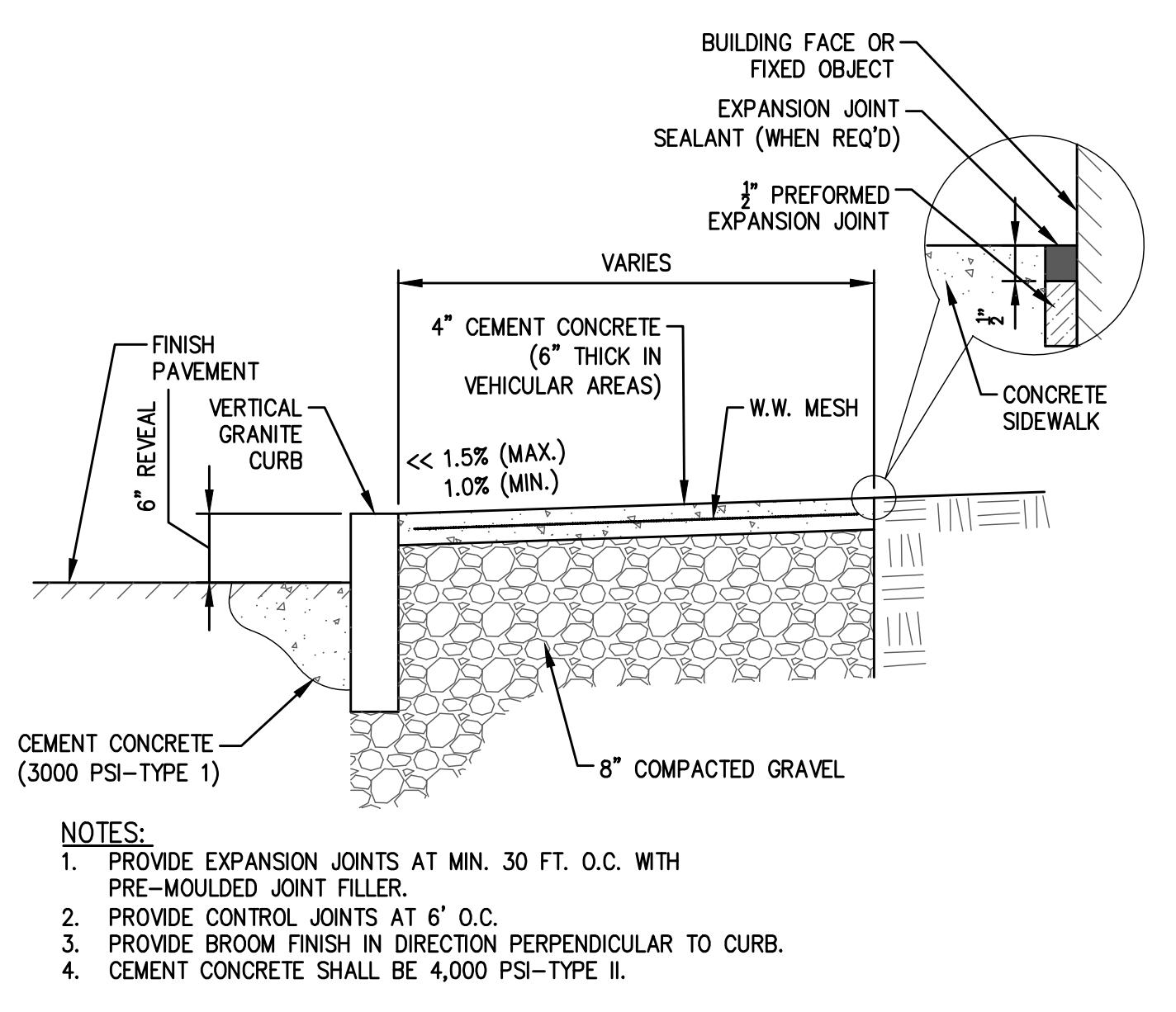
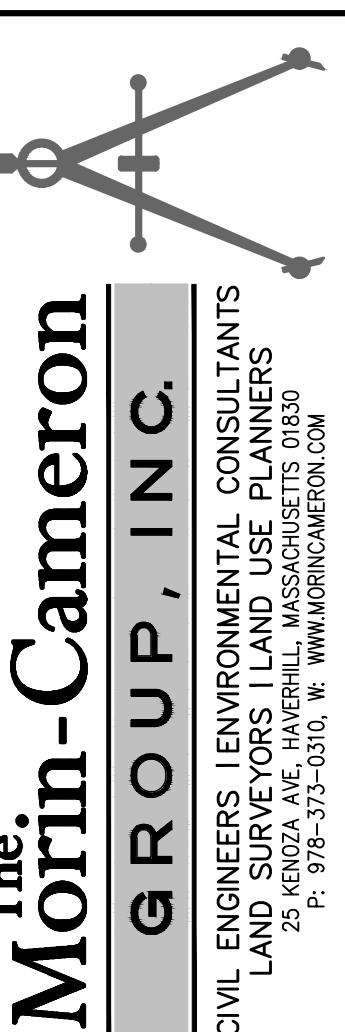
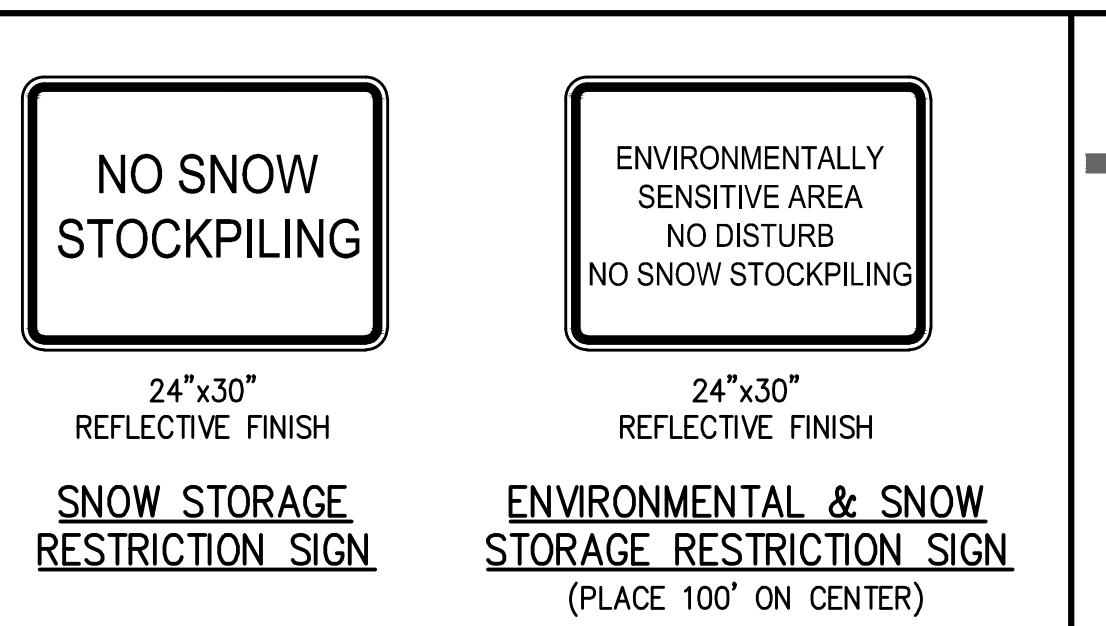
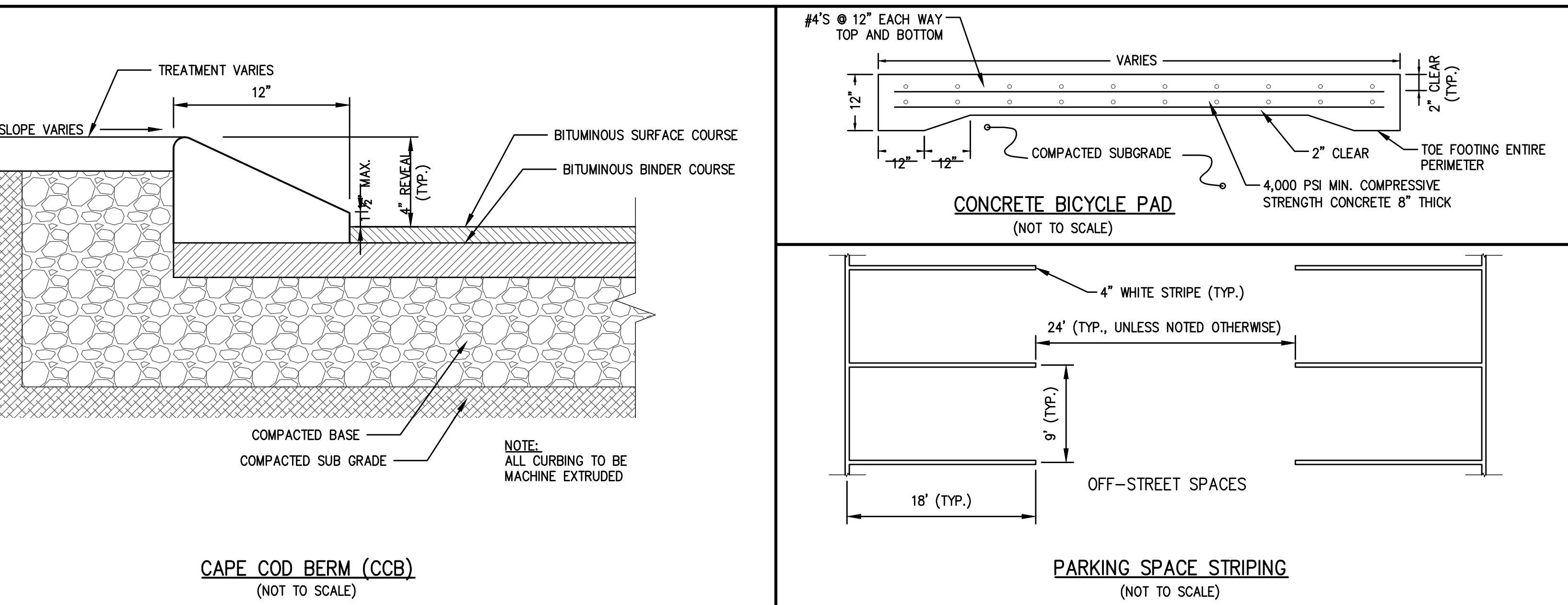
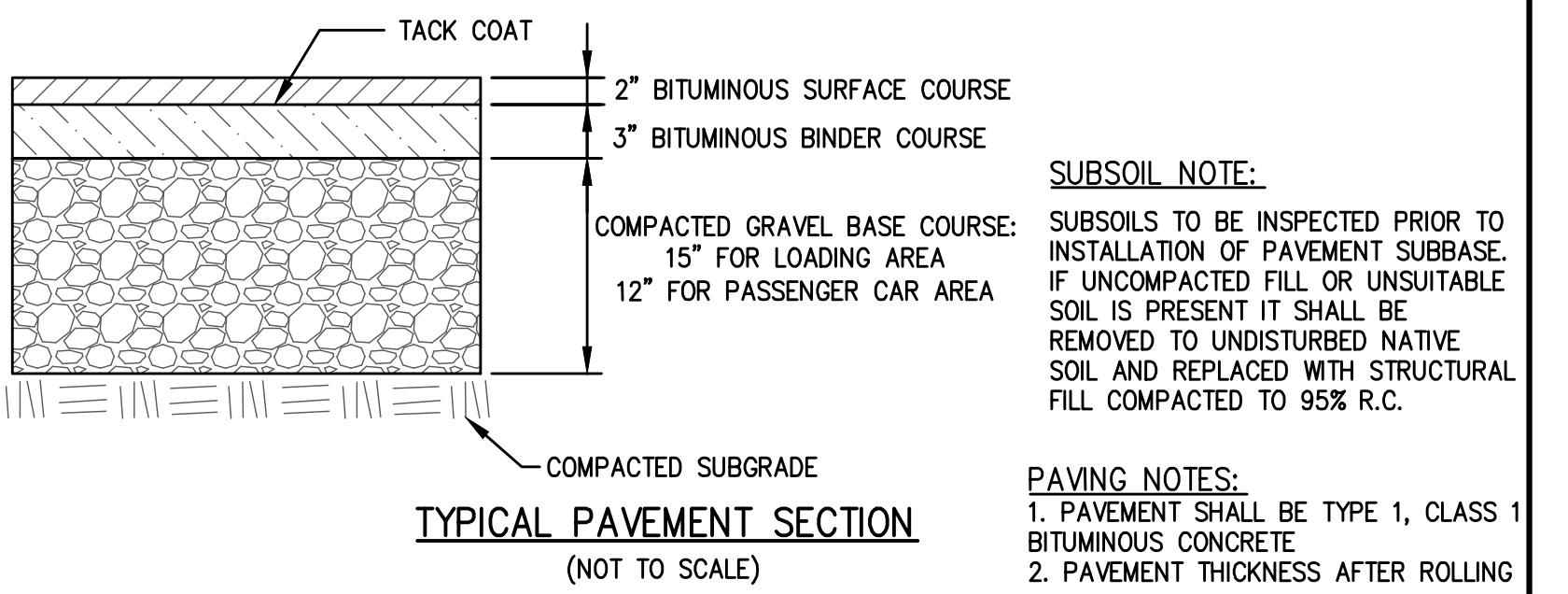
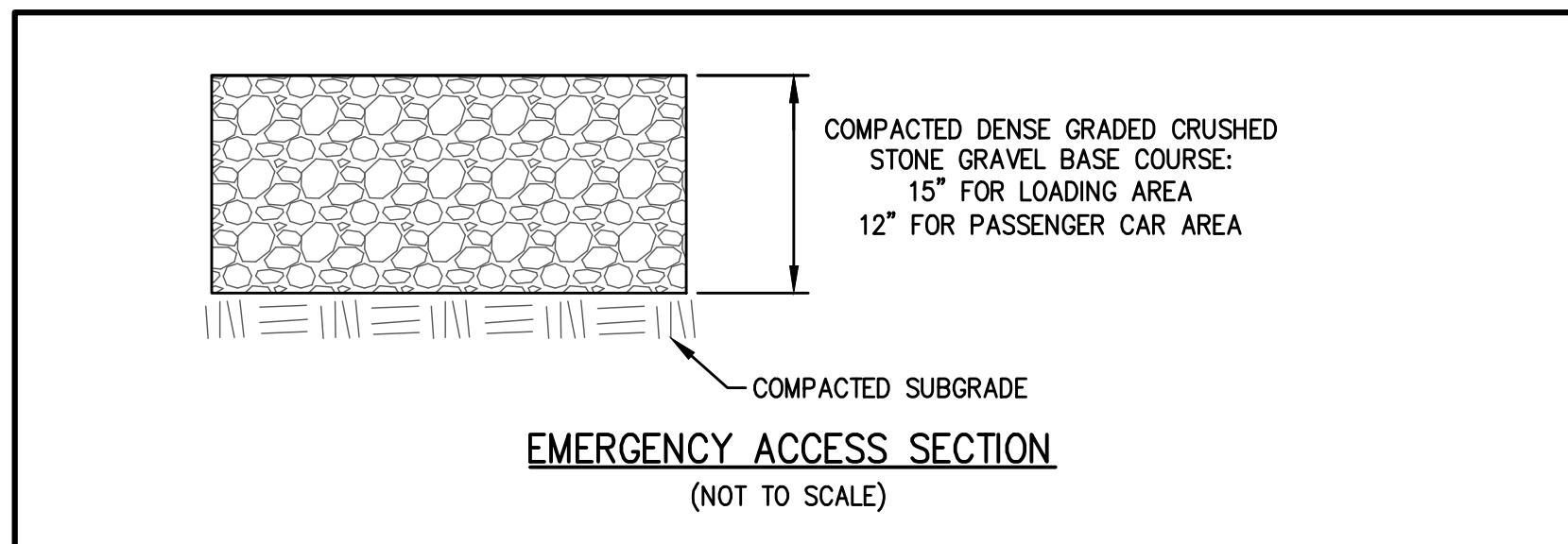
**DRAINAGE  
SCHEDULE**

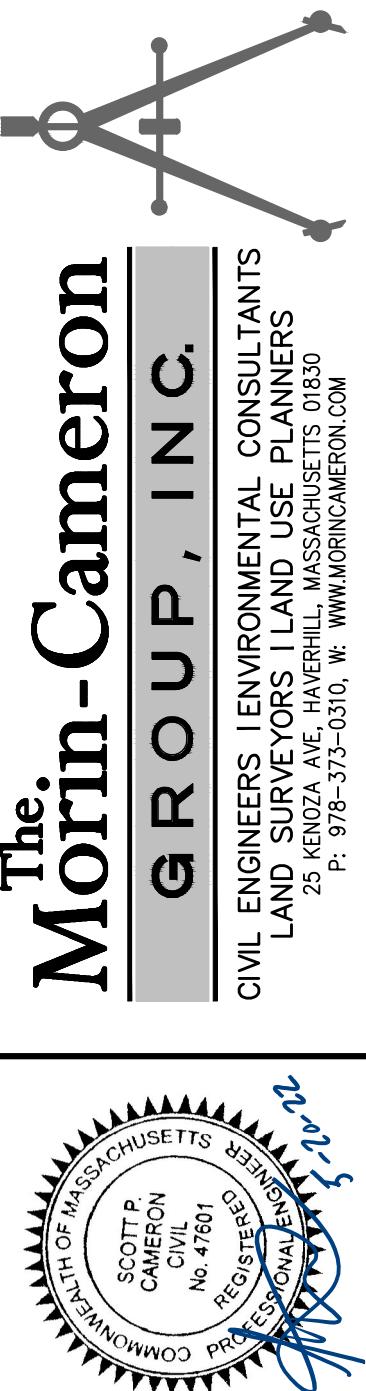
---

DRAWING NO. **C-7**





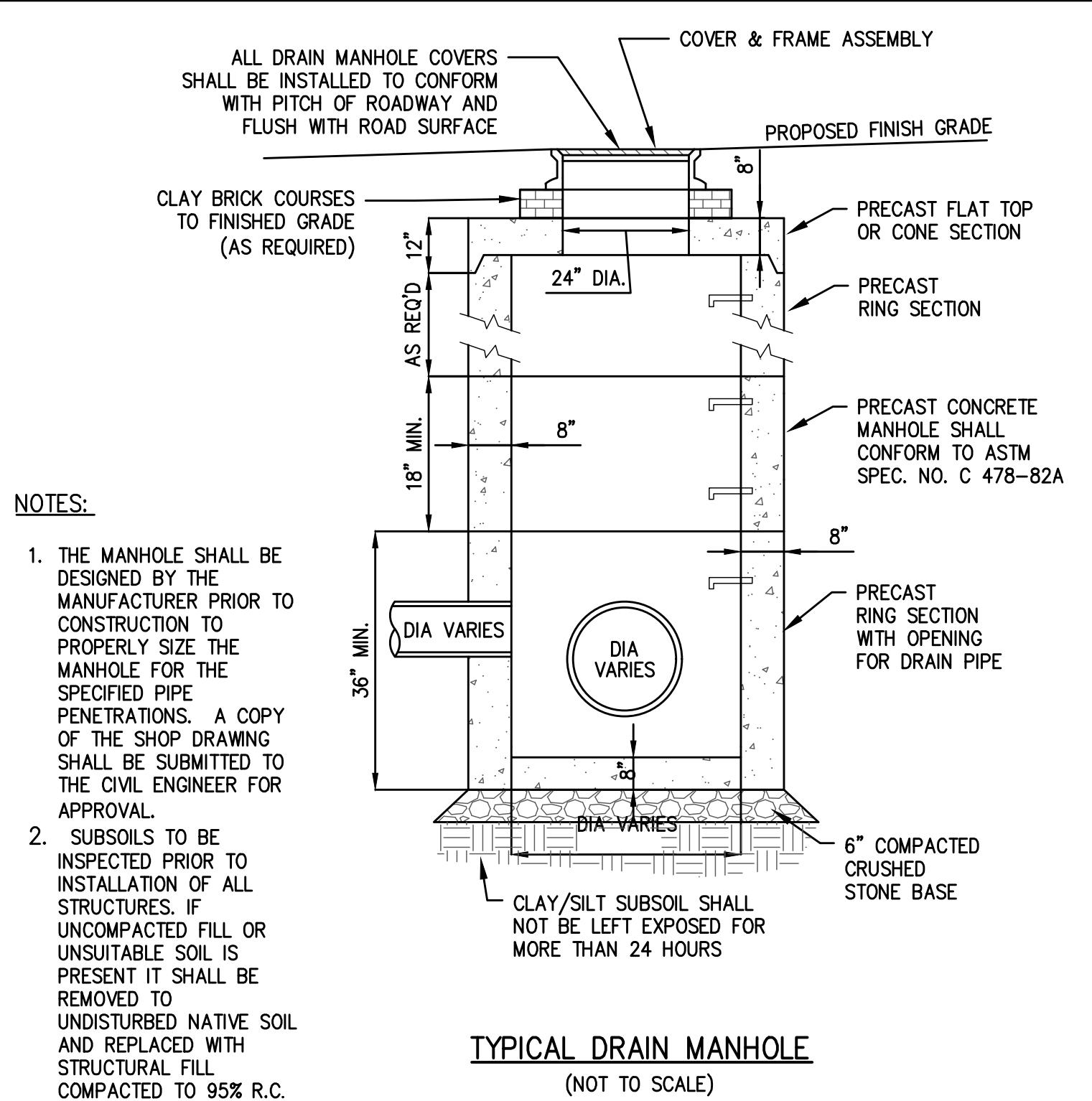




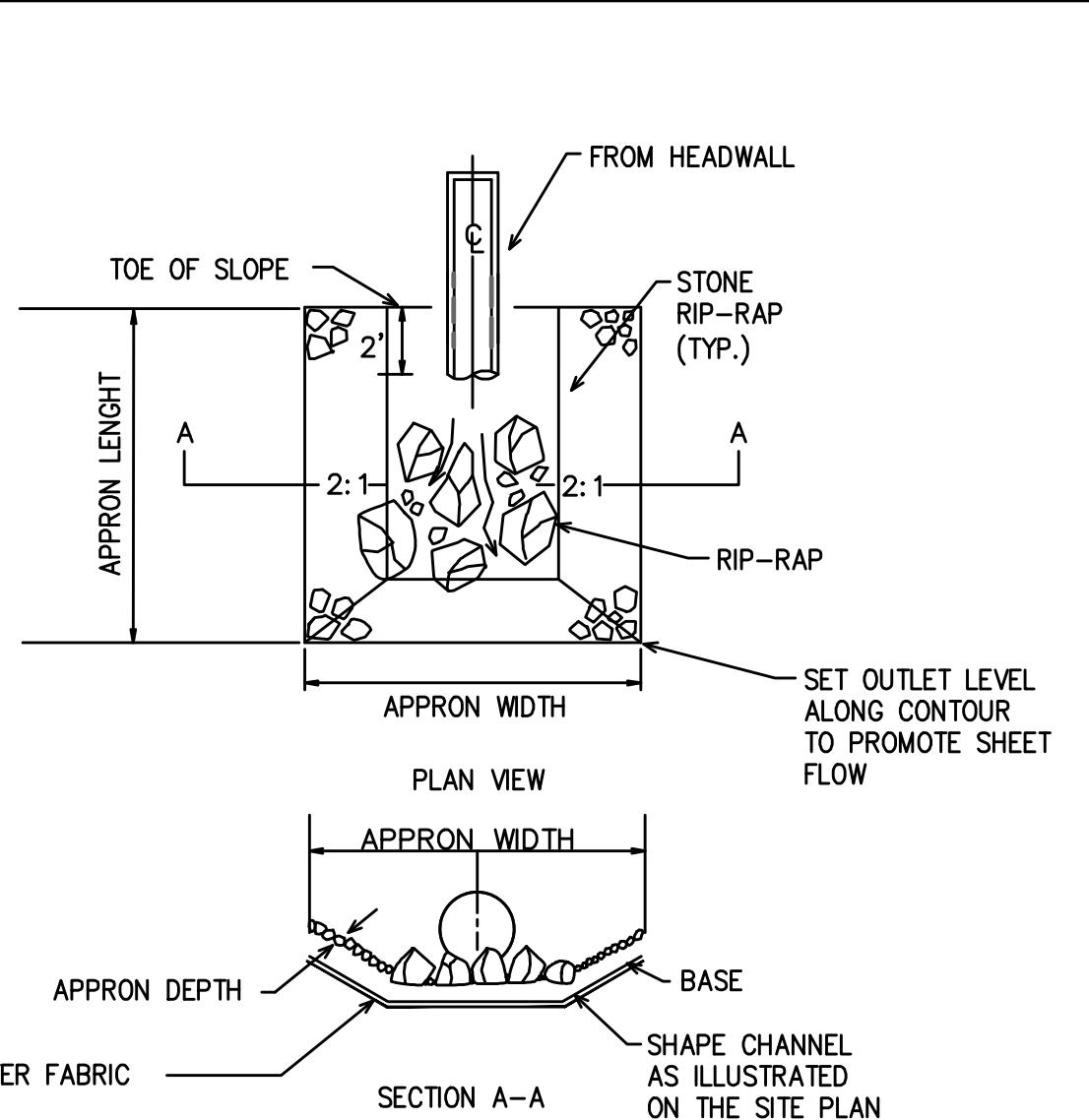
# The Morin-Cameron

---

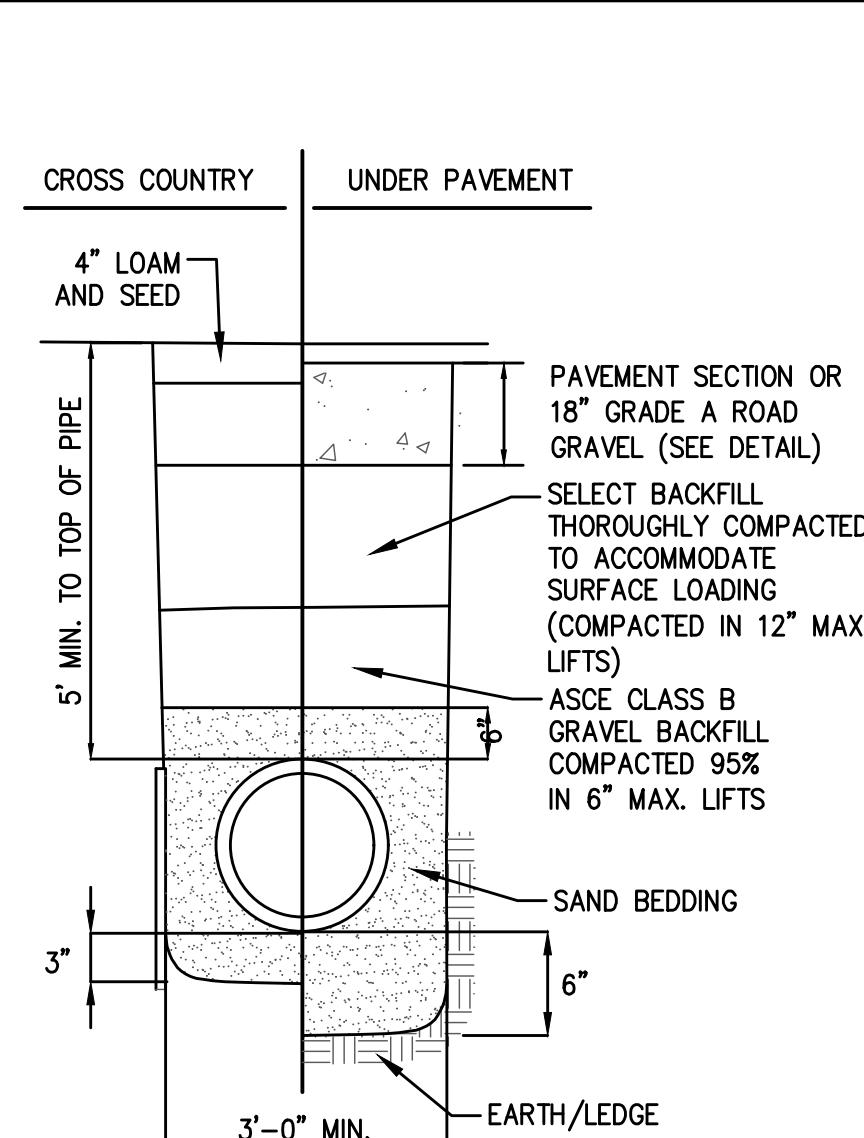
ENGINEERS | ENVIRONMENTAL CONSULTANTS  
AND SURVEYORS | LAND USE PLANNERS  
25 KENOZA AVE, HAVERHILL, MASSACHUSETTS 01830  
P: 978-373-0310 | W: [WWW.MORINCAMERON.COM](http://WWW.MORINCAMERON.COM)



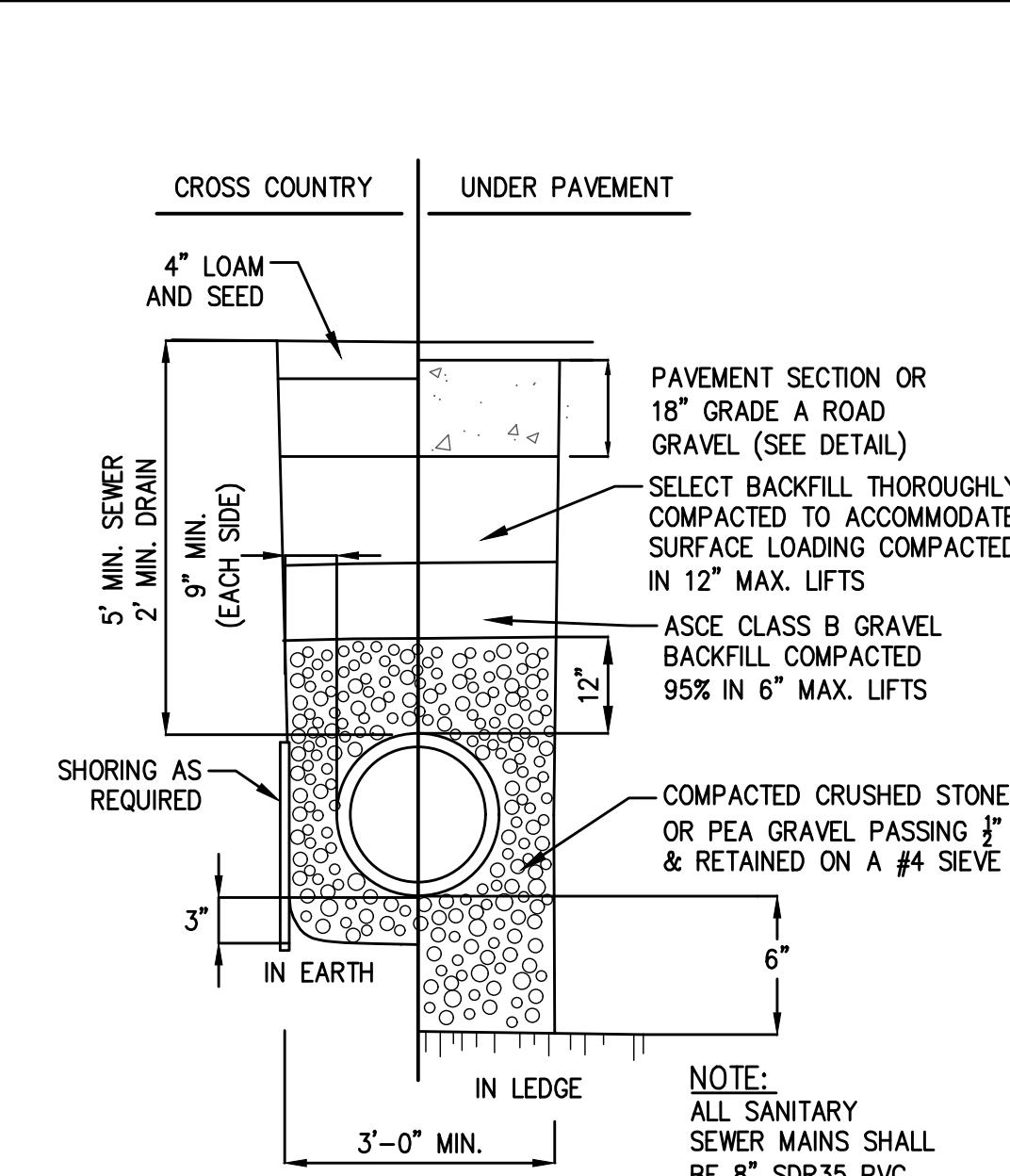
**TYPICAL DRAIN MANHOLE**  
(NOT TO SCALE)



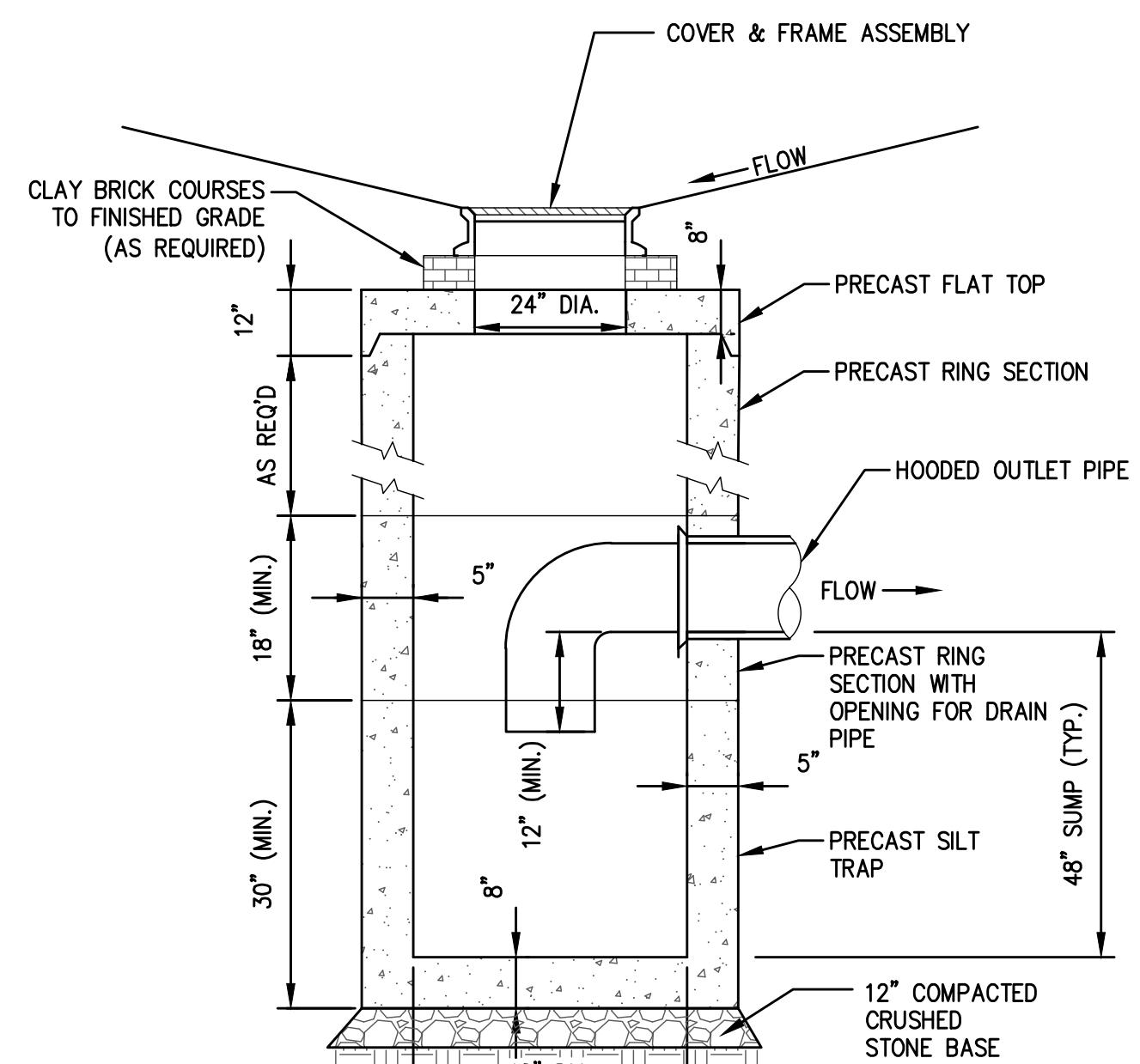
**OUTFALL RIP RAP**  
(NOT TO SCALE)



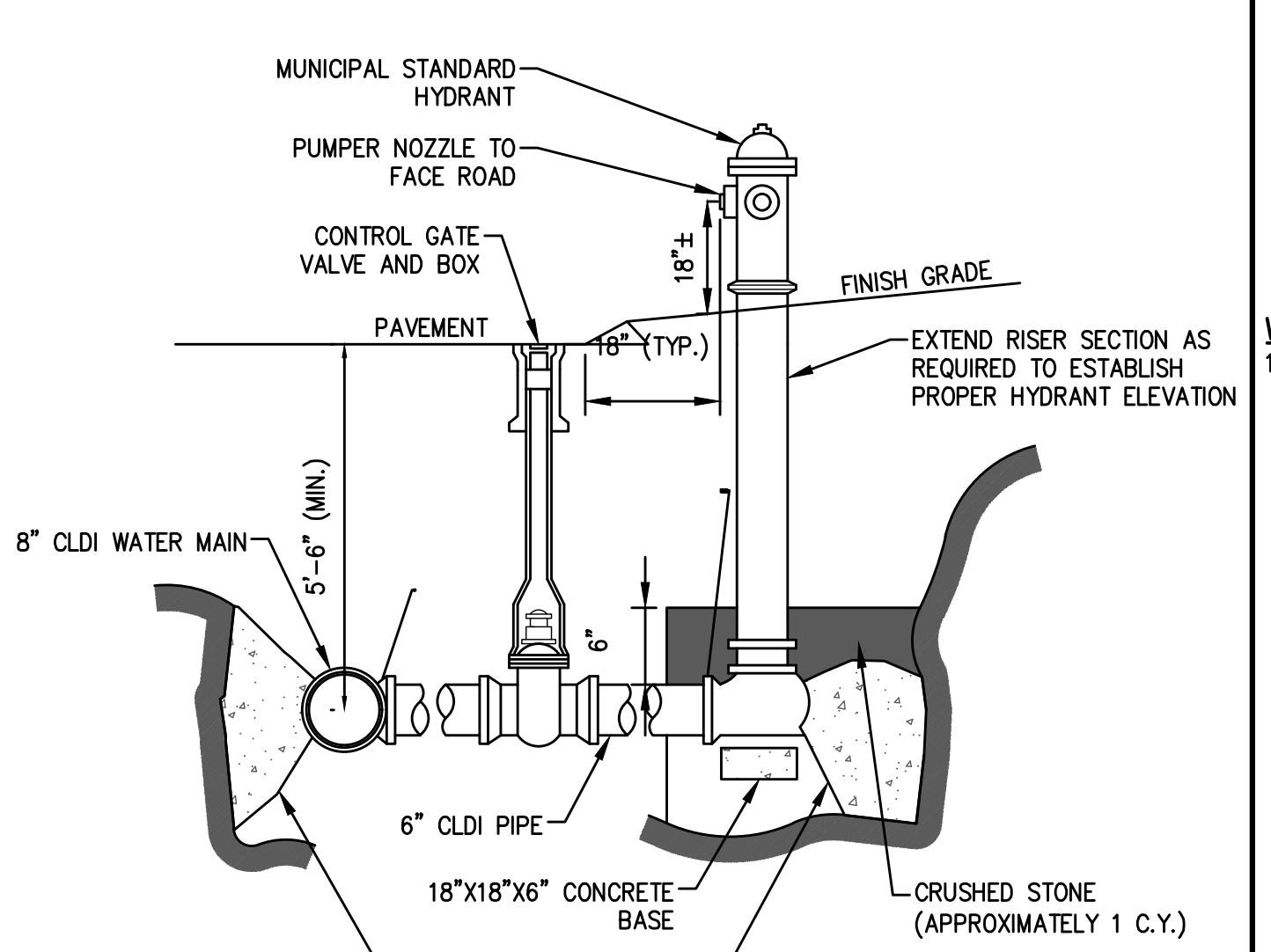
TYPICAL WATER TRENCH DETAIL  
(NOT TO SCALE)



**TYPICAL SEWER/DRAIN TRENCH DETAIL**  
**(NOT TO SCALE)**

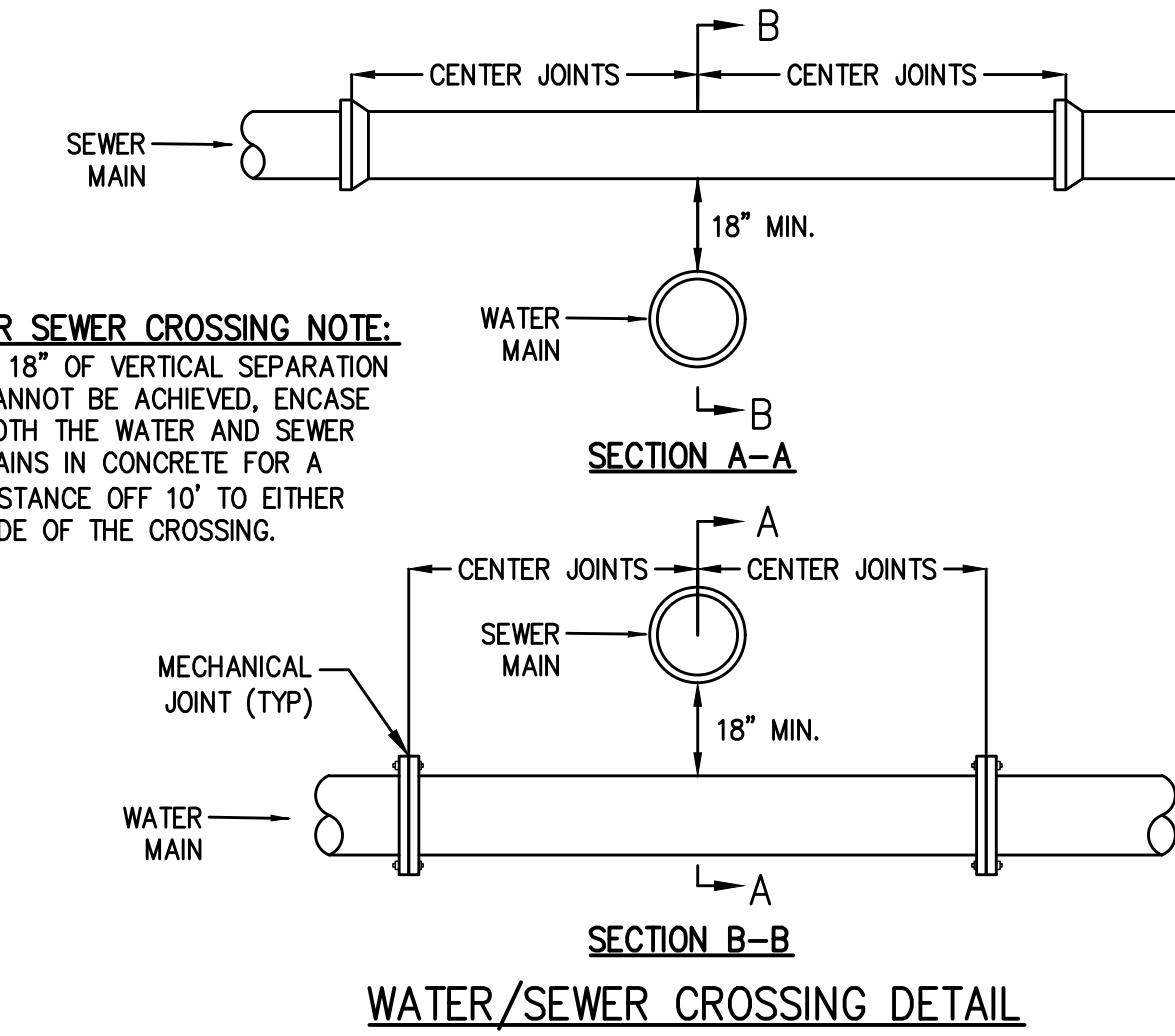


## TYPICAL CATCH BASIN (NOT TO SCALE)

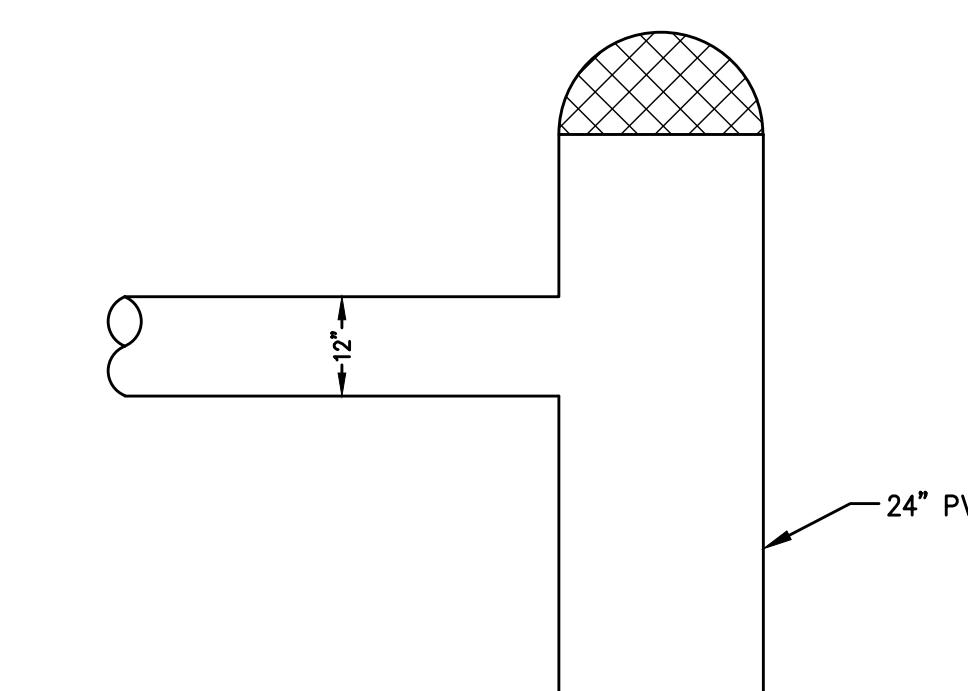


# HYDRANT DETAIL

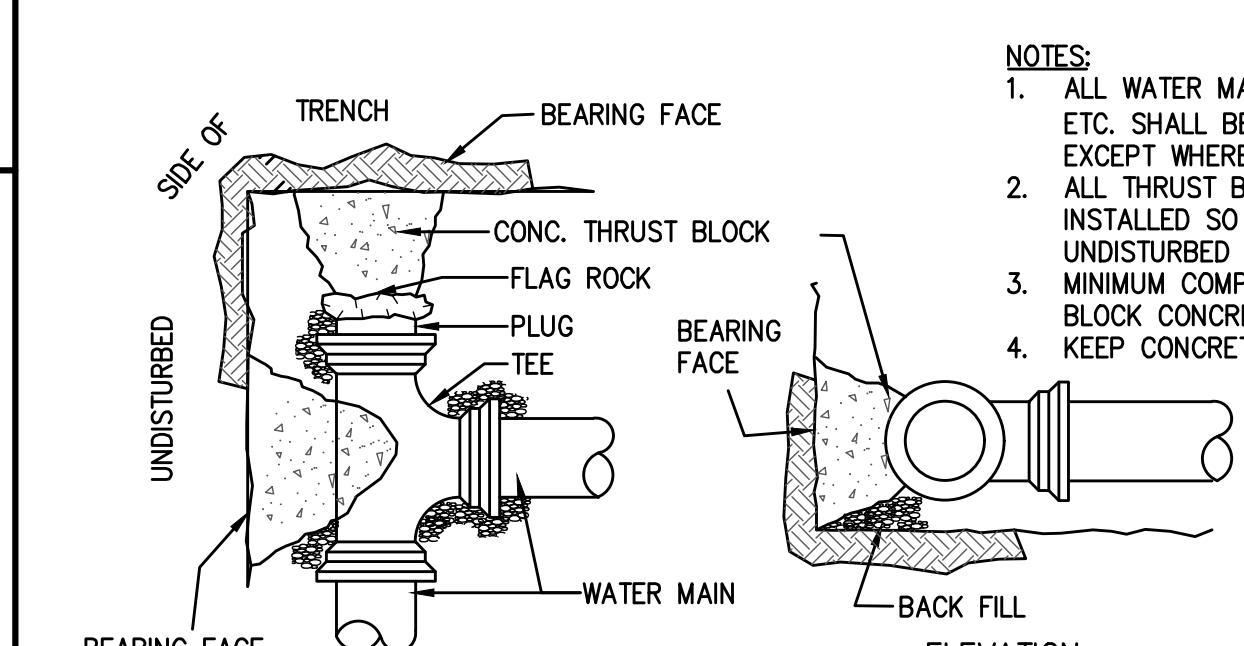
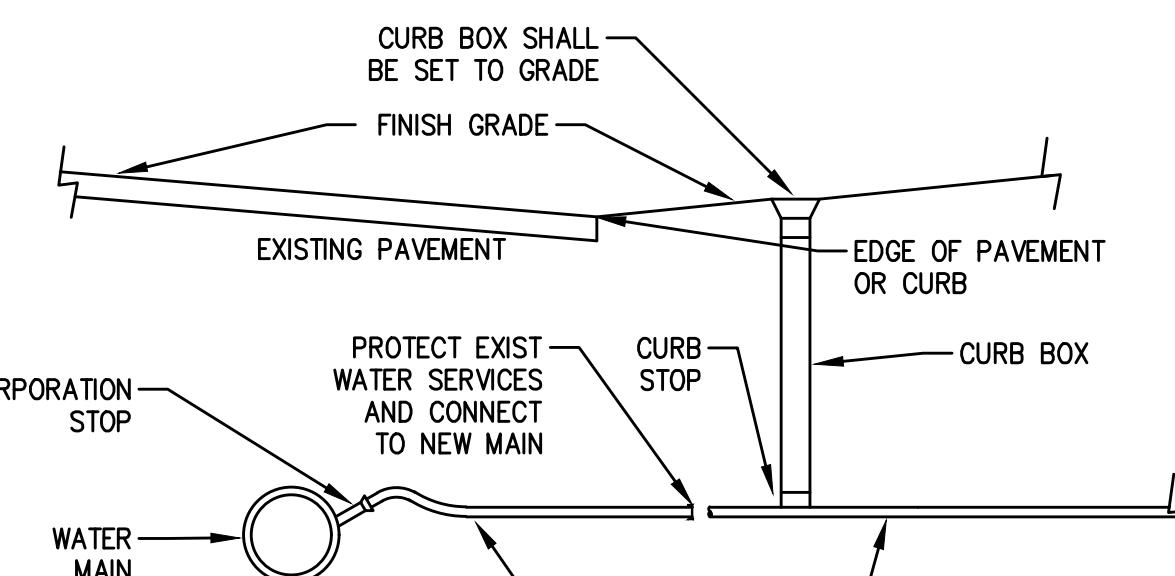
(NOT TO SCALE)



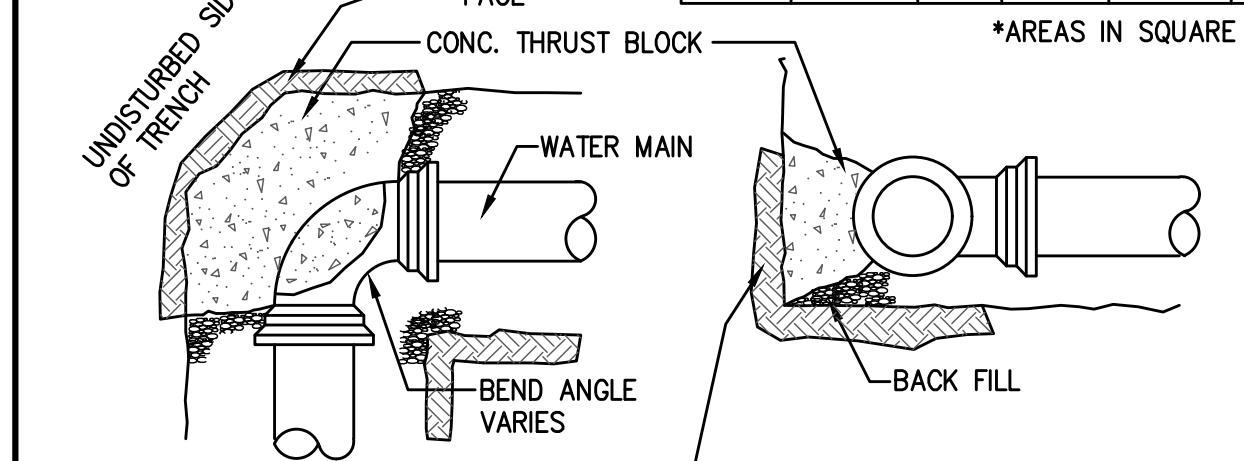
WATER/SEWER CROSSING DETAIL  
(NOT TO SCALE)



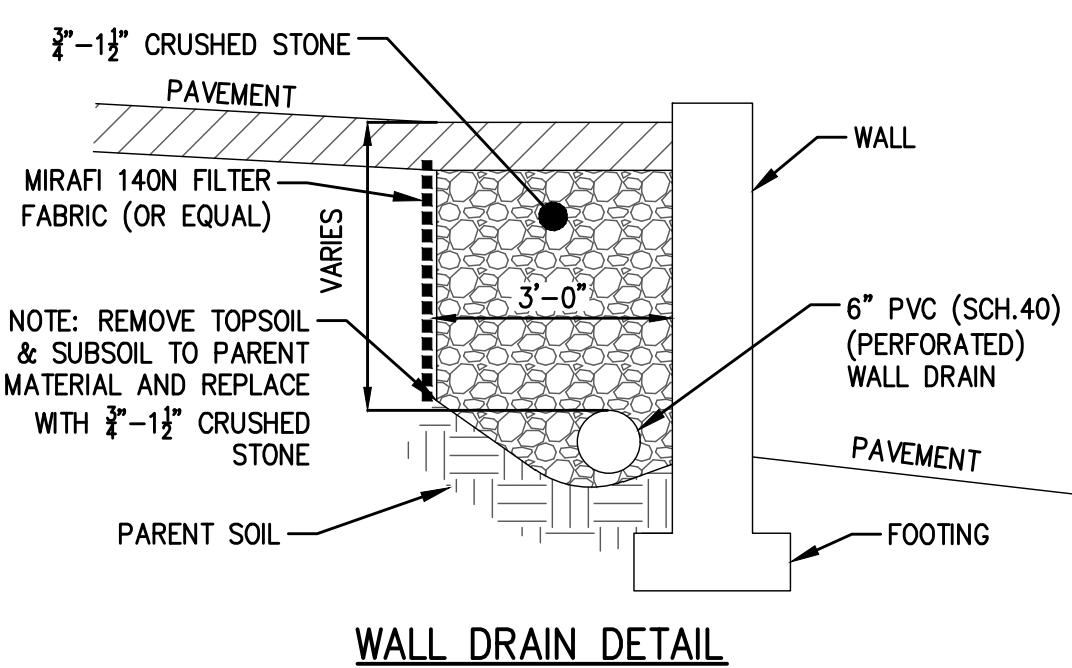
## AREA DRAIN DETAIL (C-14)



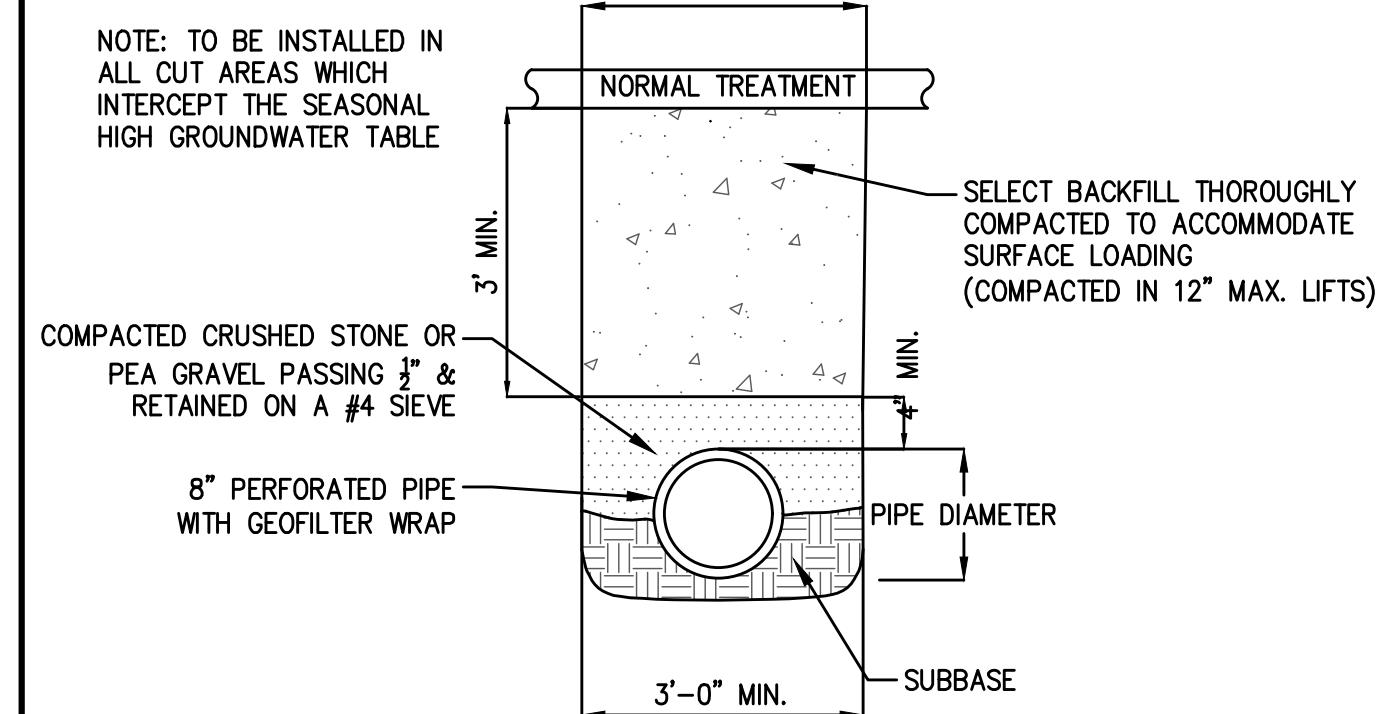
MIN. BEARING FACE AREAS FOR THRUSTBLOCKS							
	90°	45°	22.5°	TEES	PLUGS	CAPS	HYDRANTS
0'-6"	8	5	6	4	4	4	4
0'-8"	12	8	5	6	6	6	6



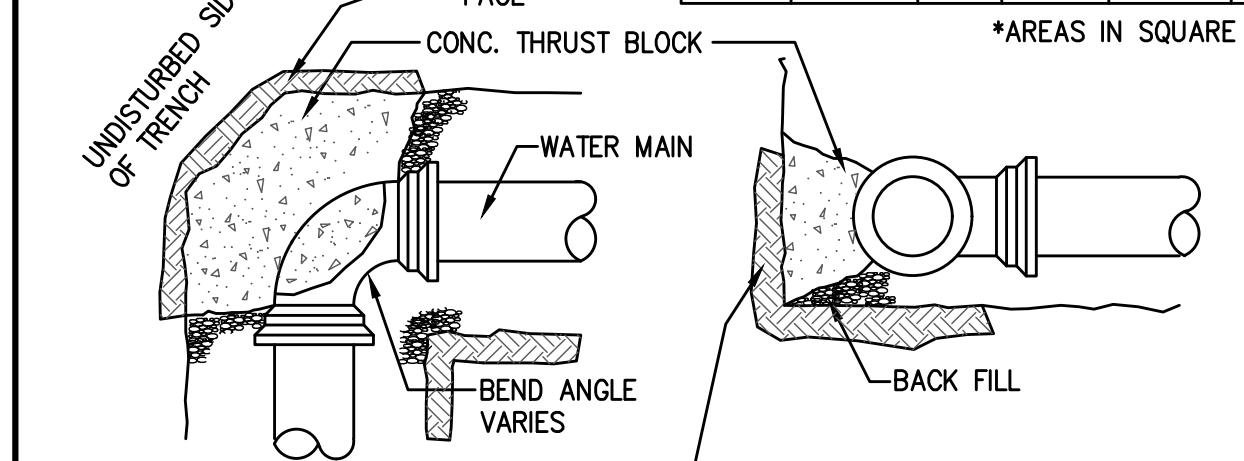
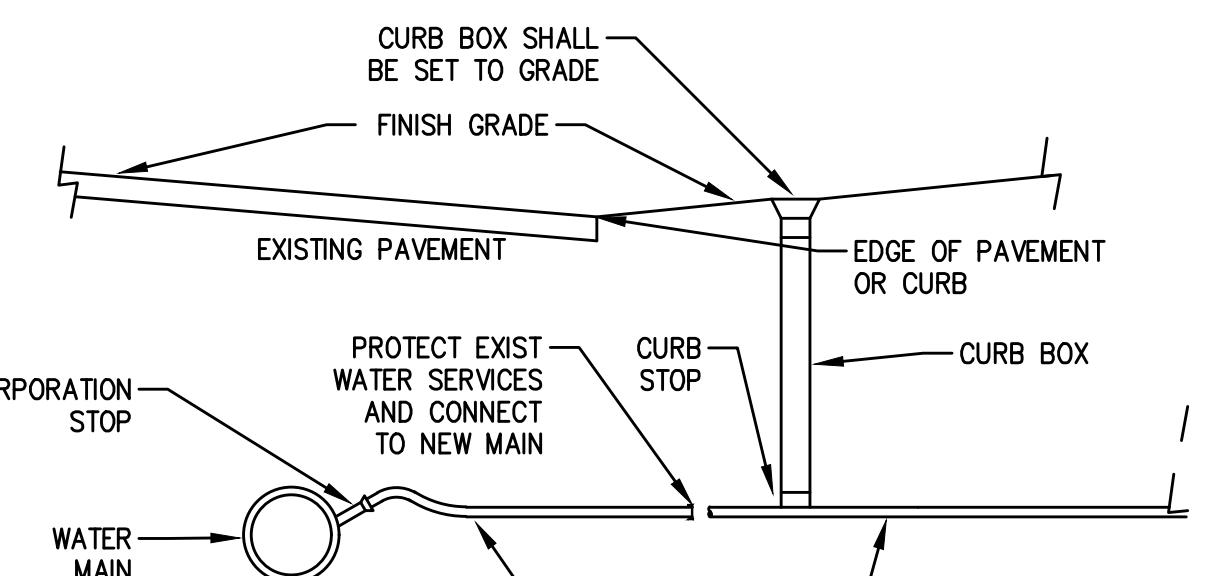
## THRUST BLOCK DETAIL



## WALL DRAIN DETAIL (NOT TO SCALE)



TYPICAL SUBDRAIN DETAIL  
(NOT TO SCALE)

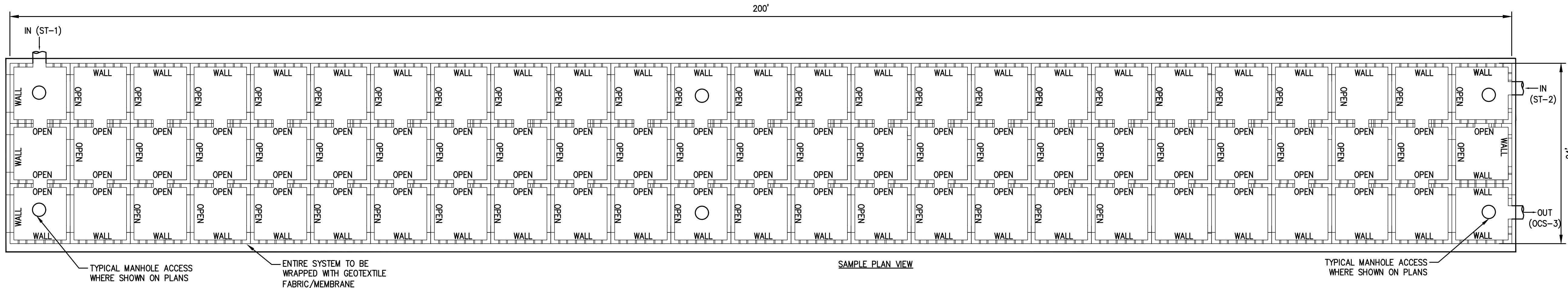


WATER SERVICE CORPORATION  
(NOT TO SCALE)

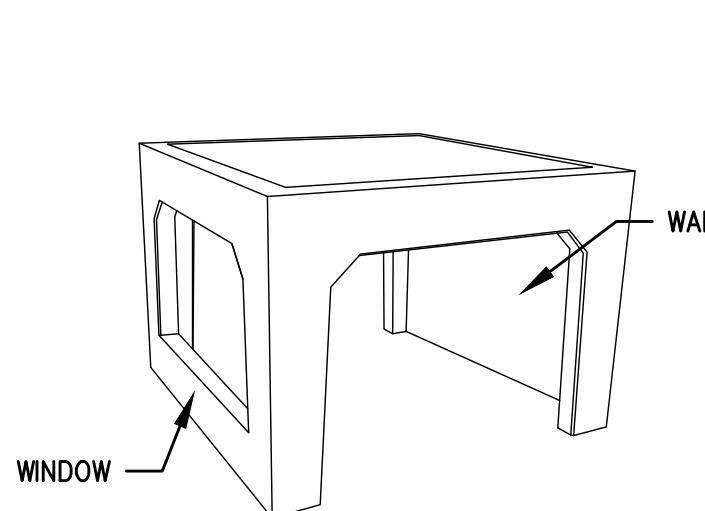
**SITE DEVELOPMENT PLANS  
IN  
METHUEN, MASSACHUSETTS  
501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 9D & 9E)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER**

## UTILITY DETAILS

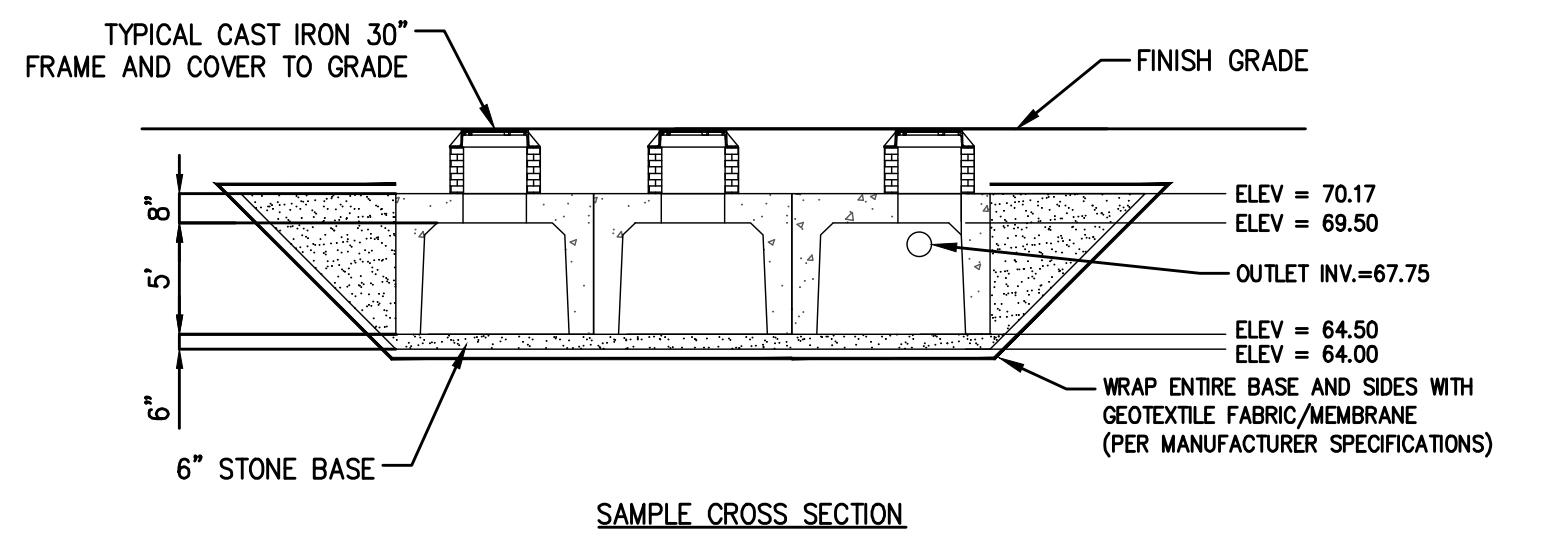
MIN. BEARING FACE AREAS FOR THRUSTBLOCKS							
	90°	45°	22.5°	TEES	PLUGS	CAPS	HYDRANTS
0'-6"	8	5	6	4	4	4	4
0'-8"	12	8	5	6	6	6	6



SAMPLE PLAN VIEW



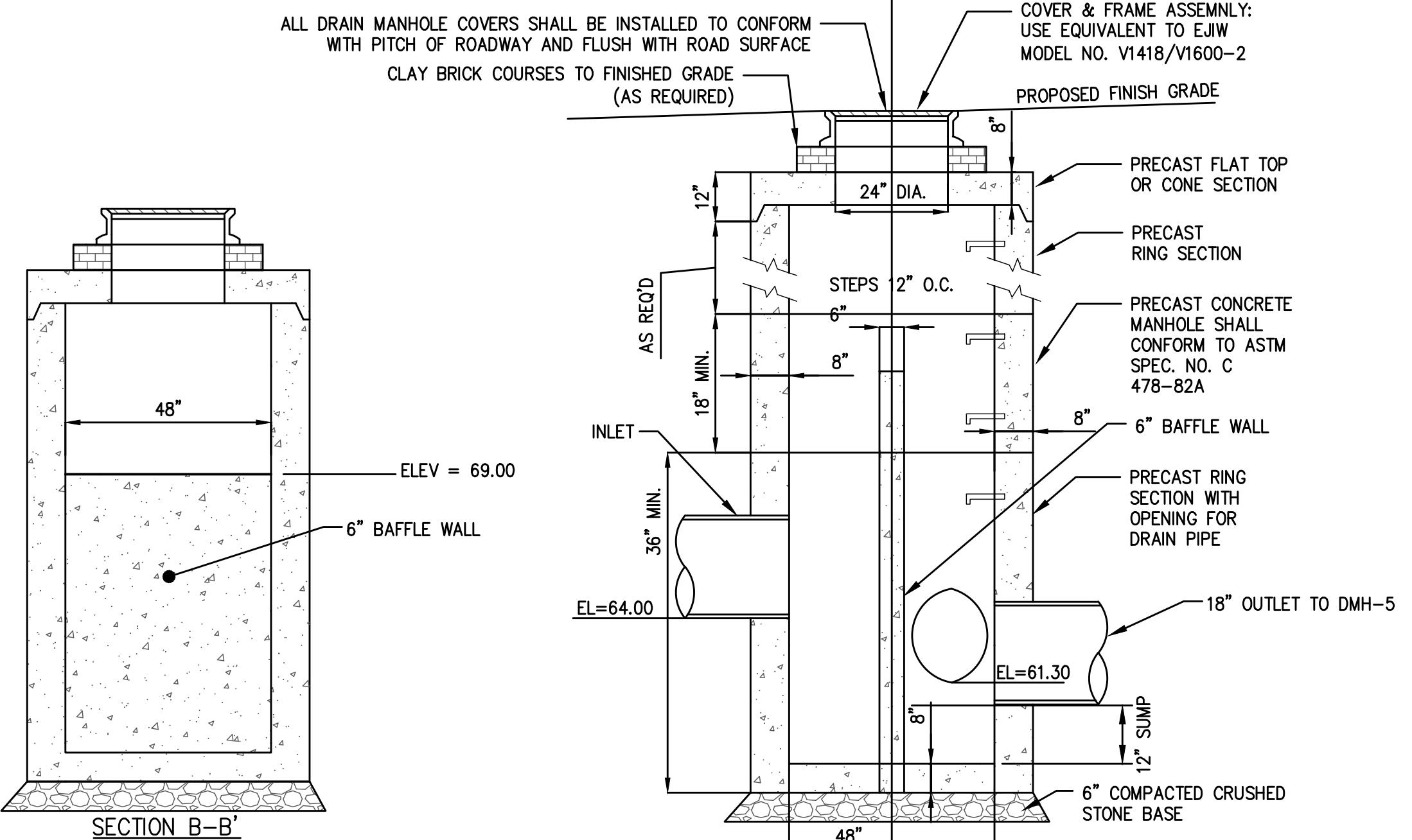
RETAIN-IT CHAMBER COMPONENT DETAIL  
(NOT TO SCALE)



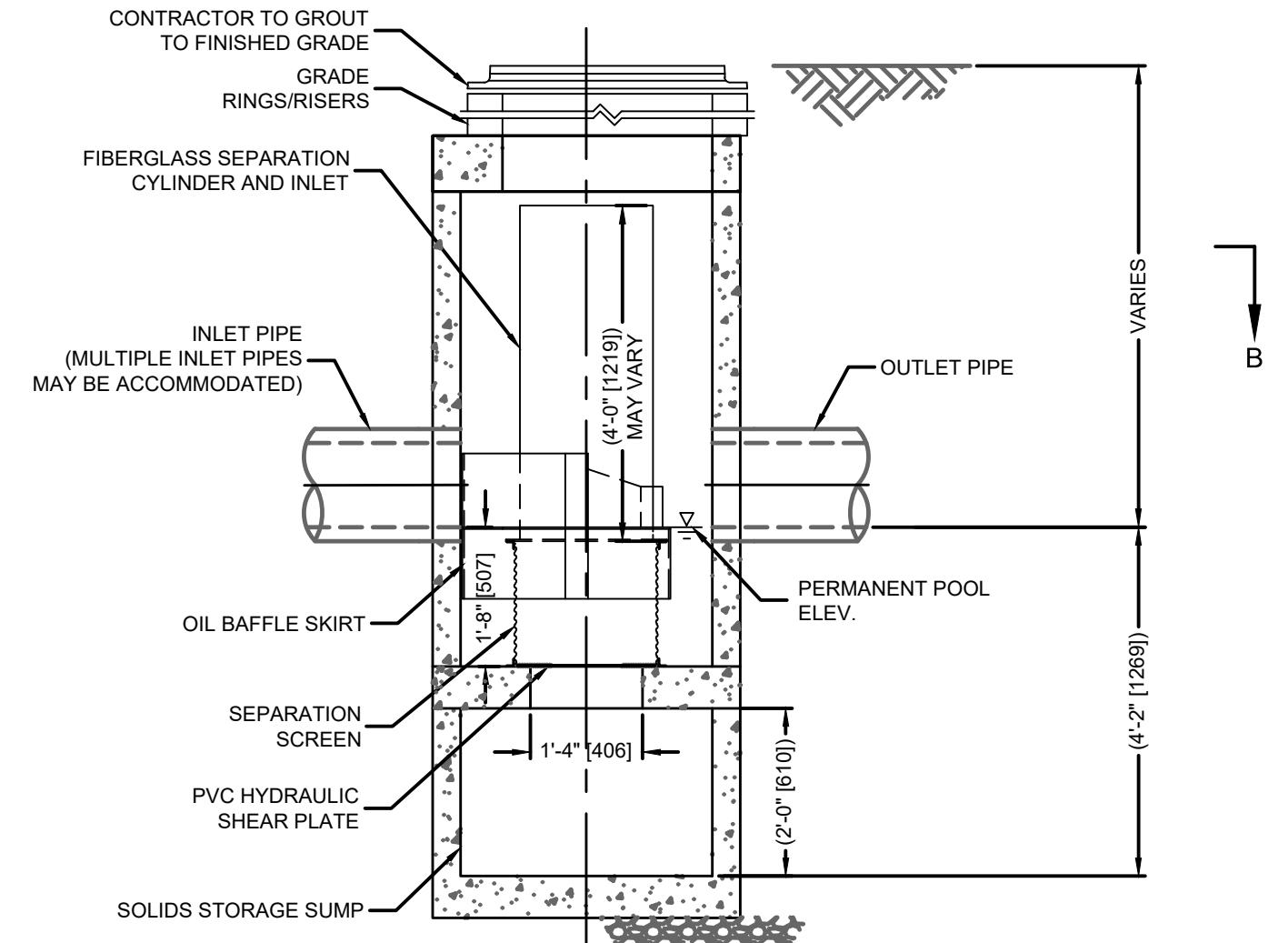
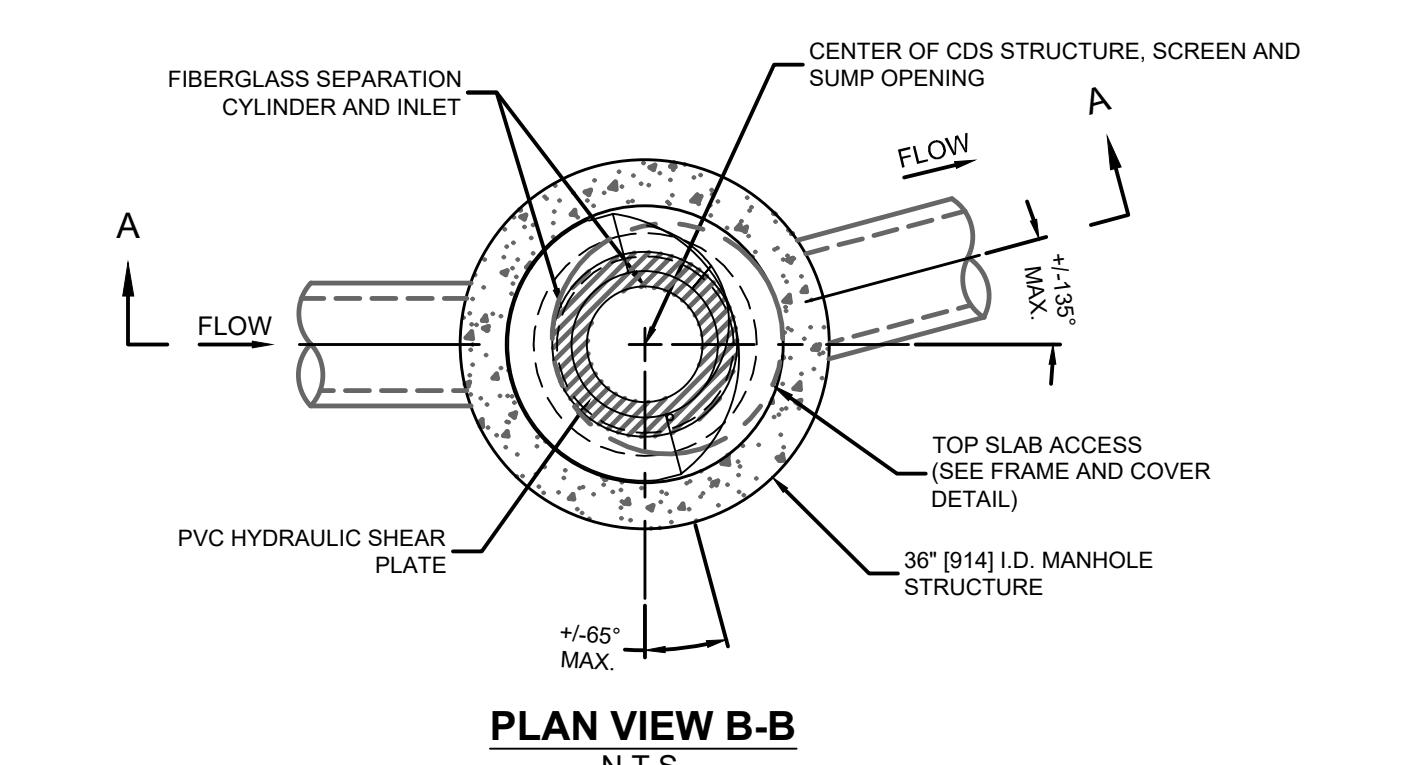
100-YEAR STORM ELEV. = 69.12  
10-YEAR STORM ELEV. = 66.99  
2-YEAR STORM ELEV. = 65.50

SAMPLE CROSS SECTION

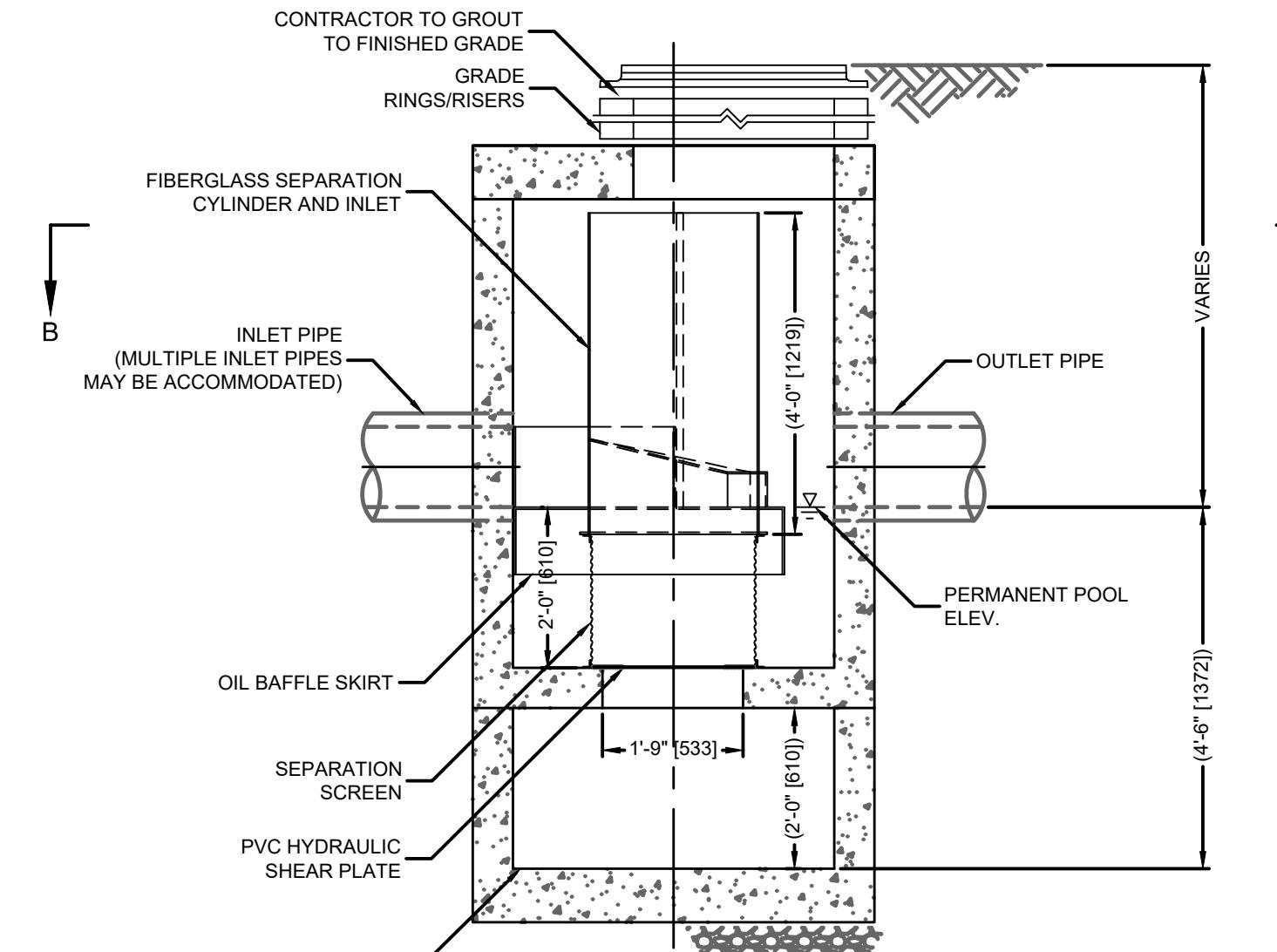
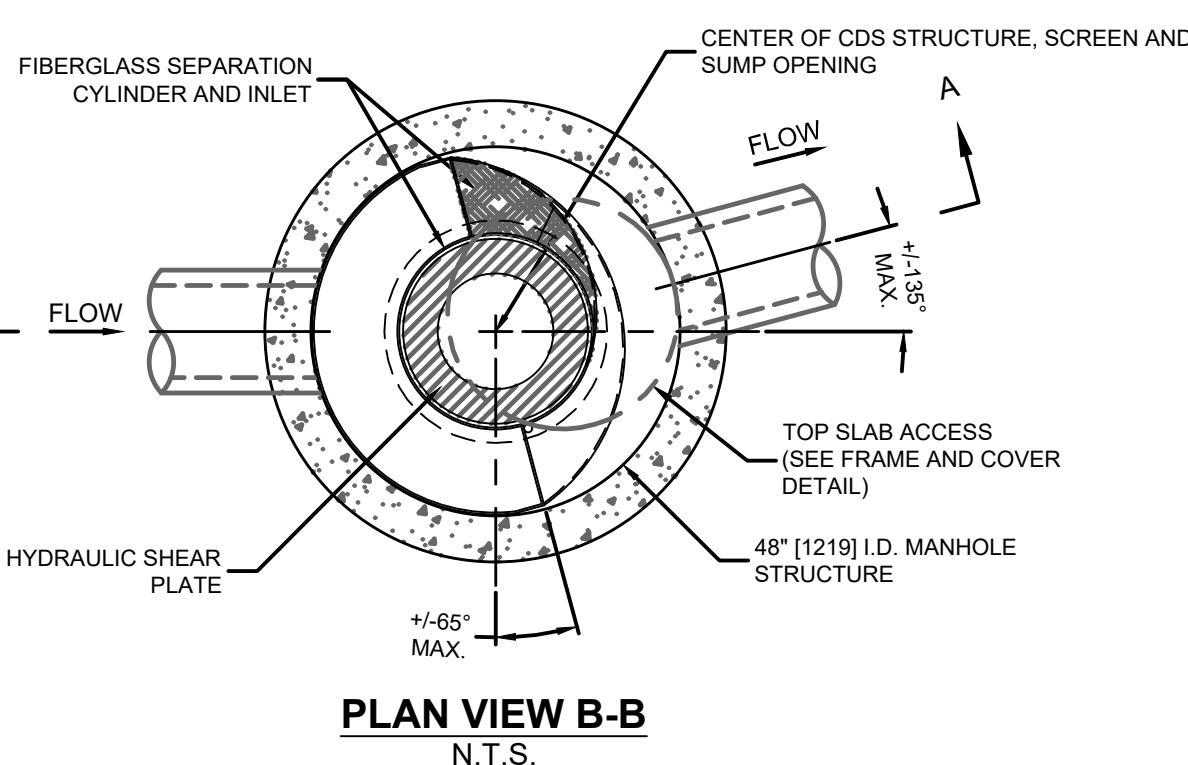
SUBSURFACE RETENTION SYSTEM (P3) (RETAIN-IT MODULES)  
(NOT TO SCALE)



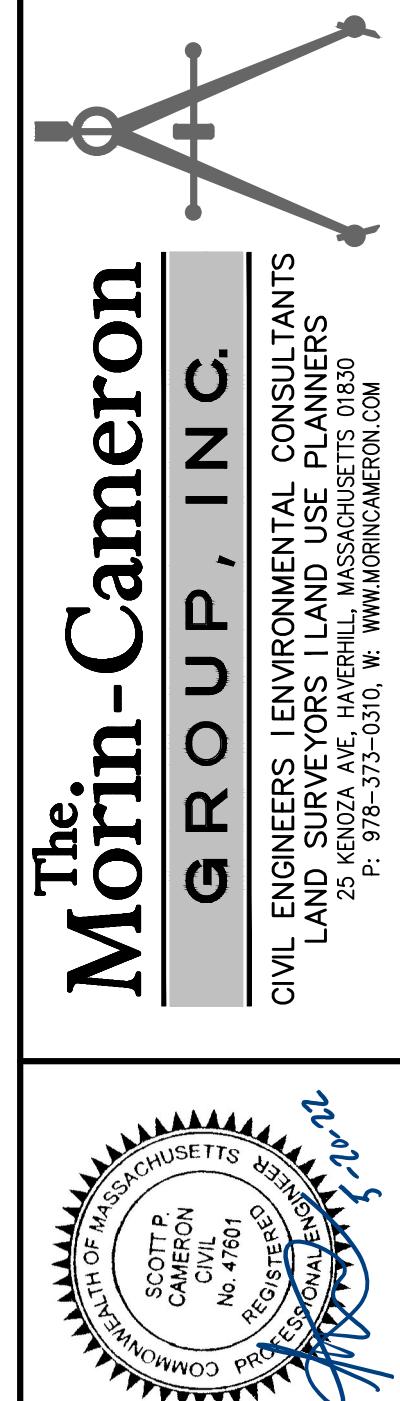
OUTLET CONTROL STRUCTURE (OCS-3)  
(NOT TO SCALE)



ELEVATION A-A  
N.T.S.  
CONTECH CDS1515-3-C (ST-1)  
(NOT TO SCALE)



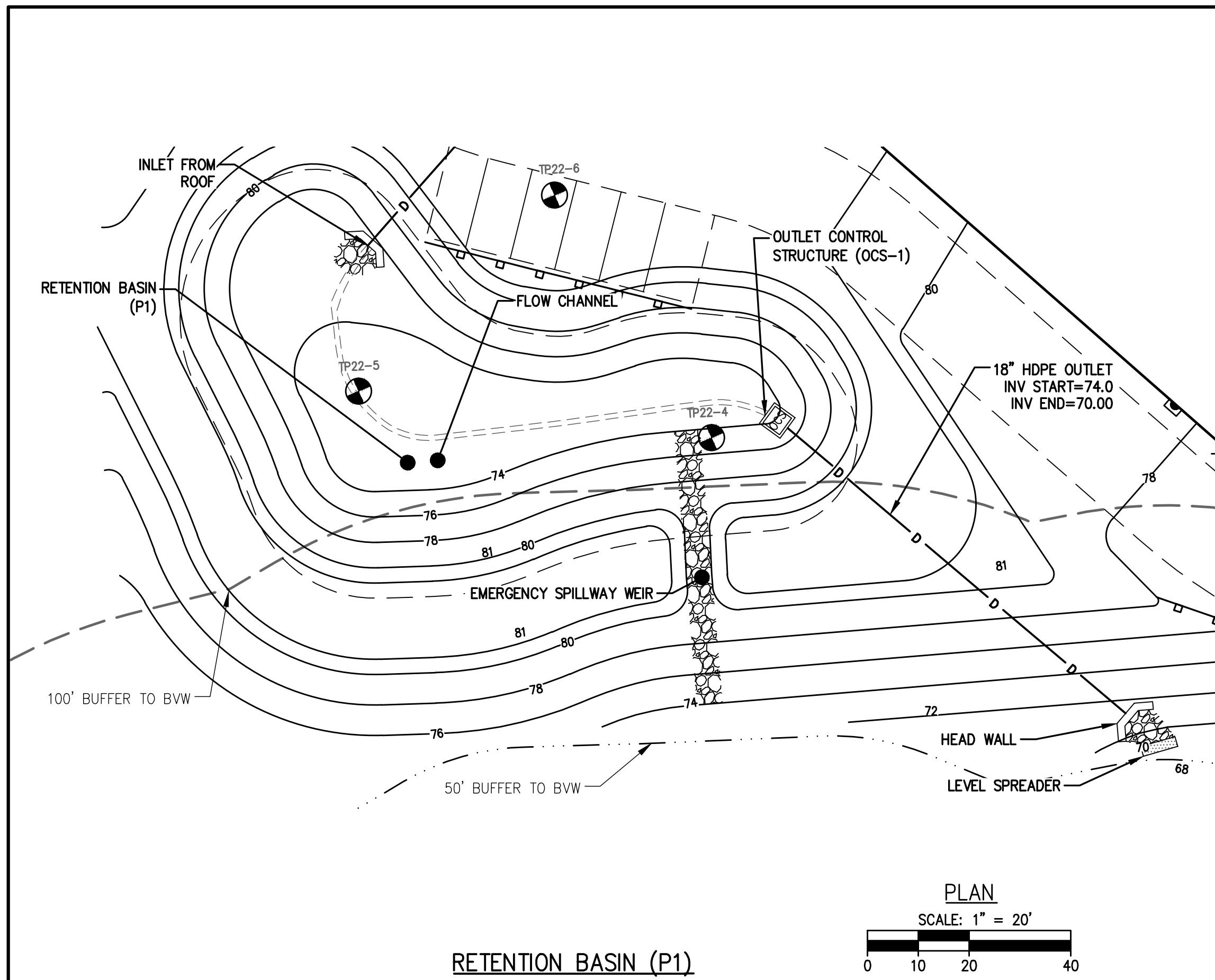
ELEVATION A-A  
N.T.S.  
CONTECH CDS2015-4-C (ST-2)  
(NOT TO SCALE)



SURVEY BY: MCG  
DRAFTED BY: CEM/LNO  
CHECKED BY: SPC  
APPROVED BY: SPC  
SCALE: AS NOTED  
DATE: APRIL 6, 2022

DRAINAGE DETAILS	REVISIONS		
	NO.	DESCRIPTION	DATE
C-12	1	REVISIONS PER PEER REVIEW AND NO	05-20-2022
		APPROVED BY: SPC	
		SCALE: AS NOTED	
		DATE: APRIL 6, 2022	

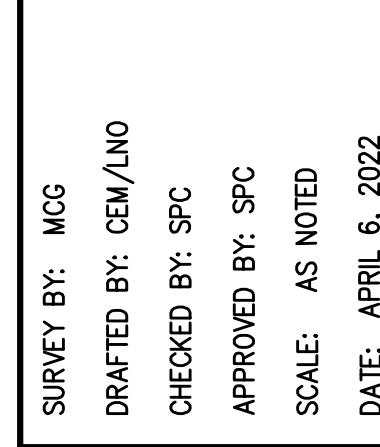
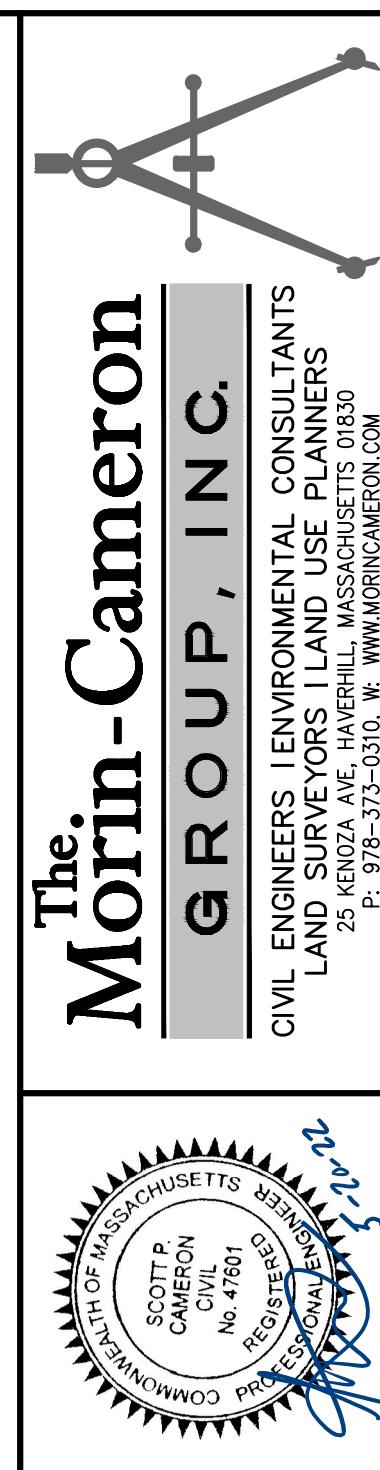
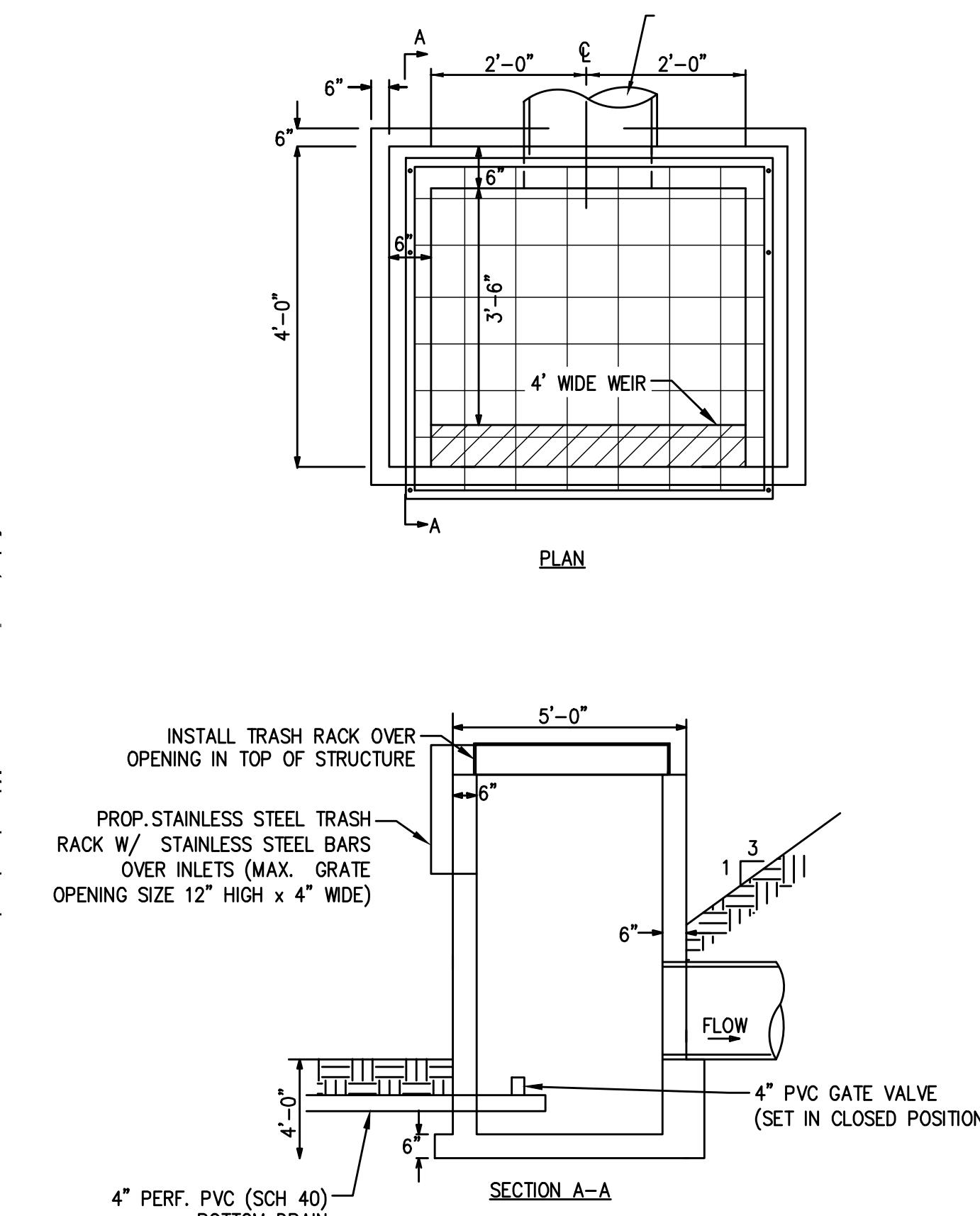
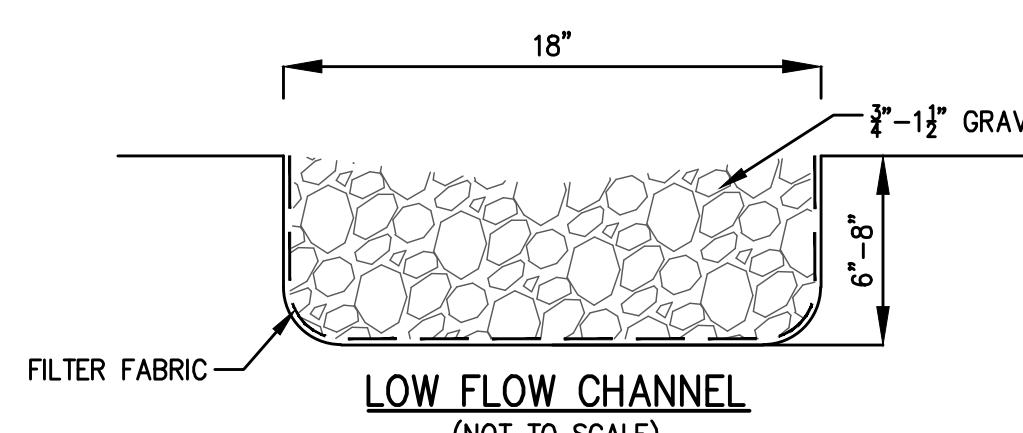
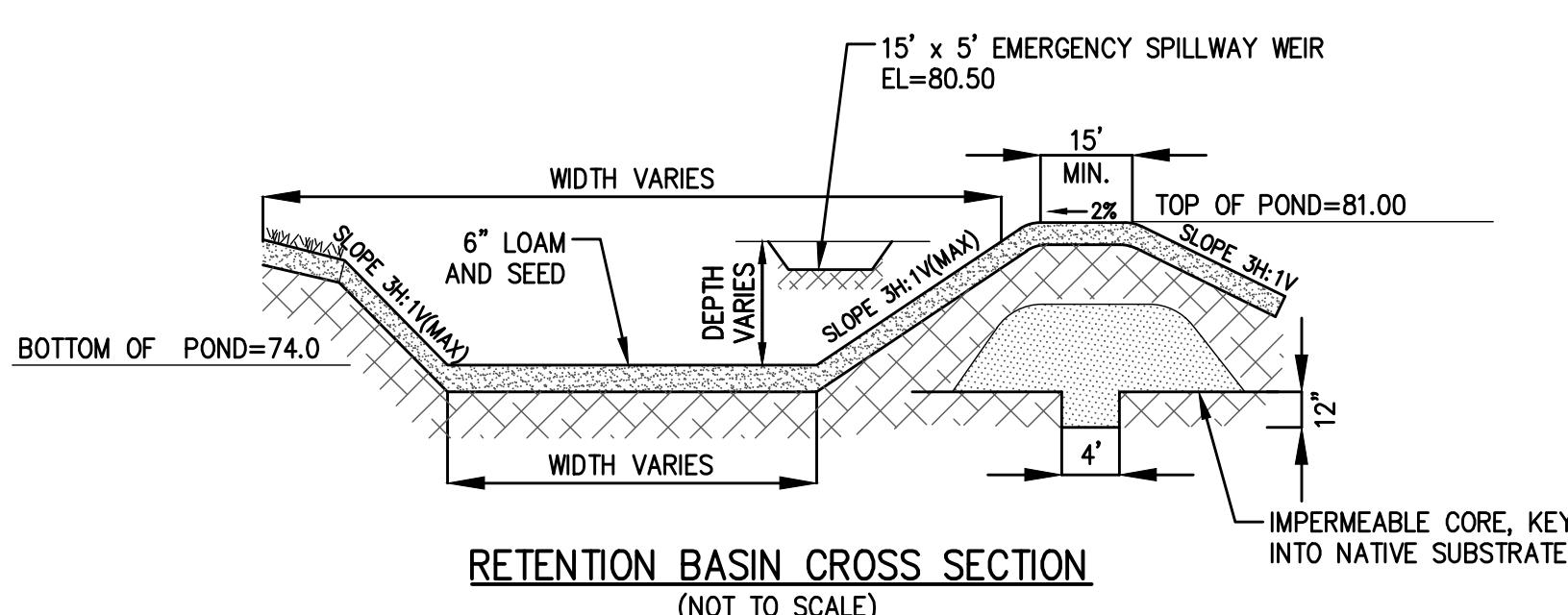
SITE DEVELOPMENT PLANS  
IN  
METHUEN, MASSACHUSETTS  
501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 30 & 9E)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER LLC



CONSTRUCTION INSPECTION NOTE:

AT LEAST 48-HOURS PRIOR TO FINALIZING BASIN GRADING AND STABILIZATION, CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AND MELHUE CITY ENGINEER THAT THE BOTTOM OF BASIN BED IS READY FOR INSPECTION. THE BASIN BOTTOM SHOULD BE SCARIFIED, FREE OF BEDROCK AND STONES OVER 6 INCHES DIAMETER.

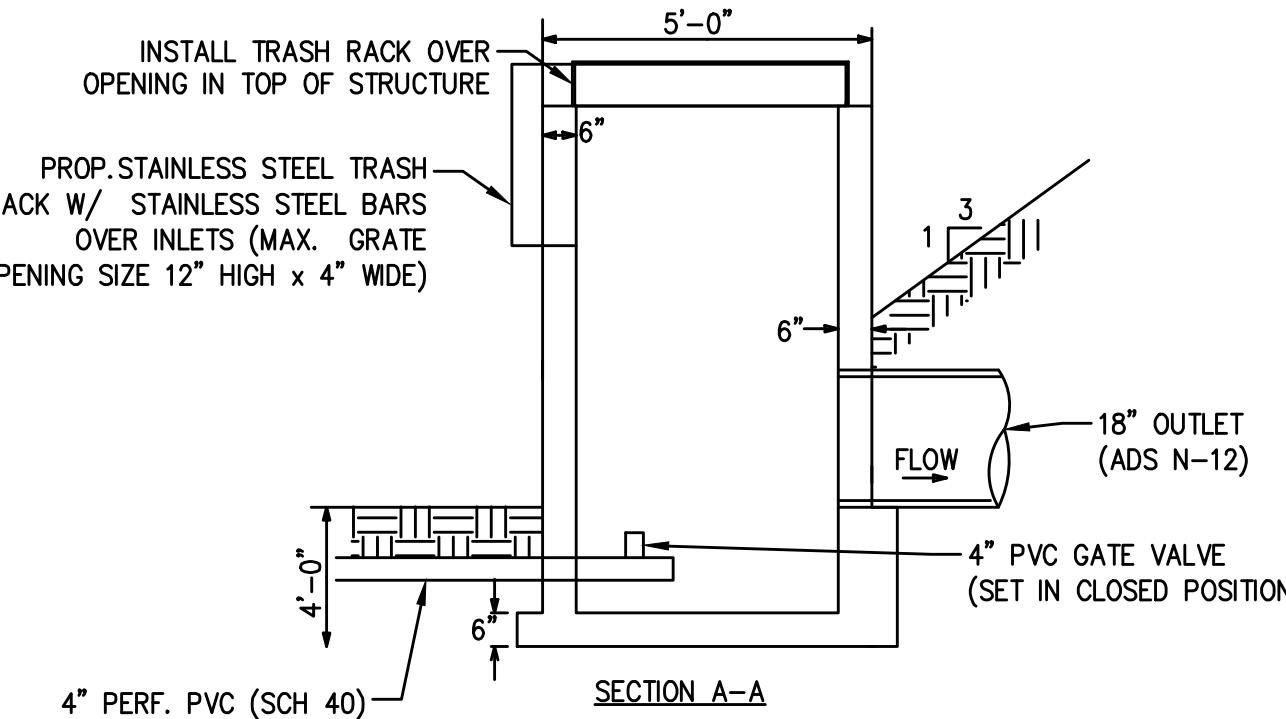
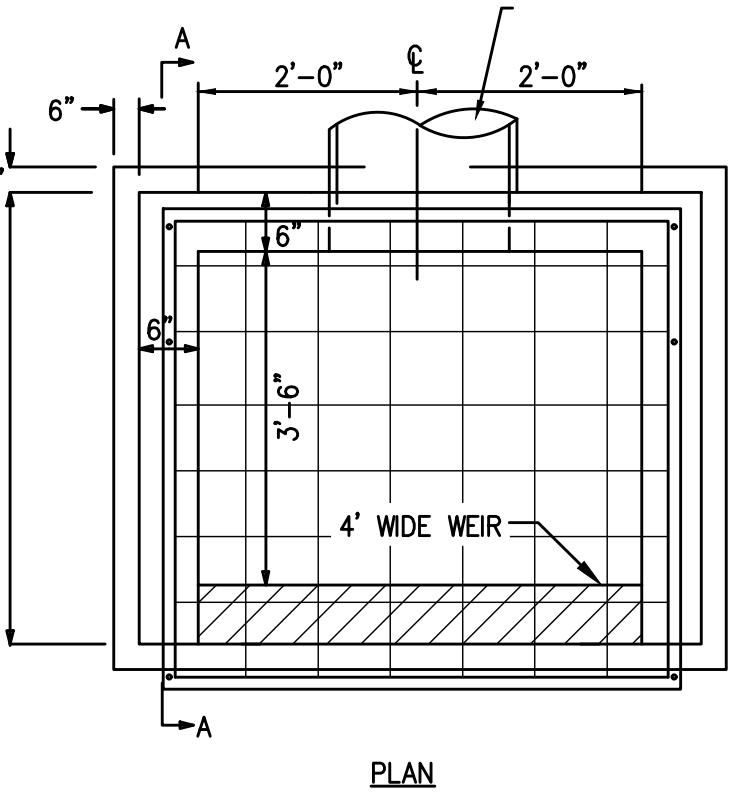
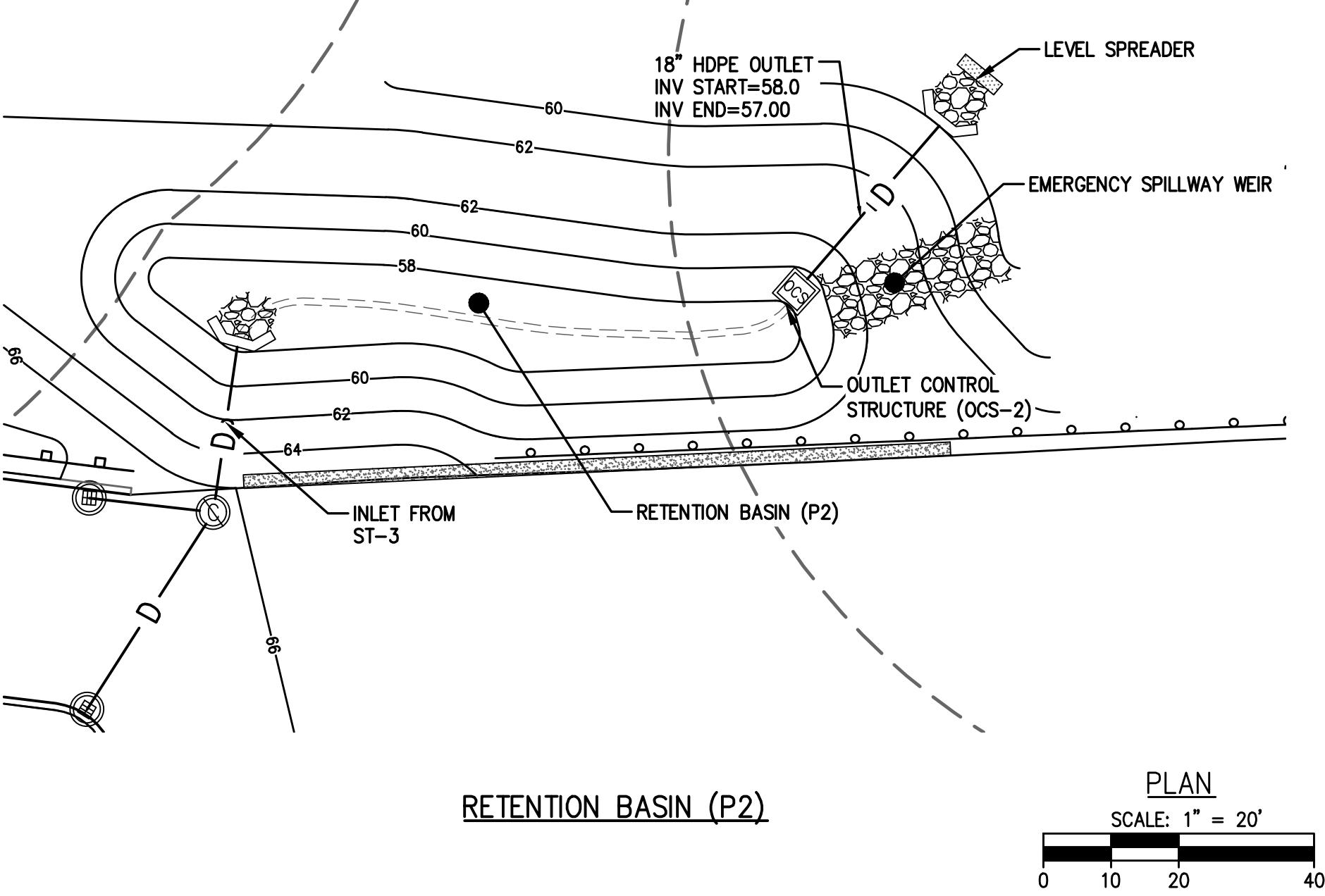
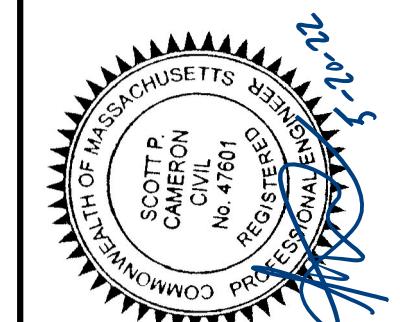
100-YEAR STORM ELEV. = 80.39  
10-YEAR STORM ELEV. = 79.26  
2-YEAR STORM ELEV. = 77.29



REV. I S. I O N S		DATE
NO.	DESCRIPTION	
1	REVISIONS PER PEER REVIEW AND NO.	05-20-2022
	DRAFTED BY: CEM/LNO	CHECKED BY: SPC
	APPROVED BY: SPC	SCALE: AS NOTED
	DATE: APRIL 6, 2022	

**SITE DEVELOPMENT PLANS**  
IN  
METHUEN, MASSACHUSETTS  
501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 30 & 9E)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER LLC

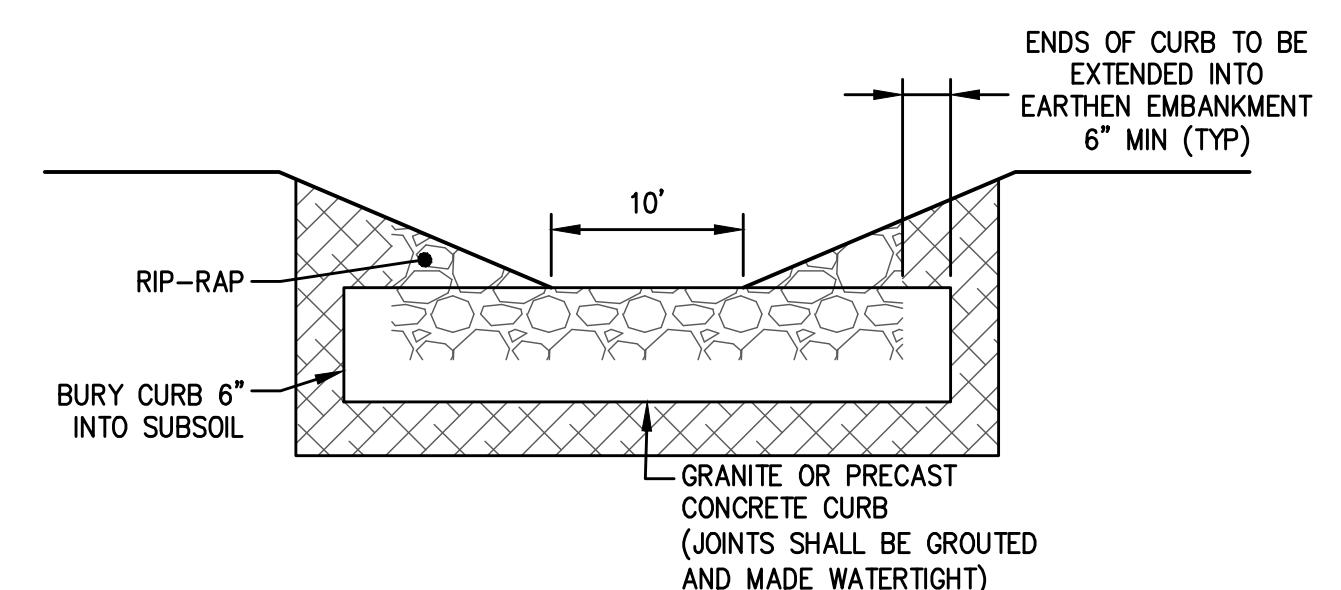
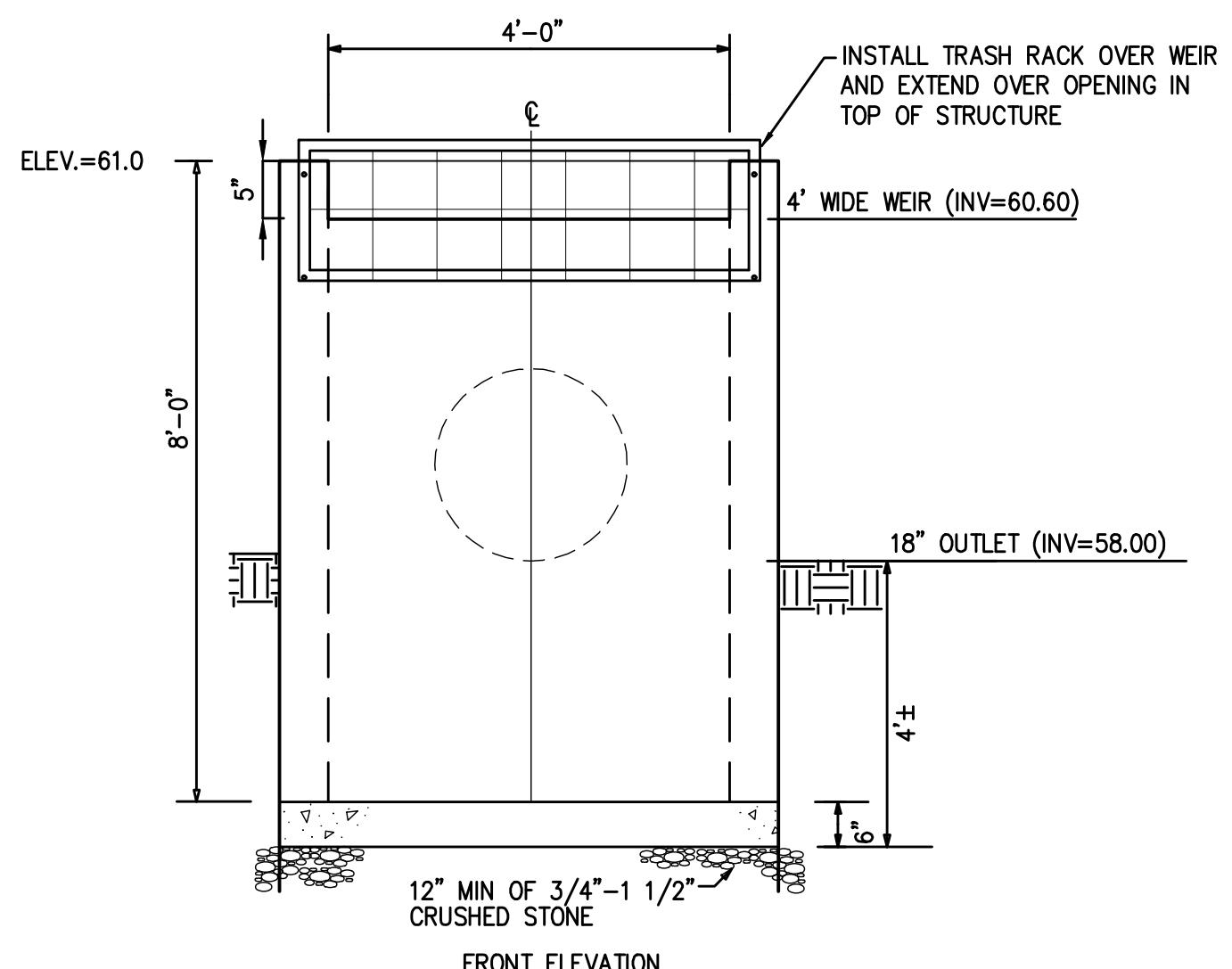
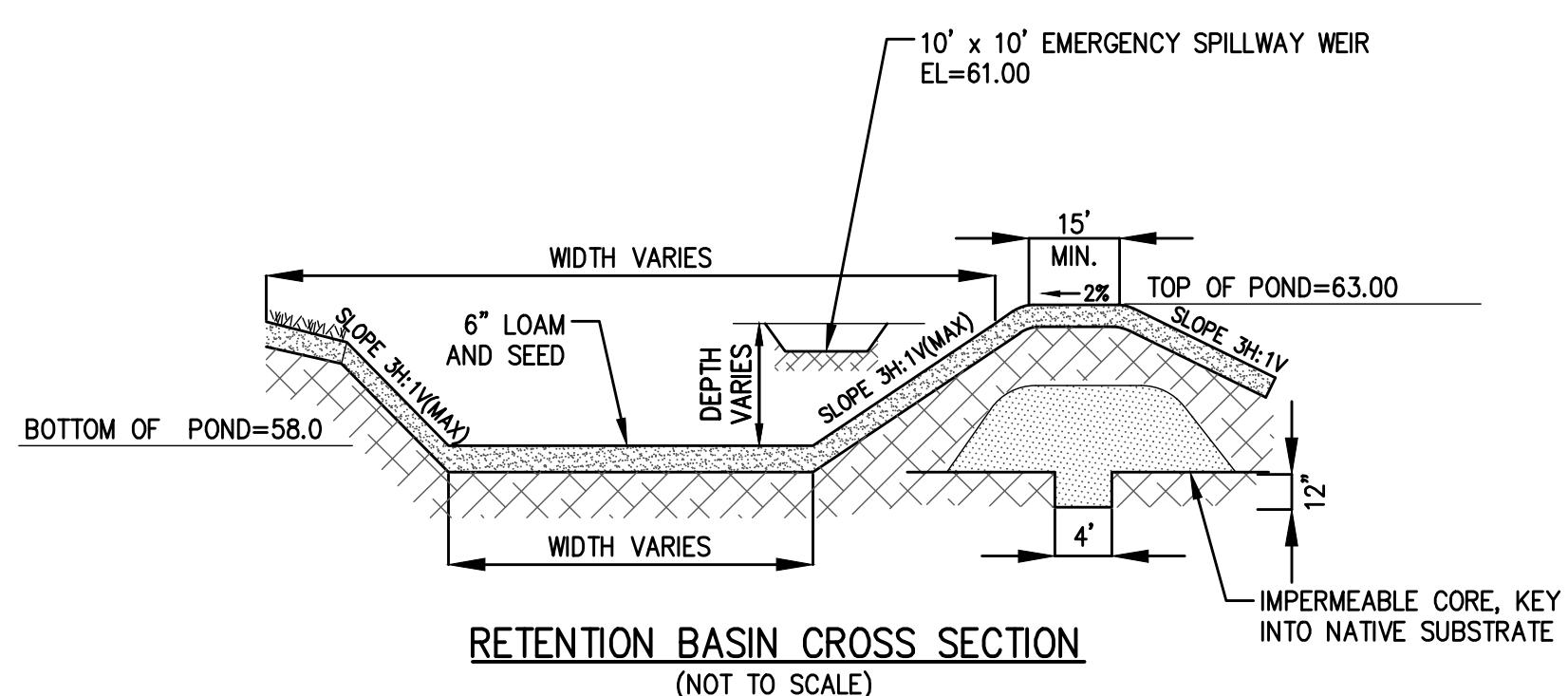
DRAINAGE DETAILS  
DRAWING NO. C-13



CONSTRUCTION INSPECTION NOTE:

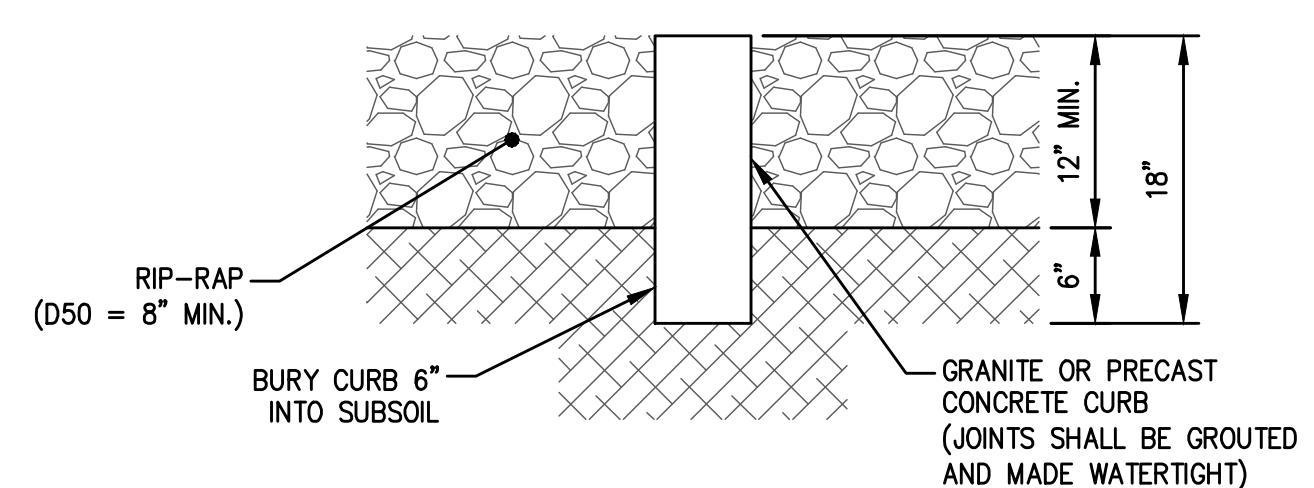
AT LEAST 48-HOURS PRIOR TO FINALIZING BASIN GRADING AND STABILIZATION, CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER AND METHUEN CITY ENGINEER THAT THE BOTTOM OF BASIN BED IS READY FOR INSPECTION. THE BASIN BOTTOM SHOULD BE SCARIFIED, FREE OF BEDROCK AND STONES OVER 6 INCHES DIAMETER.

100-YEAR STORM ELEV. = 60.87  
10-YEAR STORM ELEV. = 60.13  
2-YEAR STORM ELEV. = 58.67



**LOW FLOW CHANNEL**  
(NOT TO SCALE)

**OUTLET CONTROL STRUCTURE (OCS-2)**  
(NOT TO SCALE)

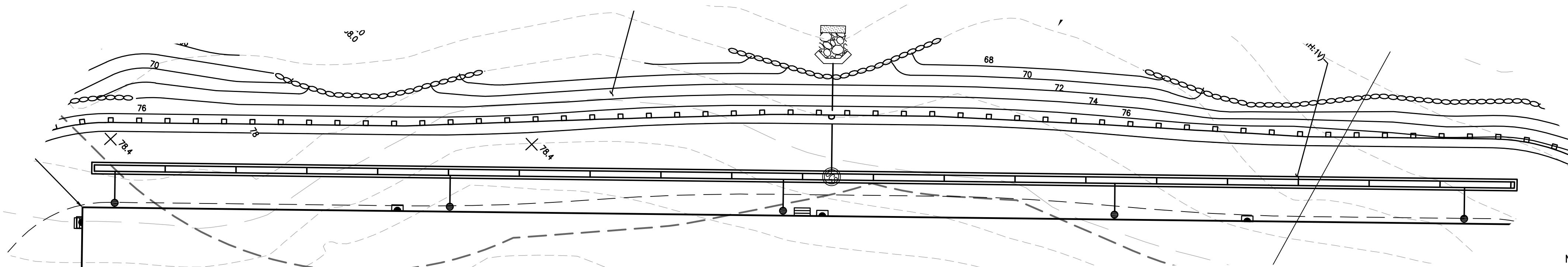


**EMERGENCY SPILLWAY WEIR**  
NOT TO SCALE

S I T E D E V E L O P M E N T P L A N S		REVISIONS	DATE
		NO.	DESCRIPTION
		1	REVISIONS PER PEER REVIEW AND NO. 05-20-2022
			DRAFTED BY: CEM/LNO
			CHEKED BY: SPC
			APPROVED BY: SPC
			SCALE: AS NOTED
			DATE: APRIL 6, 2022

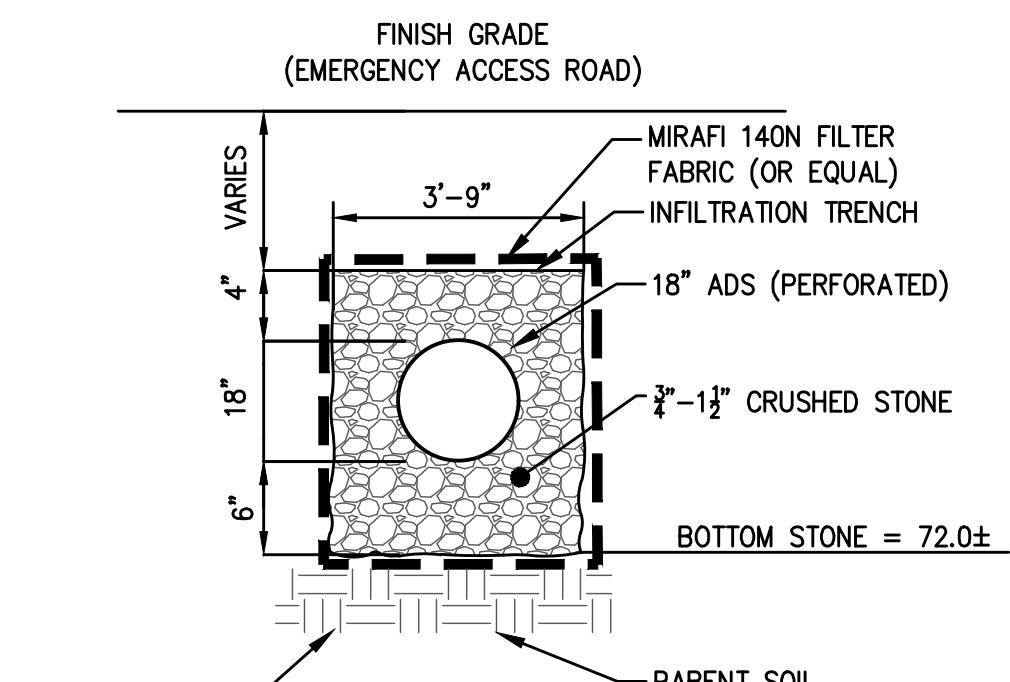
**SITE DEVELOPMENT PLANS**  
**IN METHUEN, MASSACHUSETTS**  
**501 & 600 GRIFFIN BROOK DRIVE**  
(ASSESSOR'S MAP 220, LOTS 30 & 36)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER LLC

DRAINAGE DETAILS	C-14



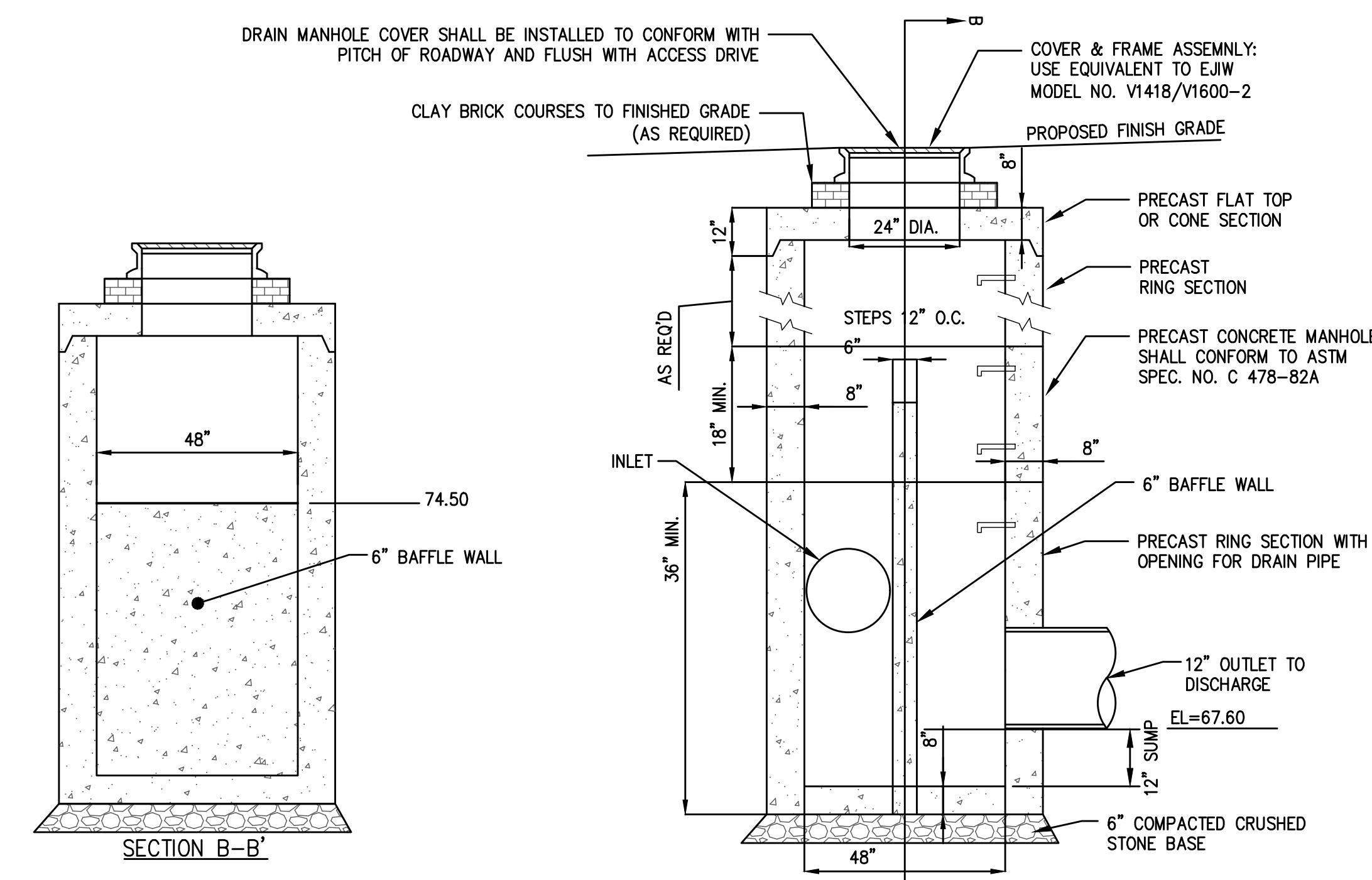
RETENTION BASIN (P4)  
(NOT TO SCALE)

100-YEAR STORM ELEV. = 74.54  
10-YEAR STORM ELEV. = 72.87  
2-YEAR STORM ELEV. = 72.05

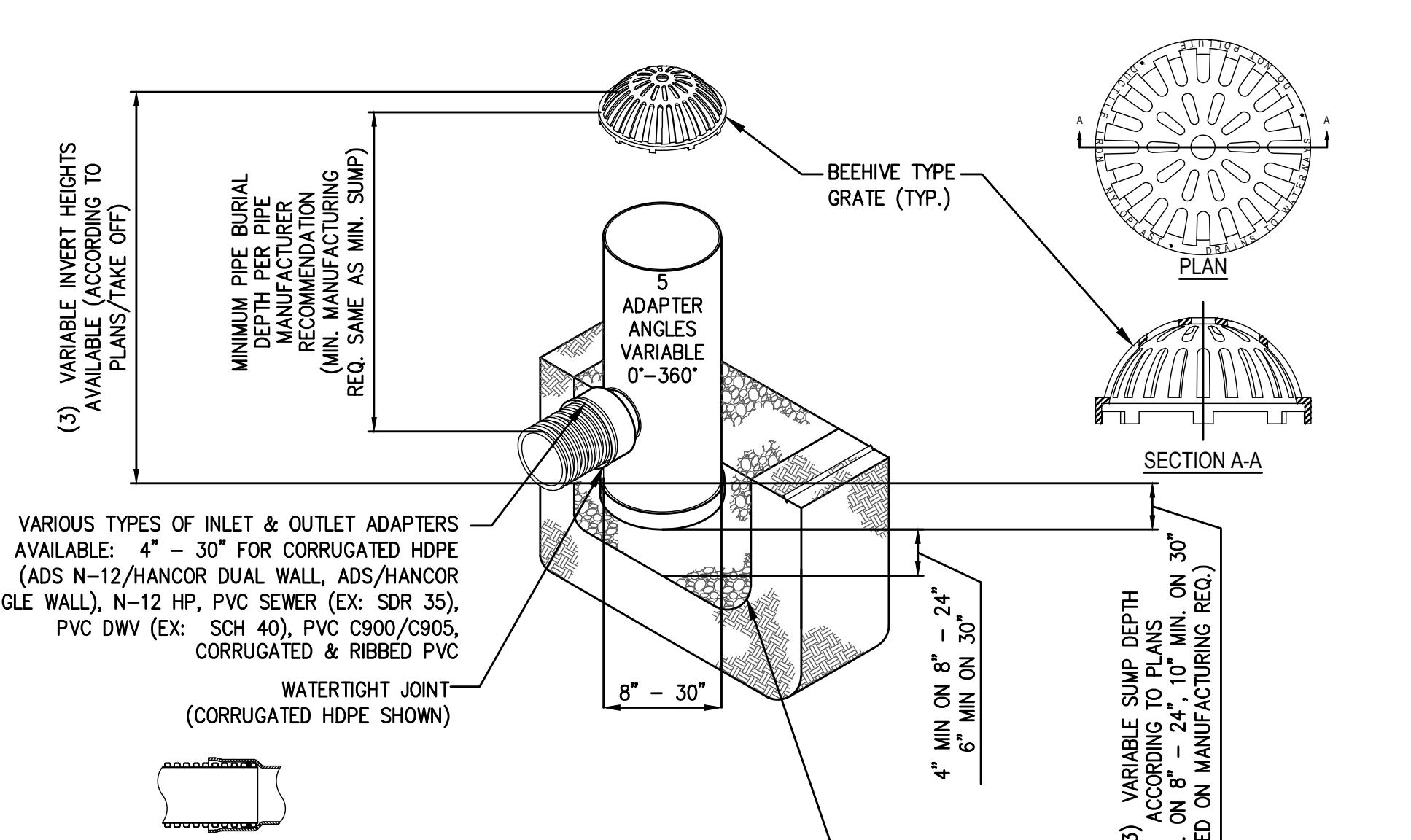


INFILTRATION TRENCH  
(AD-1 TO STONE BED)  
(NOT TO SCALE)

NOTE: REMOVE TOPSOIL & SUBSOIL TO  
PARENT MATERIAL AND REPLACE WITH  
3"-1½" CRUSHED STONE



OUTLET CONTROL STRUCTURE (OCS-4)  
(NOT TO SCALE)



- 1 - 8" - 30" BEEHIVE GRATES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
- 2 - 12" - 30" FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05. 8" & 10" BEEHIVE GRATES FIT DIRECTLY ONTO DRAIN BASINS WITH THE USE OF A PVC BODY TOP. SEE DRAWING NO. 7001-110-045.
- 3 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS. SEE DRAWING NO. 7001-110-065.
- 4 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").
- 5 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360°. SEE DRAWING NO. 7001-110-012.
- 6 - 12" - 30" BEEHIVE GRATES SHALL MEET H-20 LOAD RATING.
- 7 - 8" & 10" BEEHIVE GRATES ARE RATED FOR LIGHT DUTY APPLICATIONS ONLY; NO CONCRETE COLLAR NEEDED FOR LIGHT DUTY RATING.

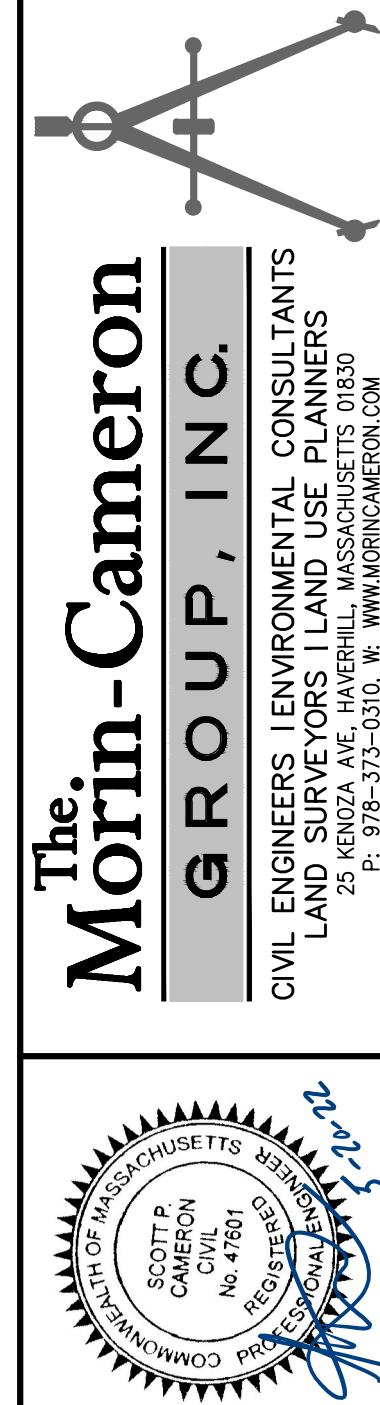
\*NYLOPLAST DRAIN BASIN WITH BEEHIVE GRATE SHOWN.  
APPROVED EQUAL PRODUCT MAY BE USED.

NYLOPLAST AREA DRAIN OR EQUAL  
(NOT TO SCALE)

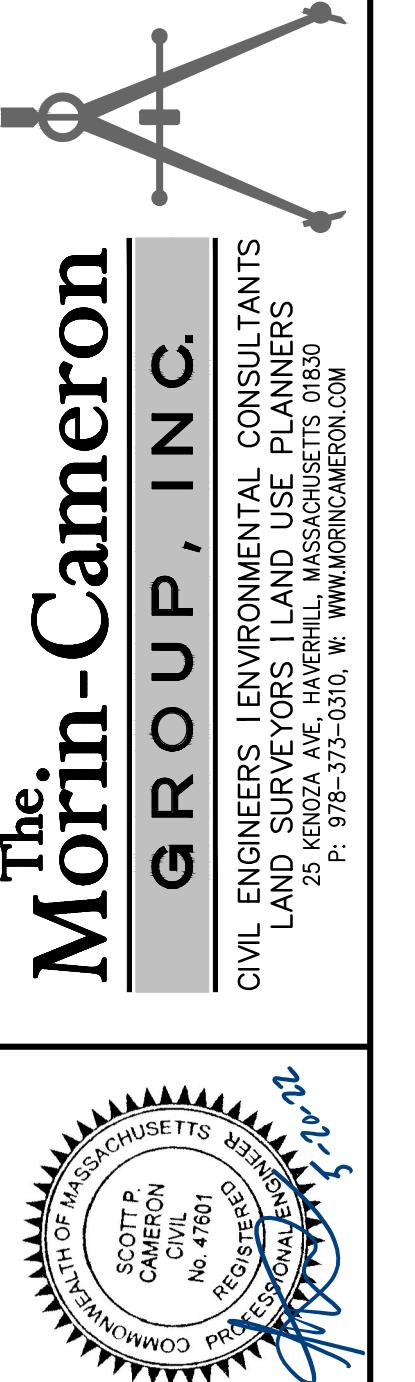
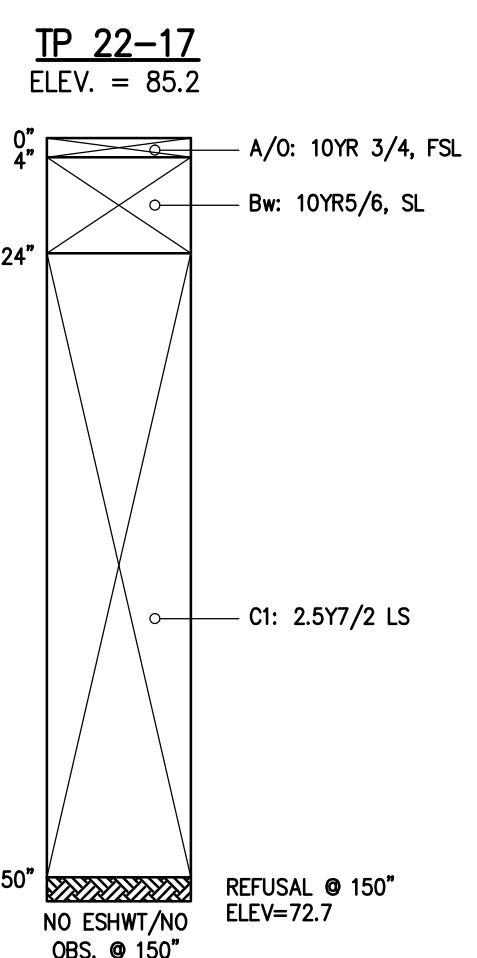
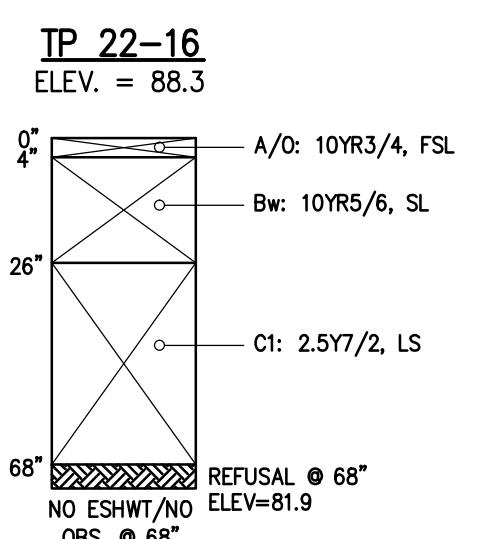
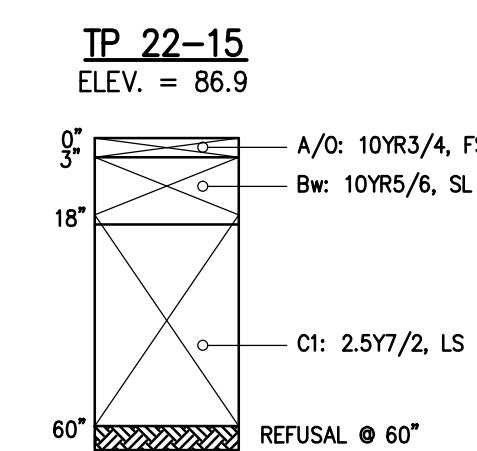
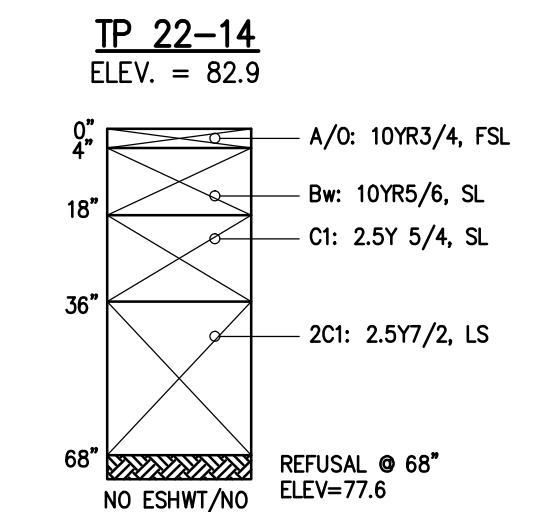
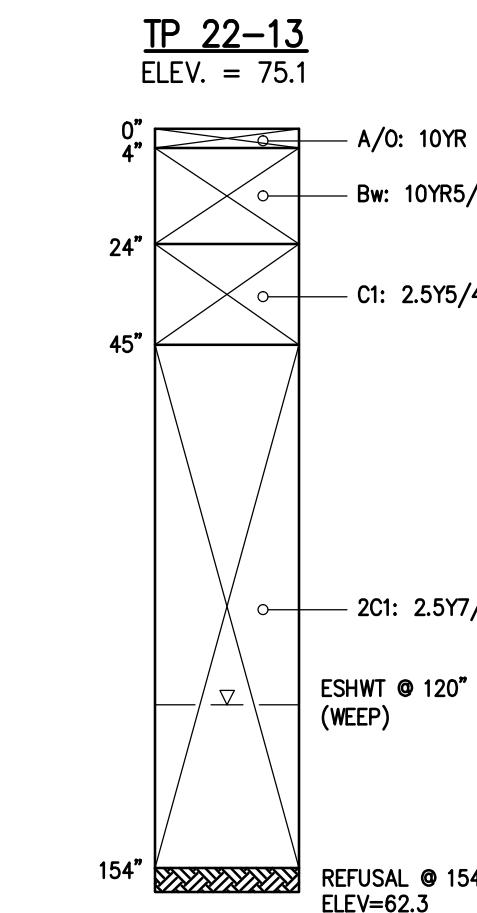
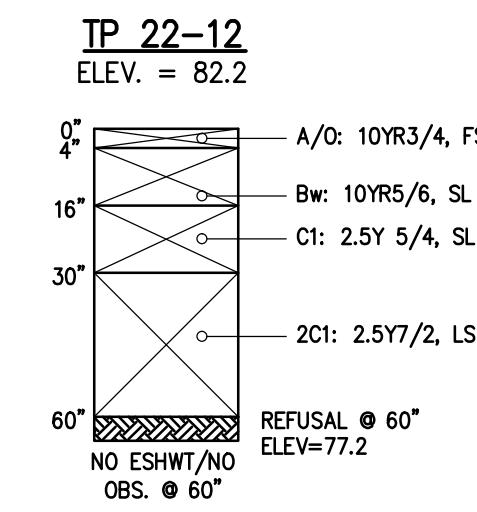
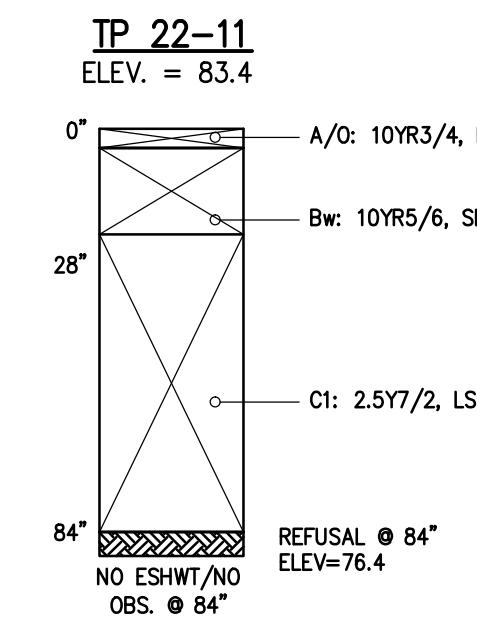
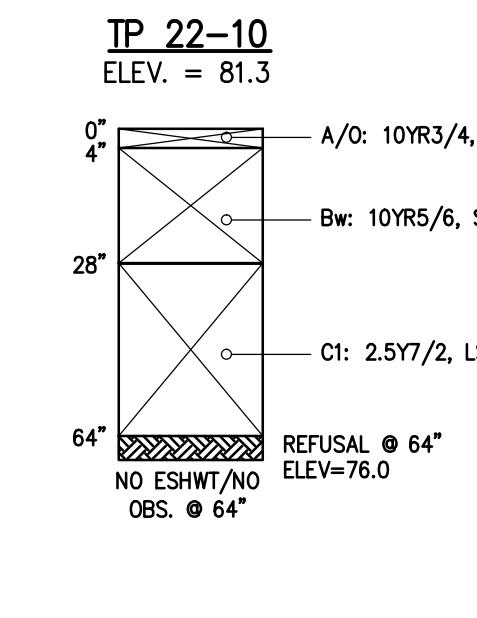
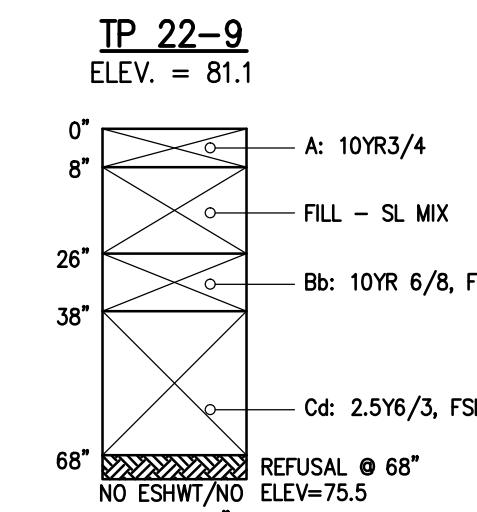
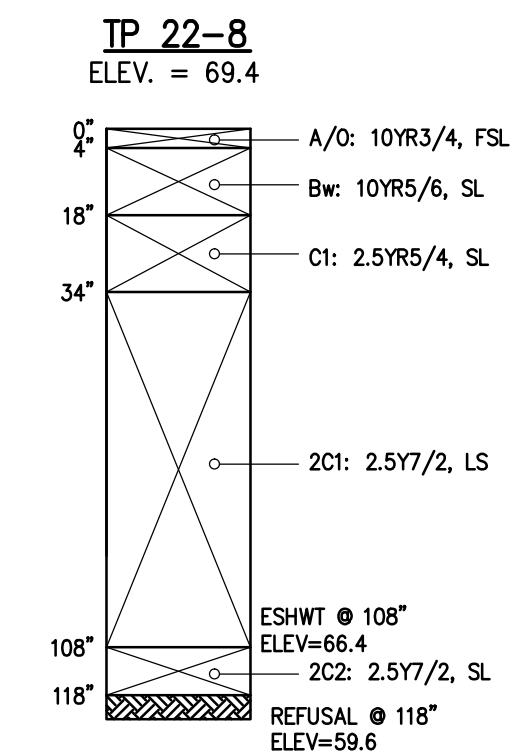
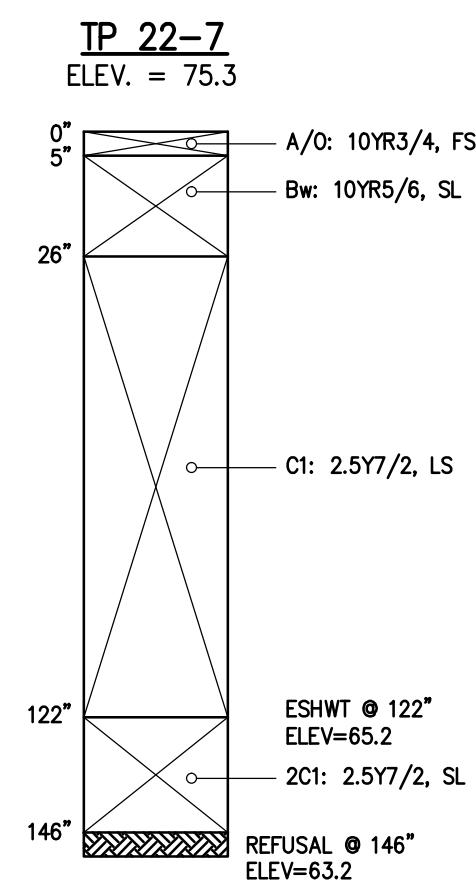
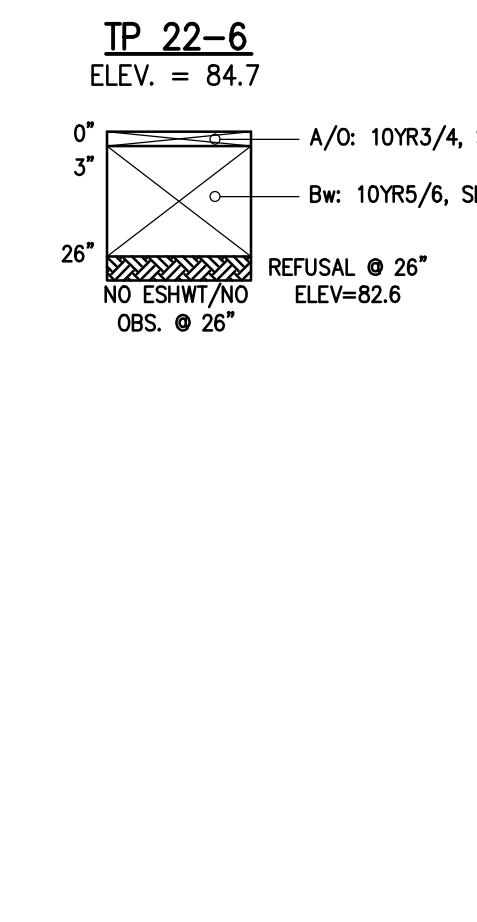
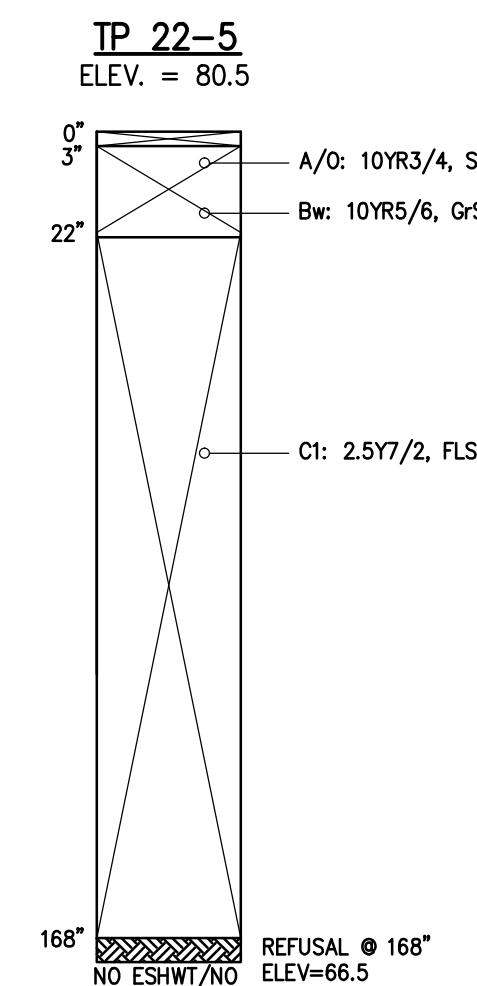
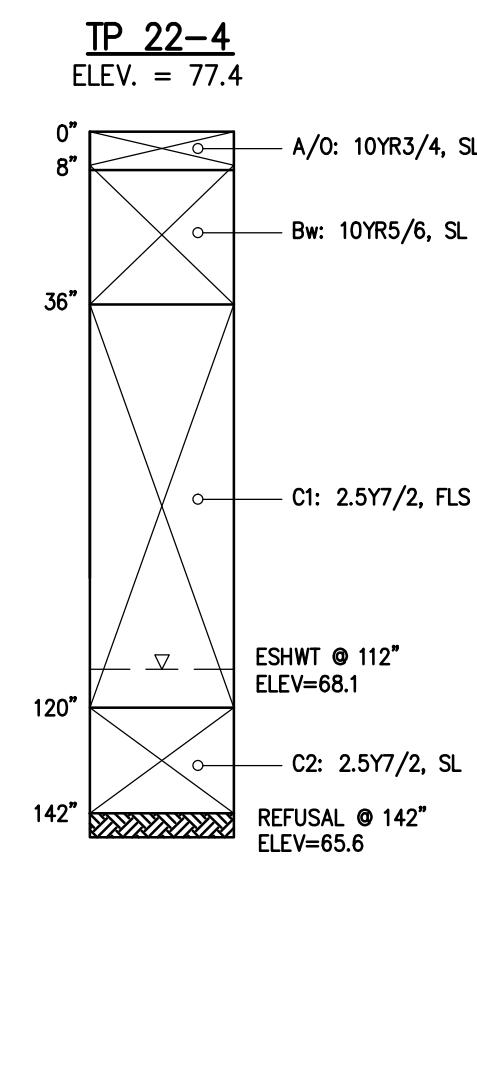
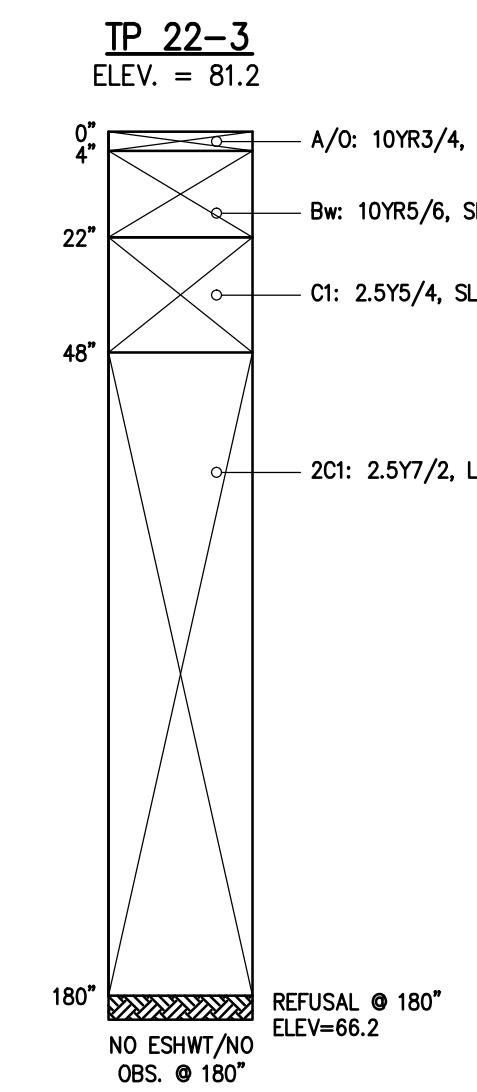
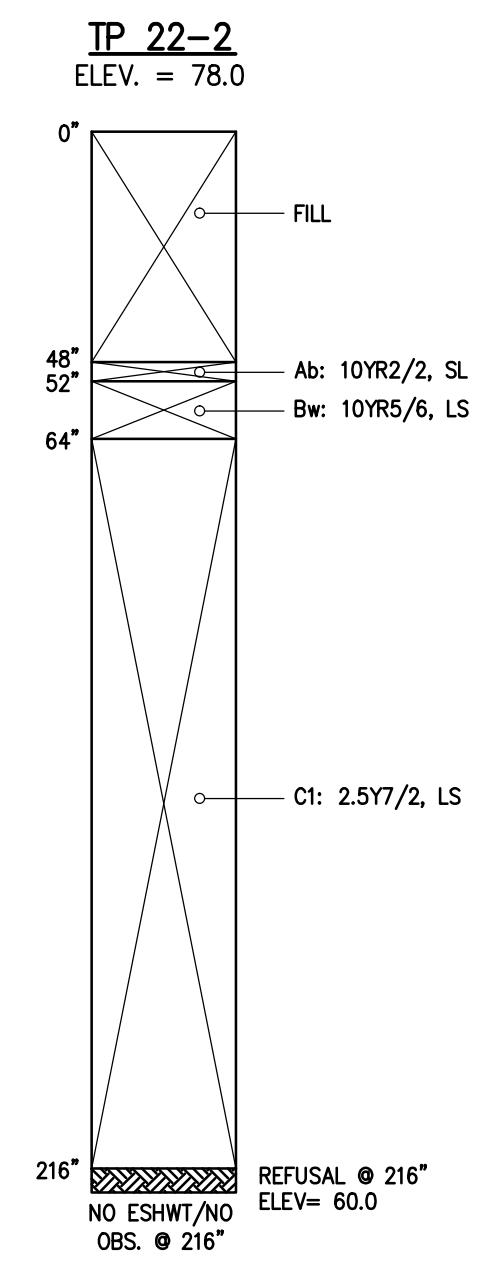
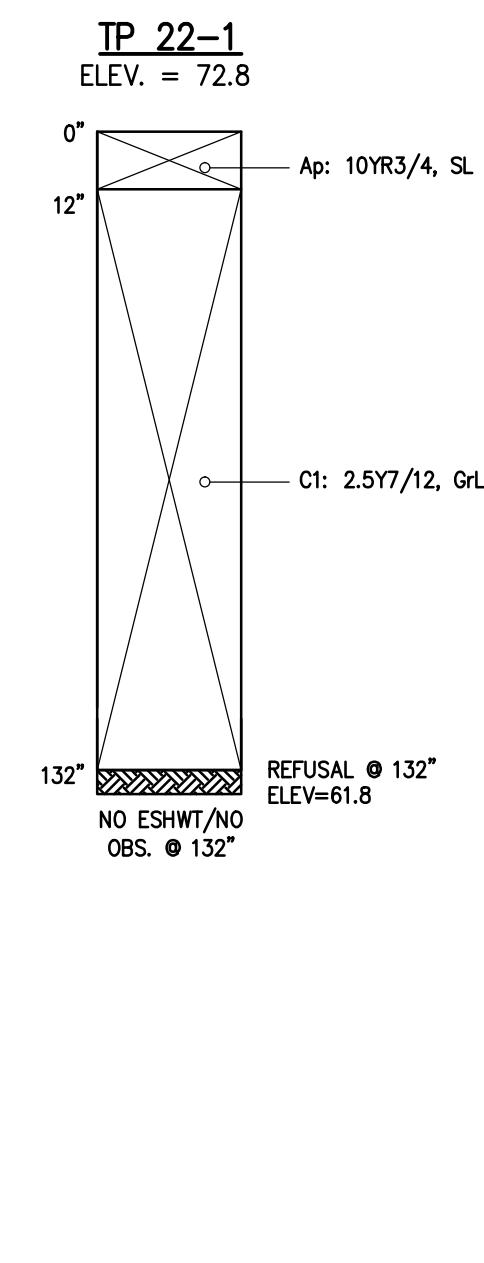
SITE DEVELOPMENT PLANS  
IN  
METHUEN, MASSACHUSETTS  
501 & 600 GRIFFIN BROOK DRIVE  
(ASSESSOR'S MAP 220, LOTS 30 & 36)  
PREPARED FOR:  
GRIFFIN BROOK DRIVE OWNER LLC

DRAWDING NO. C-15  
DRAWDING DETAILS

The Morin-Cameron  
GROUP, INC.  
CIVIL ENGINEERS ENVIRONMENTAL CONSULTANTS  
LAND SURVEYORS LAND USE PLANNERS  
25 KENDOZ AVE, HAZERILL, MASSACHUSETTS 01830  
P: 978-573-0310, W: WWW.MORINCAMERON.COM



**SOIL LOGS**  
 DATE PERFORMED: 02/07/2022 & 02/08/2022  
 PERFORMED BY: WILL SCHKUTA, SE #14030



TEST HOLE LOGS	SITE DEVELOPMENT PLANS		
	NO.	DESCRIPTION	DATE
C-16	501 & 600 GRIFFIN BROOK DRIVE (ASSESSOR'S MAP 220, LOTS 30 & 9E) PREPARED FOR: GRIFFIN BROOK DRIVE OWNER LLC	METHUEN, MASSACHUSETTS 501 & 600 GRIFFIN BROOK DRIVE PREPARED FOR: GRIFFIN BROOK DRIVE OWNER LLC	04/06/2022
DRAWING NO.			



501 & 600 Griffin  
Brook Drive  
Owner LLC  
Methuen, MA

## Civil Engineer

# The Morin-Cameron Group, Inc.

# Landscape Architect



---

Revisions per Peer Review and NOI 05/20/2022

---

## Revision:

Drawn: kc

Checked by: mr

Scale: 1"=40'-0"

---

## Key Plan:

---

Sheet Name:  
**Landscape Plan**

---

Project No.:  
**22-02**

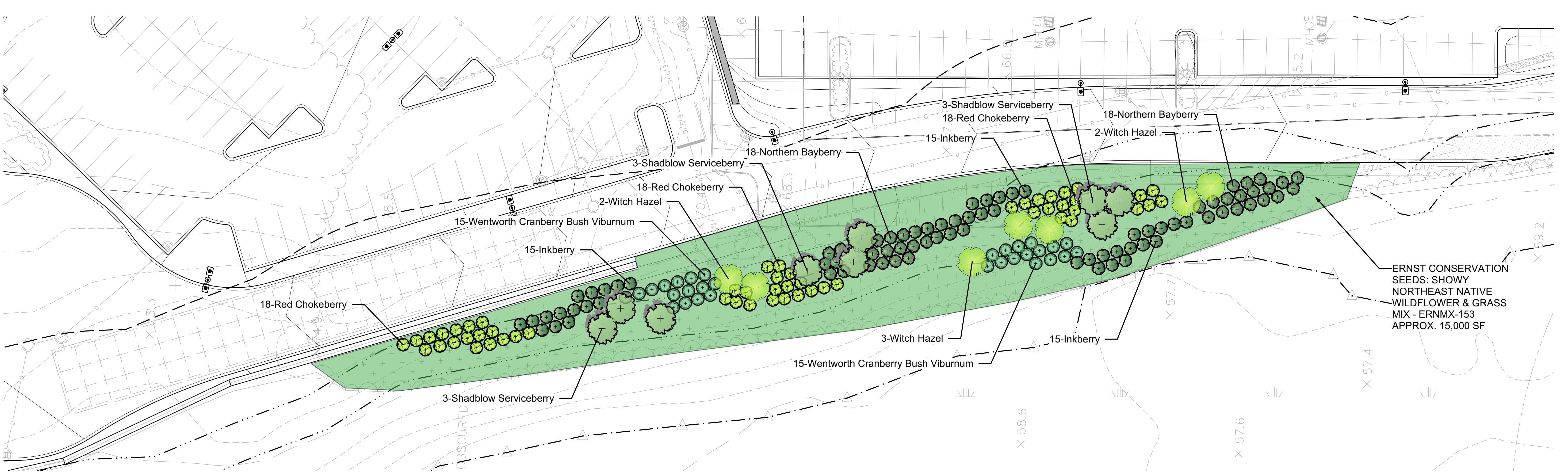
---

Issue Date:  
04/06/2022

---

Sheet No. :

110



501 & 600 Griffin  
Brook Drive  
Owner LLC  
Methuen, MA

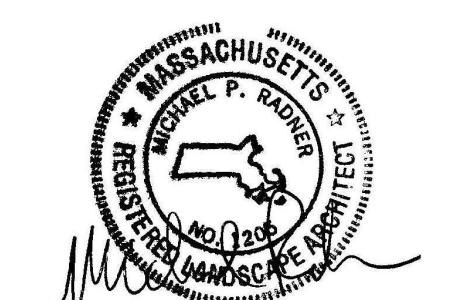
Civil Engineer

The Morin-Cameron Group, Inc.  
25 Kenoza Avenue  
Haverhill, MA

Landscape Architect



Radner Design  
Associates, Inc.  
3 Allied Drive, Suite 303  
Dedham, MA 02026  
508.736.6144  
[www.RadnerDesign.com](http://www.RadnerDesign.com)



Ernst Conservation Seeds  
8884 Mercer Pike  
Meadville, PA 16335  
(800) 873-3321 Fax (814) 336-5191  
[www.ernstseed.com](http://www.ernstseed.com)

Date: May 17, 2022

#### Native Steep Slope Mix w/Annual Ryegrass - ERNMX-181

Botanical Name	Common Name
31.10 % <i>Sorghastrum nutans</i> , NY4 Ecotype	Indiangrass, NY4 Ecotype
20.00 % <i>Lolium multiflorum</i>	Annual Ryegrass
14.00 % <i>Andropogon gerardii</i> , 'Niagara'	Big Bluestem, 'Niagara'
10.00 % <i>Elymus canadensis</i>	Canada Wildrye
7.00 % <i>Elymus virginicus</i> , Madison-NY Ecotype	Virginia Wildrye, Madison-NY Ecotype
4.00 % <i>Agrostis perennans</i> , Albany Pine Bush-NY Ecotype	Autumn Bentgrass, Albany Pine Bush-NY Ecotype
4.00 % <i>Panicum virgatum</i> , 'Shawnee'	Switchgrass, 'Shawnee'
3.00 % <i>Panicum clandestinum</i> , Tioga	Deer Tongue, Tioga
1.50 % <i>Echinacea purpurea</i>	Purple Coneflower
1.30 % <i>Chamaecrista fasciata</i> , PA Ecotype	Partridge Pea, PA Ecotype
1.20 % <i>Helopsis helianthoides</i> , PA Ecotype	Oxeye Sunflower, PA Ecotype
1.00 % <i>Coreopsis lanceolata</i>	Lanceleaf Coreopsis
1.00 % <i>Rudbeckia hirta</i>	Black-eyed Susan
0.30 % <i>Monarda fistulosa</i> , Fort Indiantown Gap-PA Ecotype	Wild Bergamot, Fort Indiantown Gap-PA Ecotype
0.20 % <i>Asclepias syriaca</i>	Common Milkweed
0.20 % <i>Solidago rugosa</i> , PA Ecotype	Wrinkleleaf Goldenrod, PA Ecotype
0.10 % <i>Aster lateriflorus</i>	Calico Aster
0.10 % <i>Aster pilosus</i> , PA Ecotype	Heath Aster, PA Ecotype
<b>100.00 %</b>	

Seeding Rate: 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate:** 60 lb per acre, or 1.5 lb per 1,000 sq ft

Erosion Control & Revegetation

Stormwater Management

**100.00 %**

**Seeding Rate**

Civil Engineer

The Morin-Cameron Group, Inc.  
25 Kenoza Avenue  
Haverhill, MA

Landscape Architect



Radner Design  
Associates, Inc.

3 Allied Drive, Suite 303  
Dedham, MA 02026  
508.736.6144  
www.RadnerDesign.com



Revisions per Peer Review and NOI 05/20/2022  
Revision:

Drawn: kc

Checked by: mr

Scale: AS SHOWN

Key Plan:

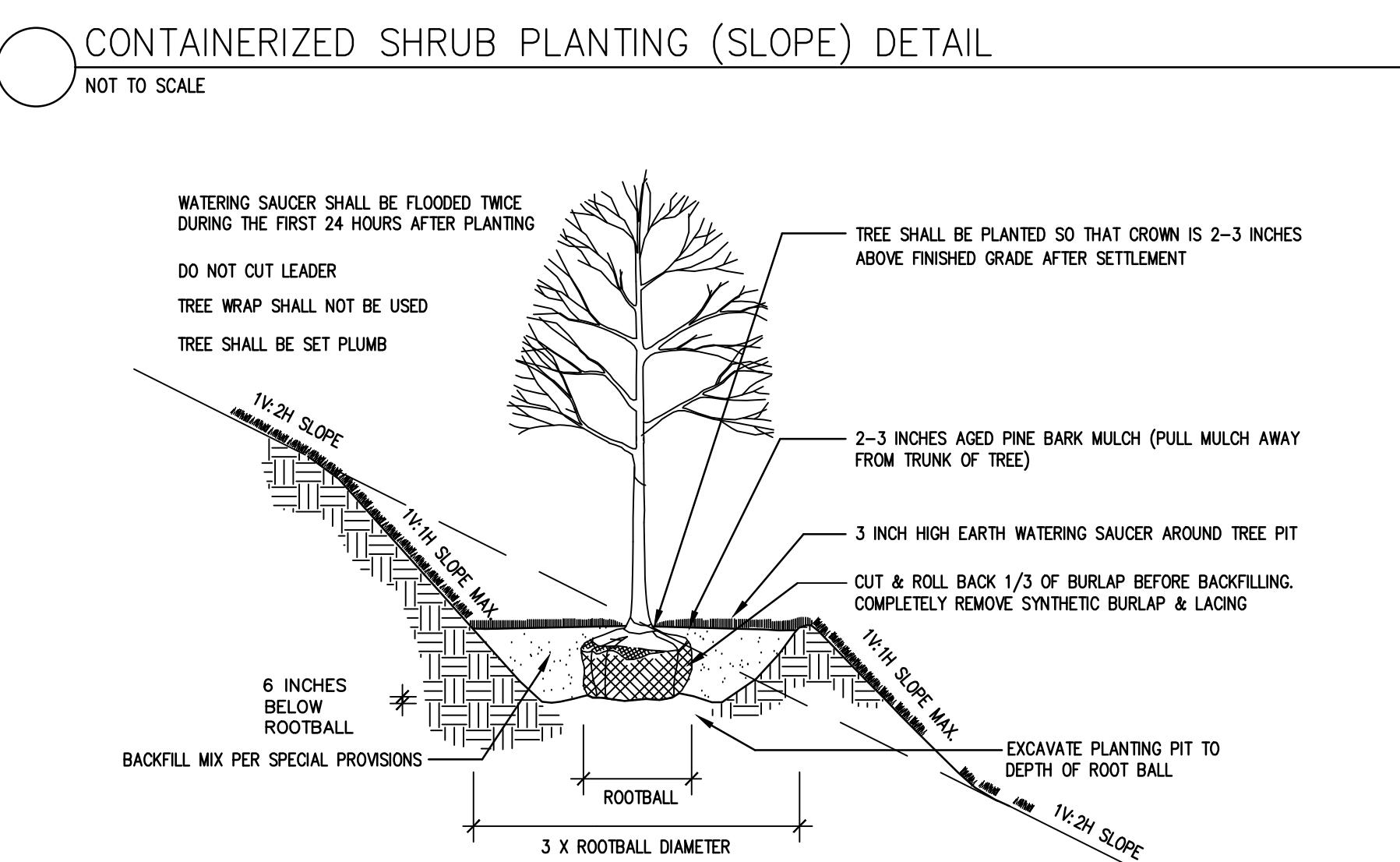
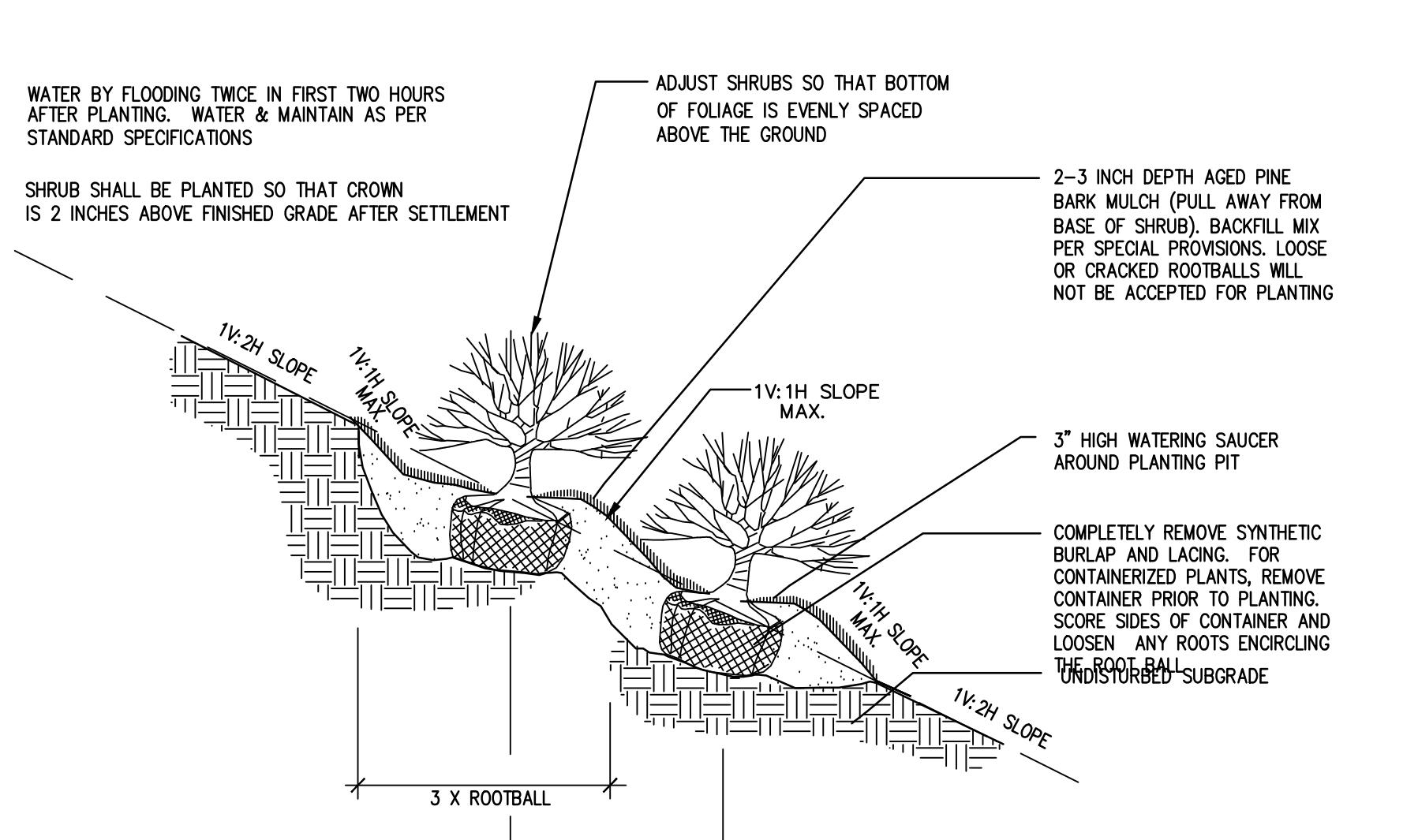
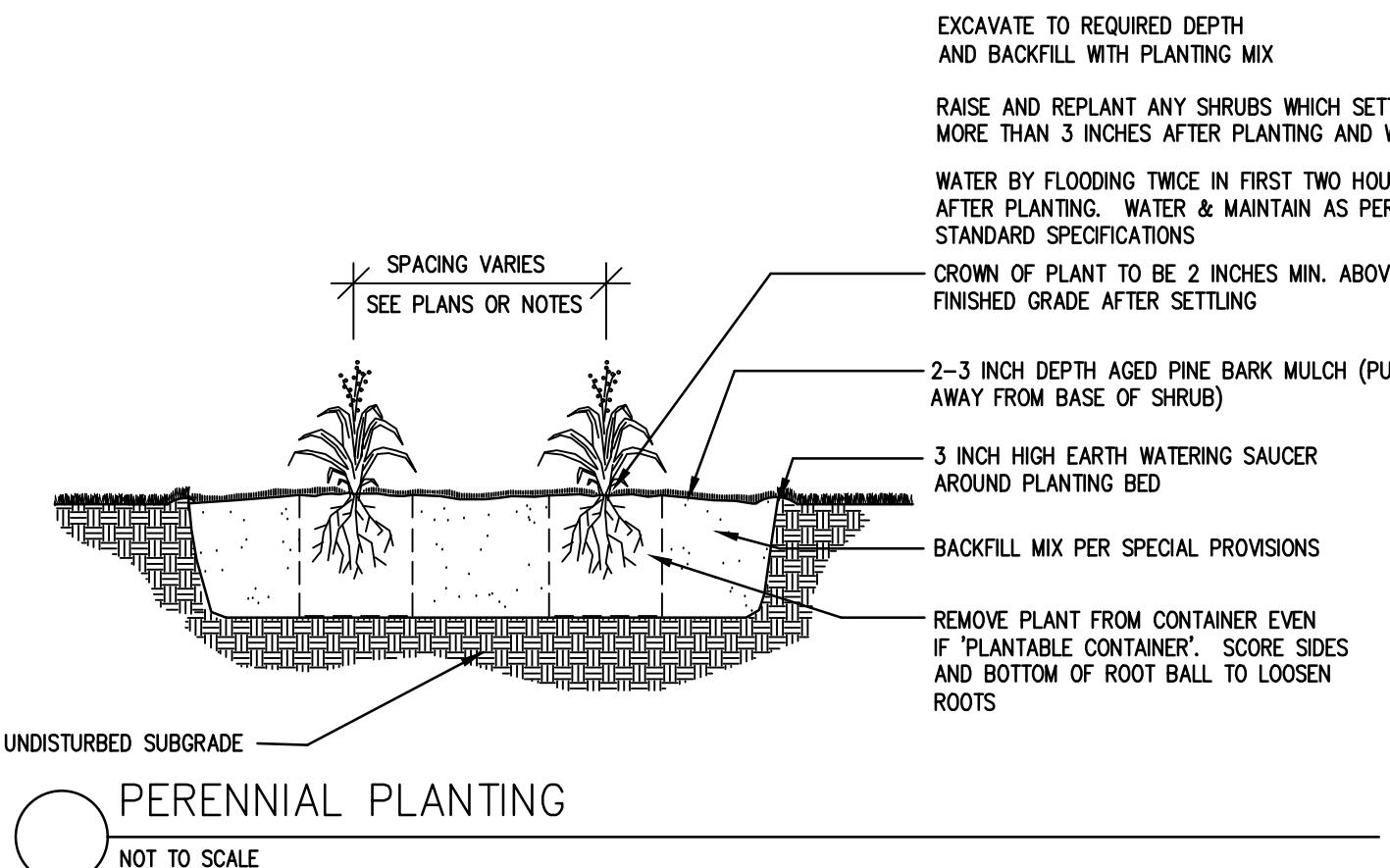
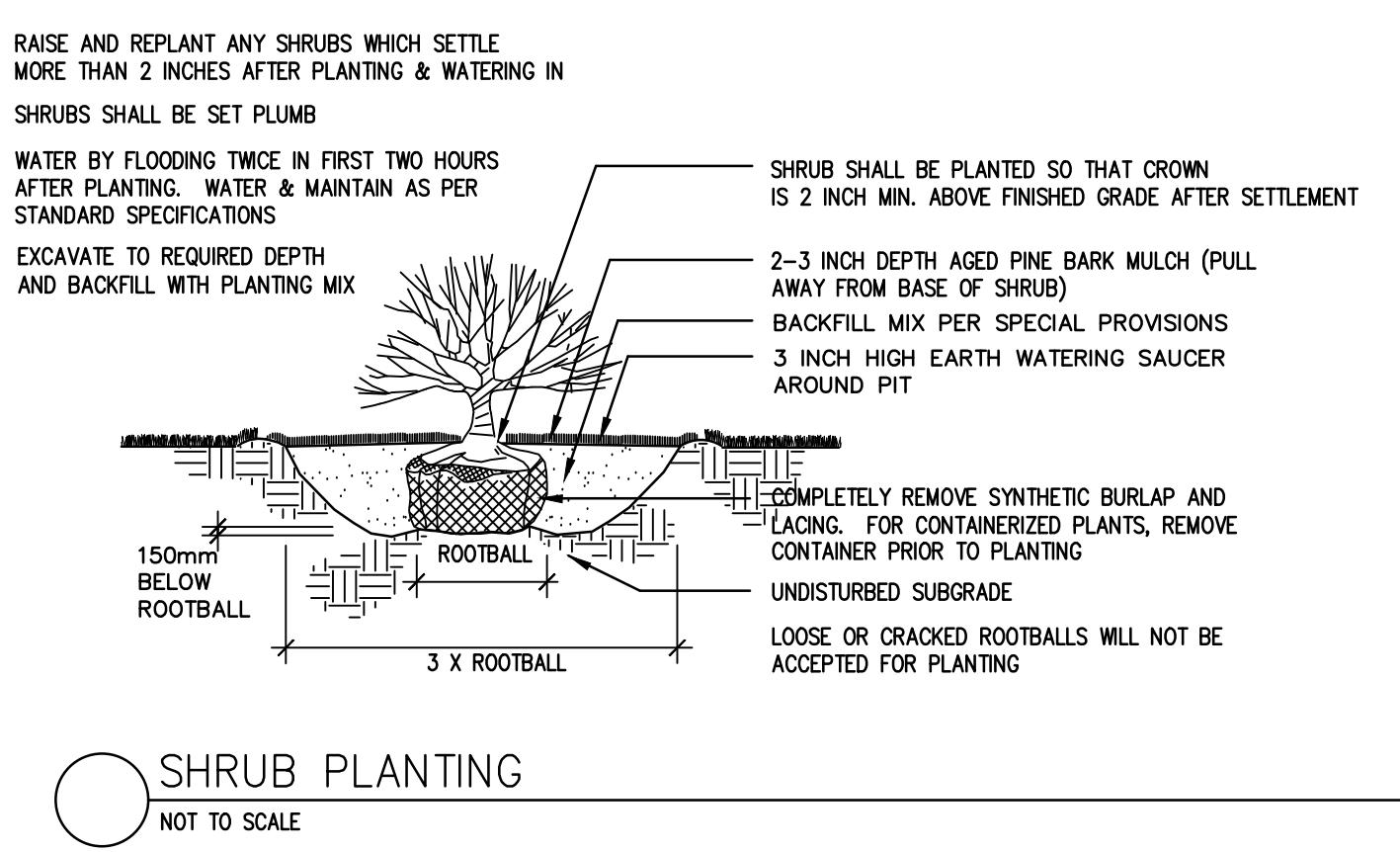
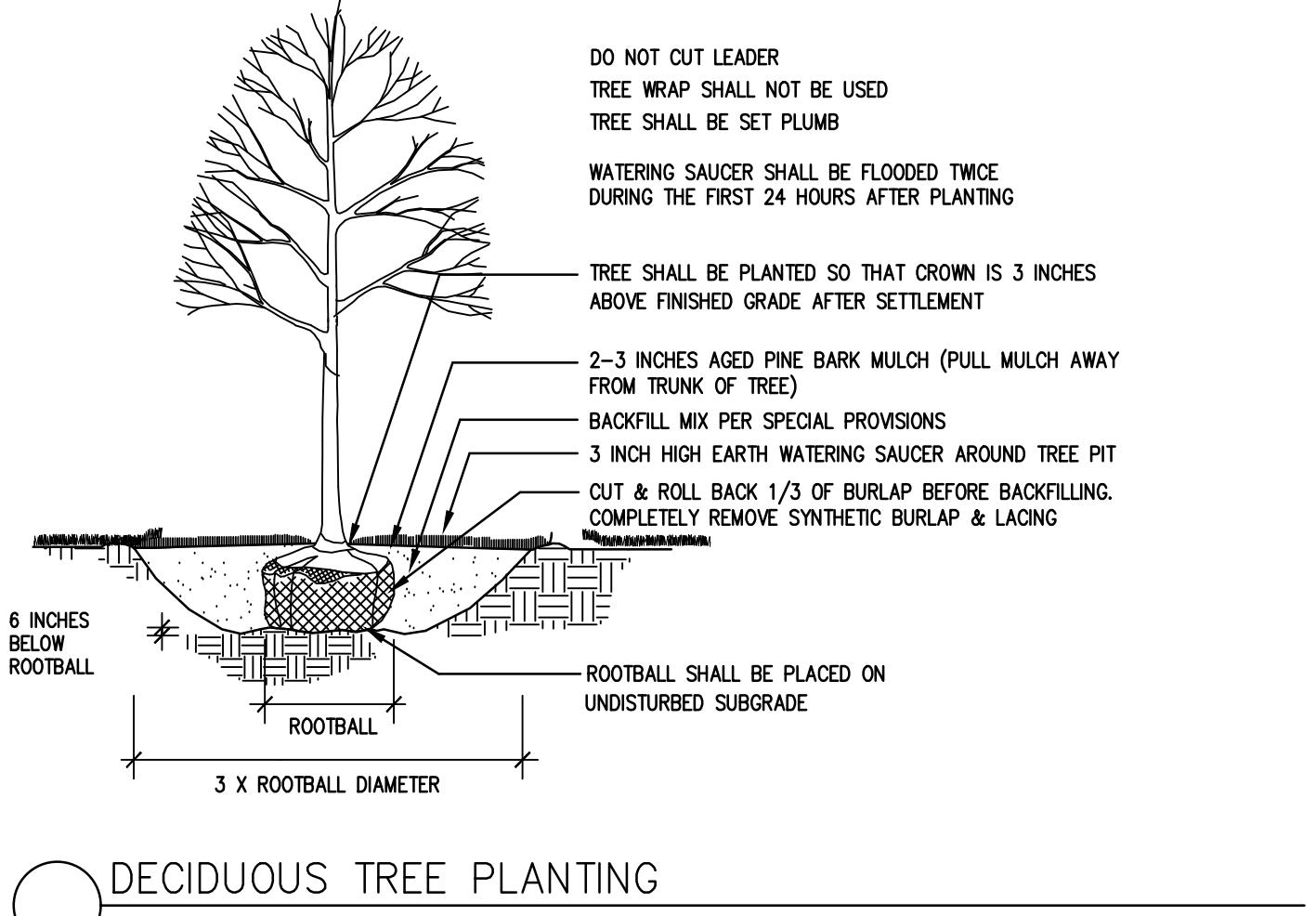
Sheet Name:  
Landscape Details,  
Planting Notes  
and Planting Schedule

Project No.:  
22-02

Issue Date:  
04/06/2022

Sheet No.:

L1.2



**PLANTING NOTES**

1. FURNISH AND PLANT PLANTS AS SHOWN. CONTRACTOR SHALL BE RESPONSIBLE FOR QUANTITY OF SHRUBS GRAPHICALLY SHOWN ON PLANS. IF THERE IS A DISCREPANCY BETWEEN PLANT LIST QUANTITIES AND GRAPHICS, THE GRAPHIC SHALL TAKE PRECEDENCE.
2. PRIOR TO THE START OF EXCAVATION FOR THE PROJECT, BOTH ON AND OFF THE SITE, THE CONTRACTOR SHALL NOTIFY DISGAF AND BE PROVIDED A DISCREPANCY REPORT. EXCAVATION SHALL BE STOPPED AND MAINTAINED UNTIL APPROVED BY DISGAF.
3. CONTRACTOR SHALL BEGIN 90 DAY MAINTENANCE PERIOD IMMEDIATELY UPON PLANTING AND WILL CONTINUE UNTIL FINAL ACCEPTANCE.
4. CONTRACTOR SHALL VERIFY TREE REMOVALS WITH LANDSCAPE ARCHITECT PRIOR TO CONSTRUCTION START.
5. CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AWAY FROM BUILDING FOUNDATIONS, STRUCTURES, AND PLANTING BEDS.
6. MAXIMUM SLOPE WITHIN DISTURBED AREAS SHALL NOT EXCEED 3:1, UNLESS OTHERWISE NOTED.
7. PLANTS SHALL BEAR THE SAME RELATIONSHIP TO FINISH GRADE AS TO ORIGINAL GRADES BEFORE DIGGING.
8. PLANT MATERIALS SHALL CONFORM TO THE SPECIFICATIONS ESTABLISHED BY "THE AMERICAN STANDARD FOR NURSERY STOCK", PUBLISHED BY THE AMERICAN SOCIETY OF NURSERYMEN AND GARDENERS.
9. PLANTS TO BE BALED IN BURLAP OR CONTAINERIZED.
10. MULCH FOR PLANTED AREAS TO BE AGED PINE BARK: PARTIALLY DECOMPOSED, DARK BROWN IN COLOR AND FREE OF WOOD CHIPS THICKER THAN 1/4 INCH.
11. PLANTING SOIL MIX: LOAM THOROUGHLY INCORPORATED WITH ROTTED MANURE PROPORTIONED 5 C.Y. TO 1 C.Y. OR EQUIVALENT. USE OF PEAT MOSS IS PROHIBITED.
12. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE PLANT MATERIALS FOR ONE (1) FULL YEAR FROM DATE OF ACCEPTANCE. REQUEST THE LANDSCAPE ARCHITECT TO PROVIDE A WRITTEN LETTER OF ACCEPTANCE UPON COMPLETION OF EACH PHASE.
13. PLANTS SHALL BE PLANTED IN A PROPERLY PREPARED SOIL.
14. LANDSCAPE ARCHITECT TO FLAG TREES TO BE TRANSPLANTED PRIOR TO CONSTRUCTION START.
15. AREAS OF THE SITE WHICH HAVE BEEN DISTURBED AND NOT OTHERWISE DEVELOPED SHALL BE LOADED WITH TOPSOIL TO A MINIMUM DEPTH OF 6", AND SEEDED WITH A MIX CONSISTING OF 40% PERENNIAL RYE GRASS; 30% CHEWINGS FESCUE; 30% KENTUCKY BLUEGRASS.
16. SCREENED IMAGES SHOW EXISTING CONDITIONS. WHERE EXISTING CONDITIONS LIE UNDER OR ARE IMPINGED UPON BY PROPOSED BUILDINGS AND/OR SITE ELEMENTS, THE EXISTING CONDITION WILL BE REMOVED, ABANDONED AND/OR CAPPED OR DEMOLISHED AS REQUIRED.
17. PROVIDE AUTOMATIC IRRIGATION SYSTEM FOR PLANTINGS AND LAWN AREAS UNLESS OTHERWISE NOTED. SUBMIT DESIGN PLANS AND PROVIDE LITERATURE PER THE SPECIFICATIONS.
18. THE CONTRACTOR SHALL NOT PLANT ANY SPECIES WITHOUT AUTHORIZATION BY THE LANDSCAPE ARCHITECT.
19. NO PLANTING SHALL BE INSTALLED BEFORE ACCEPTANCE OF ROUGH GRADING.
20. PLANTS TO BE THOROUGHLY WATERED AFTER INSTALLATION, AT LEAST TWICE WITHIN THE FIRST 24 HOURS.
21. PLANT SELECTION SUBJECT TO CHANGE DEPENDING ON PLANT AVAILABILITY AT THE TIME OF PLANTING, WITH APPROVAL OF LANDSCAPE ARCHITECT OR WETLAND SCIENTIST ONLY.

Suggested Plant Palette			
Latin Name	Common Name	Size	Remarks
<b>Deciduous Shade Trees</b>			
<i>Acer rubrum 'October Glory'</i>	October Glory Red Maple	3-3.5" Cal.	B&B, full, round, symmetrical, high-branched
<i>Celtis occidentalis</i>	Hackberry	3-3.5" Cal.	B&B, full, round, symmetrical, high-branched
<i>Gleditsia triacanthos inermis 'Skyline'</i>	Skyline Honeylocust	3-3.5" Cal.	B&B, full, round, symmetrical, high-branched
<i>Ostrya virginiana</i>	American Hop hornbeam	3-3.5" Cal.	B&B, full, round, symmetrical, high-branched
<i>Quercus palustris 'Pacific Brilliance'</i>	Pacific Brilliance Pin Oak	3-3.5" Cal.	B&B, full, round, symmetrical, high-branched
<b>Ornamental Flowering Trees</b>			
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	8-10' Ht.	B&B, full, round, multi-stem
<i>Cercis canadensis</i>	Eastern Redbud	8-10' Ht.	B&B, full, round, multi-stem
<i>Cornus florida</i>	Flowering Dogwood	8-10' Ht.	B&B, full, round, multi-stem
<i>Crataegus phaenopyrum</i>	Washington Hawthorn	8-10' Ht.	B&B, full, round, multi-stem
<i>Hamamelis virginiana</i>	Witch Hazel	8-10' Ht.	B&B, full, round, multi-stem
<b>Shrubs</b>			
<i>Aronia arbutifolia</i>	Red Chokeberry	3-4' Ht.	Container
<i>Clethra alnifolia</i>	Summersweet	3-4' Ht.	Container
<i>Forsythia x intermedia</i>	Border Forsythia	3-4' Ht.	Container
<i>Hibiscus syriacus</i>	Rose of Sharon	3-4' Ht.	Container
<i>Hydrangea macrophylla 'All Summer Beauty'</i>	All Summer Beauty Hydrangea	7 Gal.	Container
<i>Hydrangea macrophylla 'Nikko Blue'</i>	Nikko Hydrangea	7 Gal.	Container
<i>Ilex crenata</i>	Japanese Holly	5 Gal.	Container
<i>Ilex glabra</i>	Inkberry Holly	5 Gal.	Container
<i>Juniperus chinensis 'Hetzii Columnaris'</i>	Upright Hetz Juniper	4-5' Ht.	Container
<i>Juniperus chinensis 'Seagreen'</i>	Seagreen Juniper	12-18" Spr.	Container
<i>Juniperus horizontalis 'Blue Chip'</i>	Blue Chip Juniper	12-18" Spr.	Container
<i>Myrica pensylvanica</i>	Northern Bayberry	24-30" Ht.	Container
<i>Physocarpus opulifolium 'Diabolo'</i>	Ninebark	3-4' Ht.	Container
<i>Potentilla fruticosa 'Abbotswood'</i>	Abbotswood Potentilla	12-18" Ht.	Container
<i>Rosa rugosa</i>	Beech Rose	5 Gal.	Container
<i>Spiraea betulifolia</i>	Birchleaf Spirea	12-18" Ht.	Container
<i>Syringa vulgaris</i>	Lilac	5 Gal.	Container
<i>Viburnum trilobum</i>	American Cranberrybush	7 Gal.	Container
<b>Perennials, Grasses and Groundcovers</b>			
<i>Arctostaphylos uva-ursi</i>	Bearberry	1 Gal.	Container
<i>Asclepias tuberosa</i>	Butterfly Weed	1 Gal.	Container
<i>Aster novae-angliae</i>	New England Aster	1 Gal.	Container
<i>Carex pennsylvanica</i>	Oak Sedge	1 Gal.	Container
<i>Coreopsis verticillata 'Moonbeam'</i>	Moonbeam Coreopsis	1 Gal.	Container
<i>Echinacea purpurea 'Magnus'</i>	Magnus Coneflower	1 Gal.	Container
<i>Gaultheria procumbens</i>	Eastern Teaberry	1 Gal.	Container
<i>Heucherella x 'Pardon Me'</i>	Pardon Me Daylily	1 Gal.	Container
<i>Heucherella x 'Stella de Oro'</i>	Stella O'Doro Daylily	1 Gal.	Container
<i>Liatris spicata 'Kobold'</i>	Kobolt Blazing Star	1 Gal.	Container
<i>Liriope muscari 'Variegata'</i>	Variegated Lilyturf	1 Gal.	Container
<i>Negeta x faassenii 'Walker's Low'</i>	Walker's Low Catmint	1 Gal.	Container
<i>Panicum virgatum 'Shenandoah'</i>	Shenandoah Switch Grass	1 Gal.	Container
<i>Pennisetum alopecuroides</i>	Fountain Grass	1 Gal.	Container
<i>Phlox subulata</i>	Moss Phlox	1 Gal.	Container
<i>Rudbeckia 'American Gold Rush'</i>	American Gold Rush Black-Eyed Susan	1 Gal.	Container
<i>Sedum 'Autumn Joy'</i>	Autumn Joy Stonecrop	1 Gal.	Container

Buffer Zone Restoration, Slope Stabilization Planting and Stormwater Basins			
Latin Name	Common Name	Size	Remarks
<b>Ornamental Flowering Trees</b>			
<i>Amelanchier canadensis</i>	Shadblow Serviceberry	6-8'	BSB, multitrunk
<i>Hamamelis virginiana</i>	Witch Hazel	6-8'	BSB, multitrunk
<b>Shrubs</b>			
<i>Aronia arbutifolia</i>	Red Chokeberry	7 Gal.	Container
<i>Ilex glabra</i>	Inkberry Holly	5 Gal.	Container
<i>Myrica pensylvanica</i>	Northern Bayberry	7 Gal.	Container
<i>Viburnum trilobum 'Wentworth'</i>	Wentworth Cranberry Bush Viburnum	7 Gal.	Container
<b>Perennials, Grasses and Groundcovers</b>			
<i>Ernst Conservation Seeds: Showy Northeast Native Wildflower &amp; Grass Mix - ERNMX-153</i>		Seeds	Apply 20 lbs per acre @ Bufferzone Restoration Area
<i>Ernst Conservation Seeds: Native Steep Slope Mix w/Annual Ryegrass - ERNMX-181</i>		Seeds	Apply 60 lbs per acre @ Stormwater Detention Basins - Slope
<i>Ernst Conservation Seeds: Retention Basin Floor Mix - Low Maintenance - ERNMX-126</i>		Seeds	Apply 20-40 lbs per acre @ Stormwater Detention Basins - Bottom

Sheet Name:  
Landscape Details,  
Planting Notes  
and Planting Schedule

Project No.:  
22-02

Issue Date:  
04/06/2022

Sheet No.:

L1.2

501 & 600 Griffin  
Brook Drive  
Owner LLC  
Methuen, MA

Methuen, MA

# Civil Engineer

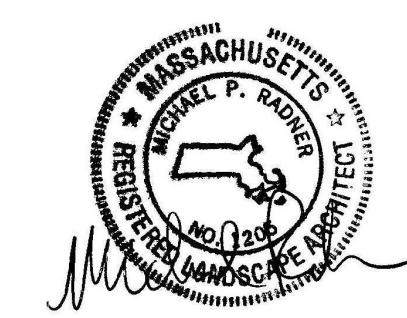
The Morin-Cameron Group, Inc.  
25 Kenoza Avenue  
Haverhill, MA

## Landscape Architect



**Radner Design  
Associates, Inc.**

3 Allied Drive, Suite 303  
Dedham, MA 02026  
508.736.6144  
[www.RadnerDesign.com](http://www.RadnerDesign.com)



---

Revisions per Peer Review and NOI 05/20/2022

---

## Revision

Drawn: kc

Checked by: mr

Scale: 1"=40'-0"

---

## Key Plan:

---

Sheet Name:  
Lightning Bl

---

Project No.:  
22-03

---

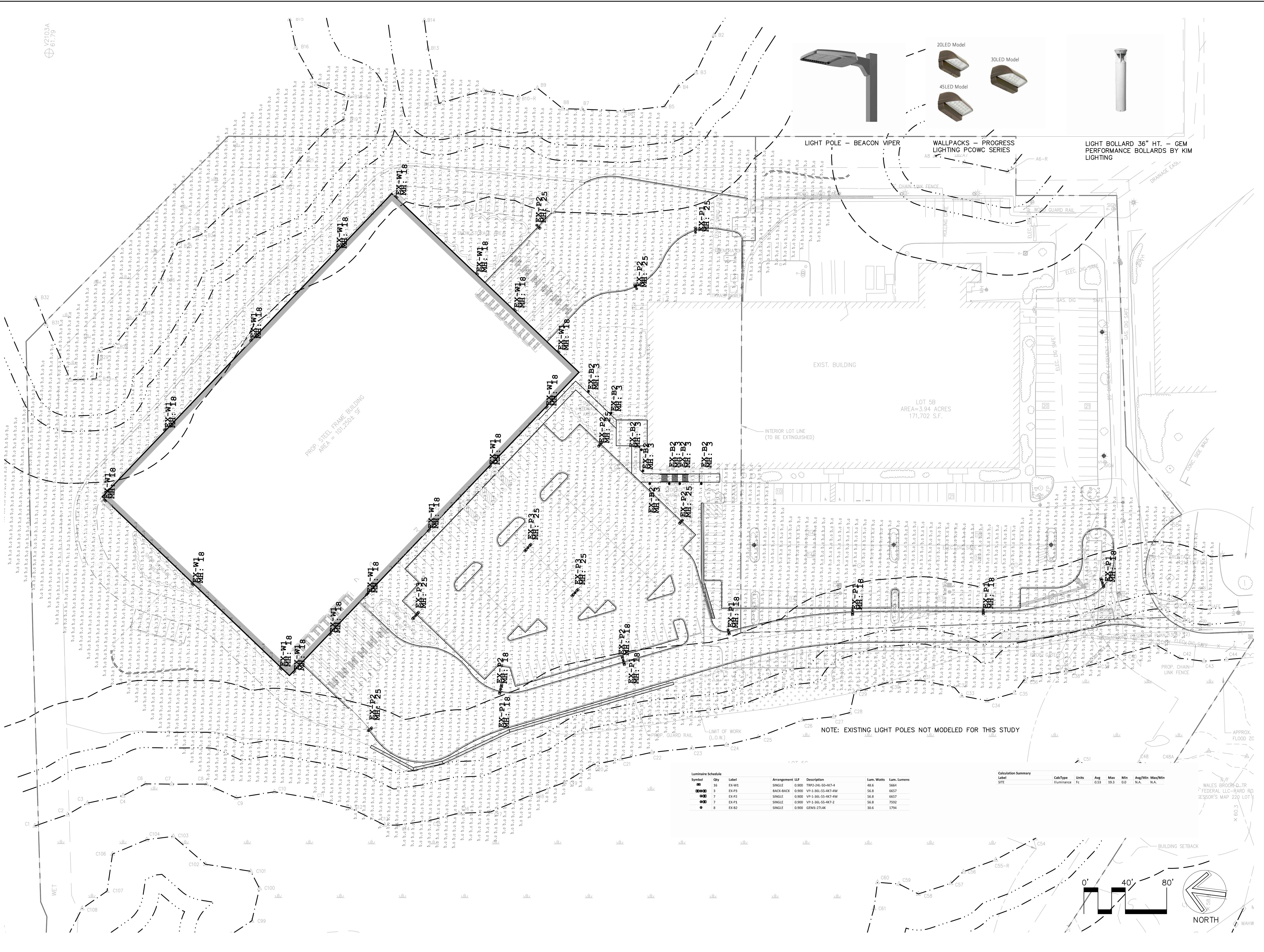
Issue Date:  
04/06/2022

---

Sheet No. :

# L2.0

Drawings and Designs © 2022 Radner Design Associates, Inc.



REGISTERED ARCHITECT  
GREGORY P. SMITH  
No. 8688  
NORTHANDOVER, MA  
gregory.smith@gsdassociates.com

gsd

architect:  
GSD Associates, LLC  
146 Main Street  
North Andover, MA 01845  
Tel: 978-888-5422

consultant:

sheet title:  
BUILDING  
ELEVATIONS

project name:  
PROPOSED WAREHOUSE-  
600 GRIFFIN BROOK DRIVE  
METHUEN, MA

issue date: 04/06/22

revisions:

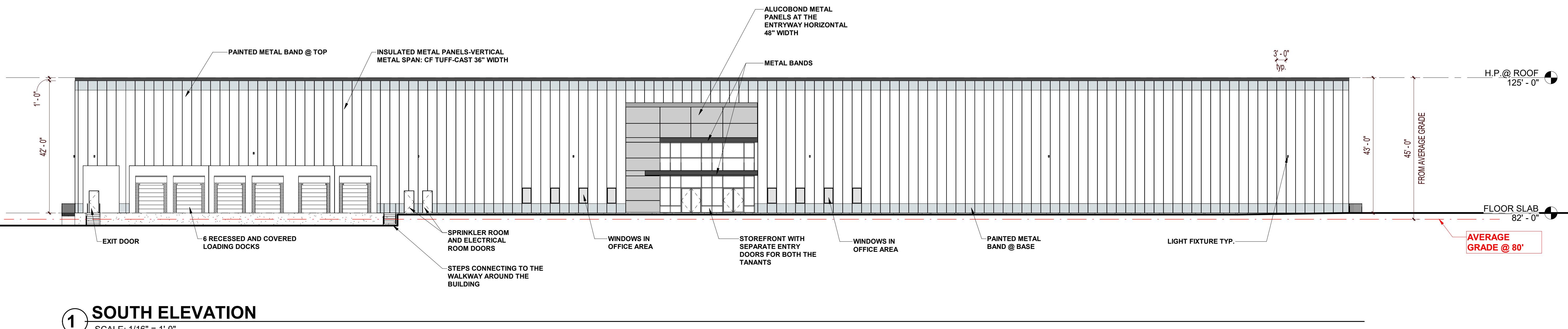
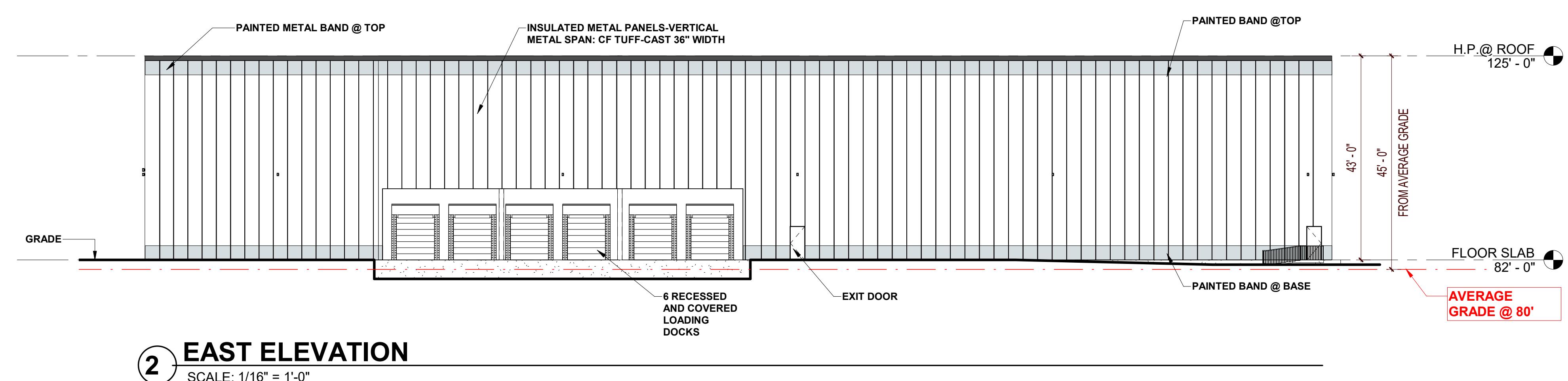
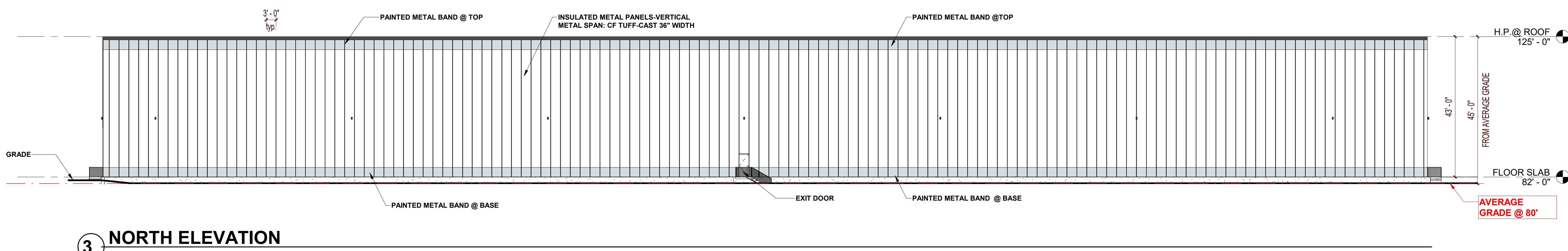
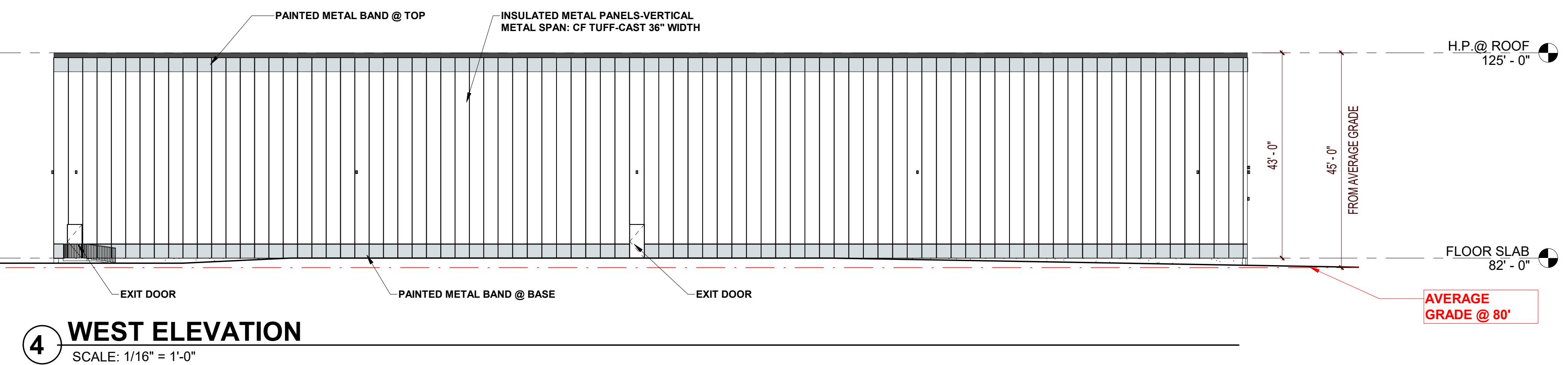
No.	Description	Date
dr.	chk.	

© 2022 GSD Associates, LLC  
ALL RIGHTS RESERVED. ALL IDEAS, DESIGNS, PLANS AND  
DRAWINGS CONTAINED IN THIS DRAWING ARE THE PROPERTY OF  
GSD ASSOCIATES, LLC. RIGHTS OF USE ARE CONDITIONAL  
AND RESTRICTED. THE INFORMATION CONTAINED IN THIS DRAWING  
CANNOT BE COPIED OR REPRODUCED IN WHOLE OR IN PART  
FOR ANY PROJECT ON THE SITE SO INDICATED. USE OF  
THE INFORMATION CONTAINED IN THIS DRAWING IN ANY  
OTHER PROJECT OR IN PERMIT APPLICATION IS  
STRICLTY PROHIBITED. THE INFORMATION CONTAINED IN  
THIS DRAWING IS THE PROPERTY OF GSD ASSOCIATES, LLC AND  
PERMISSION OF GSD ASSOCIATES, LLC AND THE  
ARCHITECT WHOSE SIGNATURE AND SEAL MAY BE  
APPLIED TO THESE DRAWINGS IS REQUIRED.

job number:

GSD-22-005

A1.2



job number:  
GSD-22-005  
A1.2  
BIM 360/JIK/600 GRIFFIN DRIVE TENANT-22-005.RVT  
gregory.smith@gsdassociates.com