

LOCUS MAP
(NOT TO SCALE)

CIVIL SITE PLANS FOR: MIXED-USE BUILDING: RETAIL AND RESIDENTIAL 281 MAIN STREET (MAP 42 LOT 12) READING, MA

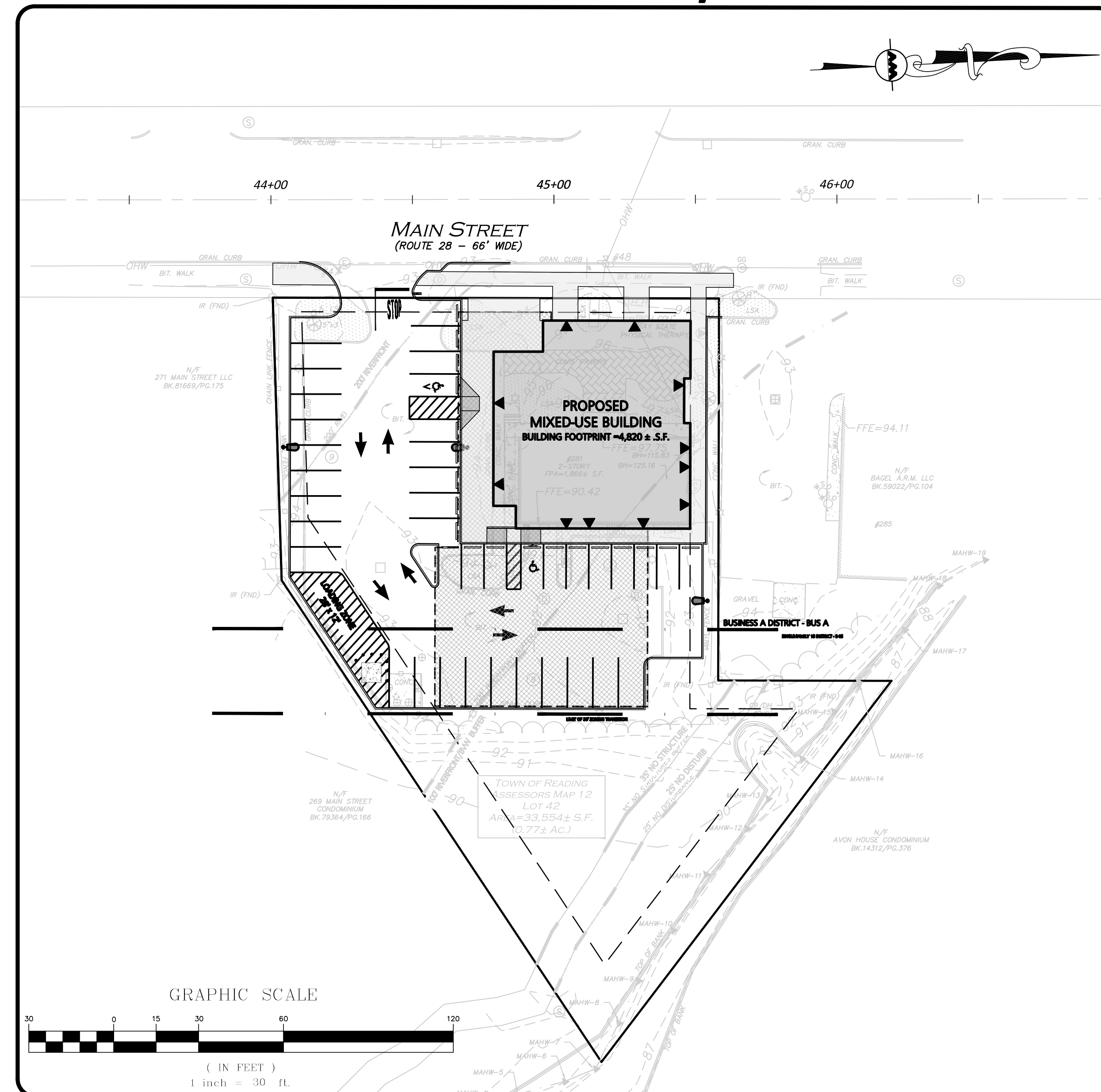
ASSESSOR'S INFORMATION			
MAP	LOT	BLOCK	AREA (ACRES)
12	42	000	0.77

OWNER / APPLICANT:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

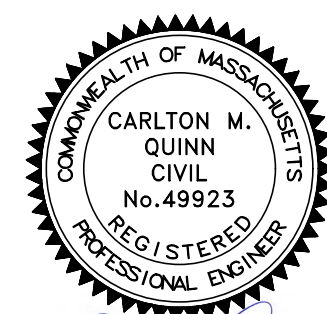
CIVIL ENGINEER, LANDSCAPE ARCHITECT & LAND SURVEYOR:
ALLEN & MAJOR ASSOCIATES
100 COMMERCE WAY, SUITE 5
WOBURN, MA 01801
781.935.6889

ARCHITECT:
SV DESIGN, LLC
126 DODGE STREET
BEVERLY, MA 01915
978.529.2303

WETLAND SCIENTIST:
GODDARD CONSULTING, LLC
291 MAIN STREET, SUITE 8
NORTHBOROUGH, MA 01532
508.393.3784



LIST OF CIVIL, SURVEY AND LANDSCAPE DRAWINGS			
DRAWING TITLE	SHEET NO.	ISSUED	LAST REVISED
SITE PLAN COVER SHEET	—	11-24-2025	—
EXISTING CONDITIONS SURVEY	V-101	11-24-2025	—
ABBREVIATIONS & NOTES	C-001	11-24-2025	—
ABBREVIATIONS & NOTES	C-002	11-24-2025	—
EROSION CONTROL & SITE PREP PLAN	C-101	11-24-2025	—
LAYOUT & MATERIALS PLAN	C-102	11-24-2025	—
GRADING & DRAINAGE PLAN	C-103	11-24-2025	—
UTILITIES PLAN	C-104	11-24-2025	—
LIGHTING PLAN	C-105	11-24-2025	—
SNOW STORAGE PLAN	C-106	11-24-2025	—
VEHICLE MOVEMENT PLAN	C-107	11-24-2025	—
FIRE TRUCK TURNING PLAN	C-108	11-24-2025	—
DETAILS	C-501	11-24-2025	—
DETAILS	C-502	11-24-2025	—
DETAILS	C-503	11-24-2025	—
DETAILS	C-504	11-24-2025	—
DETAILS	C-505	11-24-2025	—
LANDSCAPE PLAN	L-101	11-24-2025	—
LANDSCAPE NOTES & DETAILS	L-501	11-24-2025	—
LANDSCAPE NOTES & DETAILS	L-502	11-24-2025	—



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

PREPARED BY:

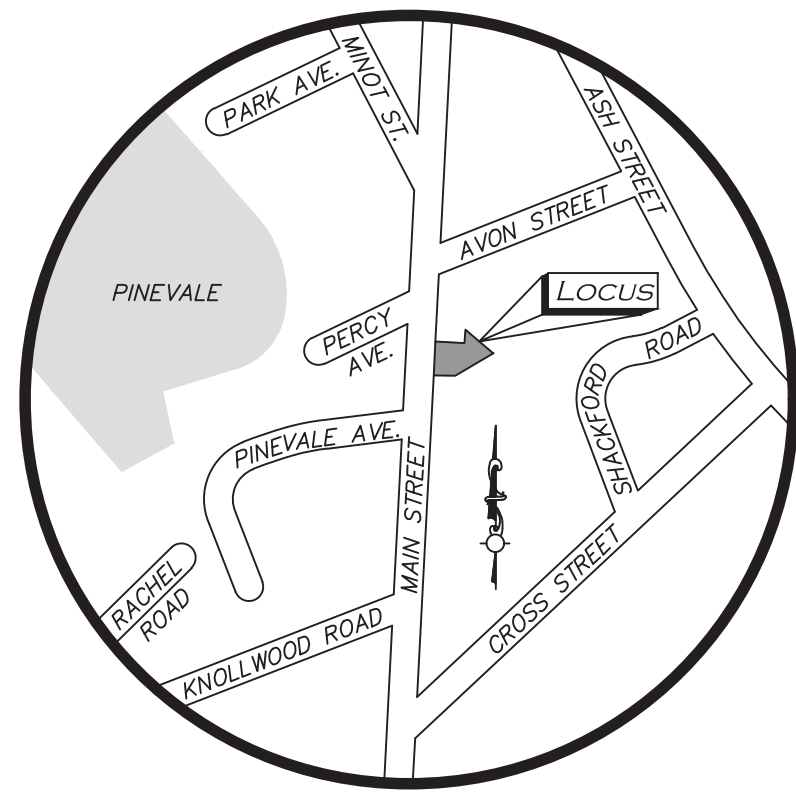


ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture

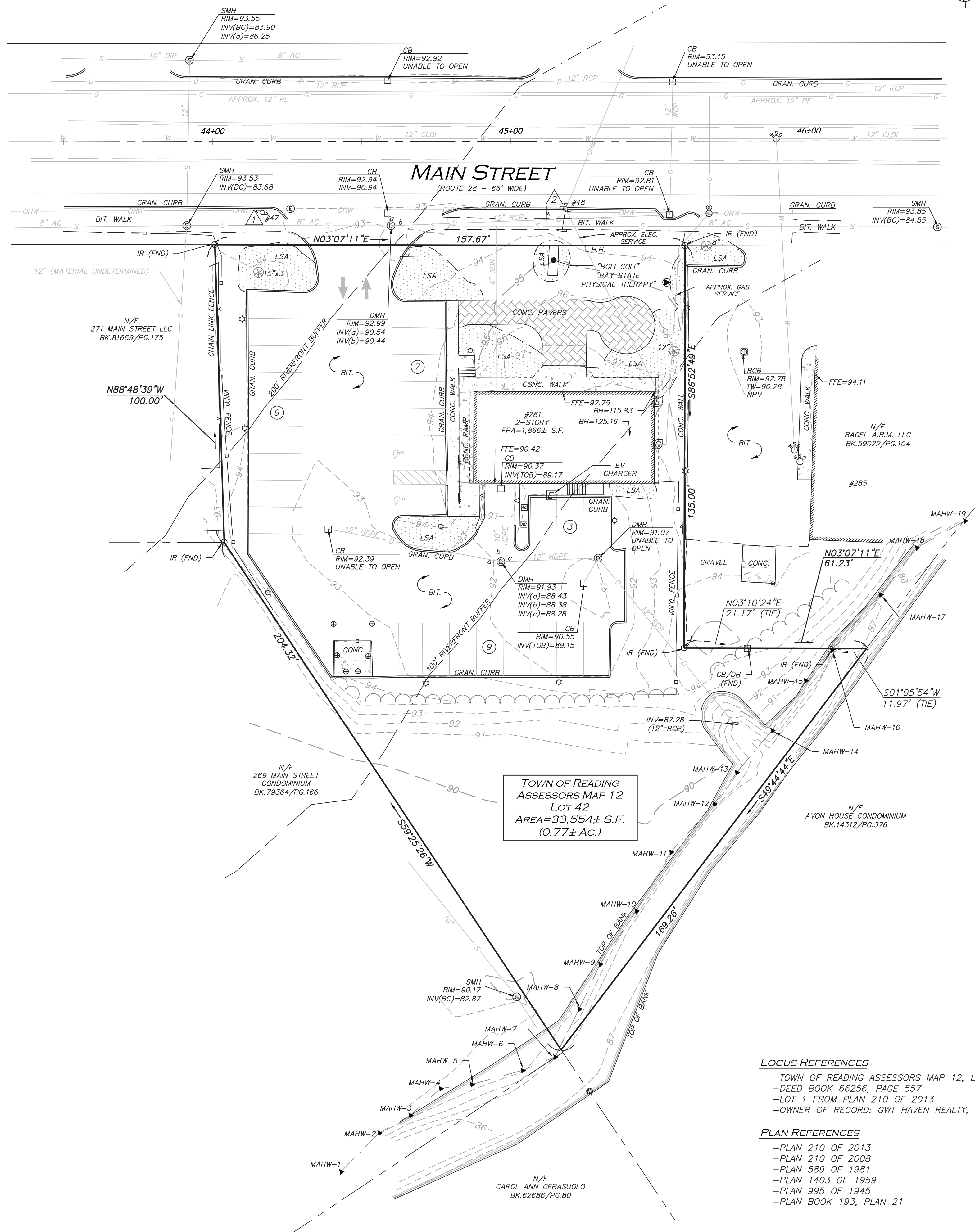
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN, MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

ISSUED FOR APPROVAL: NOVEMBER 24, 2025



LOCUS MAP
(NOT TO SCALE)



LEGEND

- CONCRETE BOUND (CB) □
- IRON PIPE (IP) ○
- IRON ROD (IR) ◊
- DRAIN MANHOLE (DMH) ⊙
- SEWER MANHOLE (SMH) ⊕
- ELECTRIC MANHOLE (EMH) ⊖
- CATCH BASIN (CB) ⊞
- ROUND CATCH BASIN (RCB) ⊚
- UTILITY POLE W/LIGHT ⊙
- GUY WIRE —
- WATER GATE ⊕
- GAS GATE ⊖
- BOLLARD ⊙
- INVERT (INV) —
- LIGHT ⊙
- TREE ⊙
- SIGN ⊙
- WETLAND FLAG ▲A31
- HAND HOLE ⊙
- AIR CONDITIONER ⊙
- ELECTRIC BOX ⊙
- FLAG POLE ⊙
- GAS METER ⊙
- ELECTRIC METER ⊙
- HANDICAPPED PARKING SPACE ⊙
- PAINTED ARROW →
- PARKING SPACE COUNT ⊙
- CONCRETE ▨
- LANDSCAPED AREA (LSA) ▨
- WETLAND AREA ▨
- BUILDING ▨
- BUILDING OVERHANG ▨
- WETLAND ▨
- BUFFER ZONE ▨
- 1' CONTOUR -53-
- 5' CONTOUR -55-
- PROPERTY LINE ---
- ABUTTERS LINE ---
- CONCRETE RETAINING WALL ▨
- TREE LINE ▨
- EDGE OF PAVEMENT ▨
- EDGE OF GRAVEL ▨
- EDGE OF WATER CURB ▨
- CHAIN LINK FENCE x
- VINYL FENCE o
- WATER LINE -W-
- SEWER LINE -S-
- DRAIN LINE -D-
- GAS LINE -G-
- ELECTRIC LINE -E-
- OVERHEAD WIRES -OHW-
- FOOTPRINT AREA FPA
- FINISHED FLOOR ELEVATION FFE
- BUILDING HEIGHT BH
- BITUMINOUS BIT.
- CONCRETE CONC.
- GRANITE GRAN.
- BOTTOM CENTER (BC)
- REINFORCED CONCRETE PIPE RCP
- DUCTILE IRON PIPE DI
- HIGH DENSITY POLYETHYLENE PIPE HDPE
- NO PIPE VISIBLE NPV
- TOP OF BELL TOB
- CONC. BOUND W/DRILL HOLE CB/DH
- FOUND FND
- NOW OR FORMERLY N/F
- BOOK BK.
- PAGE PG.

WE HEREBY CERTIFY THAT:
THIS PLAN IS THE RESULT OF AN ACTUAL ON THE GROUND SURVEY PERFORMED ON OR BETWEEN AUGUST 25, 2025 AND SEPTEMBER 29, 2025.

ALLEN & MAJOR ASSOCIATES, INC.



Digitally signed by Andrew J. Ruggles
Date: 2025.10.07 13:19:29-04'00'
PROFESSIONAL LAND SURVEYOR FOR ALLEN & MAJOR ASSOCIATES, INC.

REV DATE DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
#281 MAIN STREET
READING, MA

PROJECT NO. 2398-08 DATE: 10/7/2025

SCALE: 1" = 20' DWG. NAME: S-2398-08-EC

DRAFTED BY: CTP CHECKED BY: AUR

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • landscape architecture
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY
WOUBURN MA 01801-8501
TEL: (781) 935-6889
FAX: (781) 935-2896

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DRAWING TITLE: EXISTING CONDITIONS SHEET NO. 1 OF 1

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BENCHMARK SUMMARY

TBM #	DESCRIPTION	ELEV.
1	NAIL IN UTILITY POLE #47	95.05
2	RAILROAD SPIKE IN UTILITY POLE #48	94.34

PARKING SUMMARY

STANDARD STALLS	26
HANDICAPPED STALLS	2
TOTAL STALLS	28

UTILITY STATEMENT

THE UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING DRAWINGS. ALLEN & MAJOR ASSOCIATES, INC. (A&M) MAKES NO GUARANTEE THAT THE UTILITIES SHOWN HEREON COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. A&M FURTHER DOES NOT WARRANT THAT THE UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. A&M HAS NOT PHYSICALLY LOCATED THE UNDERGROUND UTILITIES.

LOCUS REFERENCES

- TOWN OF READING ASSESSORS MAP 12, LOT 42
- DEED BOOK 66256, PAGE 557
- LOT 1 FROM PLAN 210 OF 2013
- OWNER OF RECORD: GWT HAVEN REALTY, LLC

PLAN REFERENCES

- PLAN 210 OF 2013
- PLAN 210 OF 2008
- PLAN 589 OF 1981
- PLAN 1403 OF 1959
- PLAN 995 OF 1945
- PLAN BOOK 193, PLAN 21

NOTES

1. NORTH ARROW IS BASED ON MASSACHUSETTS GRID COORDINATE SYSTEM (MAINLAND ZONE) (NAD 83).
2. BOOK/PAGE AND PLAN REFERENCES ARE TAKEN FROM MIDDLESEX (SOUTH) REGISTRY OF DEEDS IN CAMBRIDGE, MA.
3. VERTICAL DATUM IS NAVD 88 ESTABLISHED USING RTK GPS OBSERVATION.
4. CONTOUR INTERVAL IS ONE FOOT (1').

GRAPHIC SCALE



NOTES

GENERAL NOTES:

- TOPOGRAPHIC INFORMATION AND EXISTING SITE FEATURES WERE OBTAINED FROM AN ACTUAL FIELD SURVEY PERFORMED BY ALLEN & MAJOR ASSOCIATES, INC. 100 COMMERCE WAY, WOBURN, MASSACHUSETTS.
- DURING CONSTRUCTION, ALL VEHICLES MUST BE PARKED ON SITE.
- DURING CONSTRUCTION, ALL STAGING AND DELIVERIES WILL OCCUR ON SITE.
- THIS PROJECT WILL BE SERVED BY PUBLIC WATER AND SEWER AND PRIVATE, NATURAL GAS, TELEPHONE, CABLE AND ELECTRIC. ALL UTILITY LINES WILL BE INSTALLED UNDERGROUND UNLESS OTHERWISE NOTED.
- 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 "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 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 PLANS AT NO ADDITIONAL COST.
- ALL PROPOSED MAIN BUILDING ENTRANCES AND WALKS SHALL BE HANDICAP ACCESSIBLE PER FEDERAL ADA & MA AB REGULATIONS.
- ALL SITE WORK DONE FOR THIS PROJECT SHALL BE IN STRICT ACCORDANCE WITH THE SITE PLANS AND SITE WORK SPECIFICATIONS FOR CONSTRUCTION.
- ANY DAMAGE TO PRIVATE OR PUBLIC PROPERTIES DUE TO THE CONTRACTOR'S ACTIVITIES SHALL BE REPAIRED AND RESTORED BY THE CONTRACTOR AT THEIR OWN EXPENSE.
- ALL PROPERTY MARKERS AND STREET LINE MONUMENTS SHALL BE PROPERLY PROTECTED DURING CONSTRUCTION. ANY DAMAGE TO THESE ITEMS SHALL BE REPAIRED AND RESTORED BY A SURVEYOR REGISTERED IN THE STATE OF MASSACHUSETTS AT THE CONTRACTOR'S EXPENSE.
- ALL APPLICABLE PERMITS AND AN APPROVED SET OF PLANS SHALL BE AVAILABLE AT THE CONSTRUCTION SITE.
- THE CONTRACTOR IS RESPONSIBLE FOR SCHEDULING A PRE-CONSTRUCTION MEETING WITH THE APPROPRIATE CITY DEPARTMENTS, THE APPROPRIATE UTILITY COMPANIES, THE OWNER AND OWNER'S REPRESENTATIVE. THE MEETING SHALL TAKE PLACE PRIOR TO THE START OF CONSTRUCTION AND THE CONTRACTOR MUST PROVIDE 48 HOURS NOTICE TO ALL ATTENDEES PRIOR TO THE START OF THE MEETING.
- APPROPRIATE WARNING SIGNS, MARKERS, BARRICADES AND/OR FLAG MEN SHALL BE PROVIDED TO REGULATE TRAFFIC. CONSTRUCTION TRAFFIC CONTROLS SHALL BE IMPLEMENTED AND OPERATED ACCORDING TO THE MASS DEPARTMENT OF TRANSPORTATION, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) AND THE LOCAL AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ADDITIONAL BENCHMARK INFORMATION IF REQUIRED. THE CONTRACTOR IS RESPONSIBLE FOR LOCATING AND PROTECTING ALL EXISTING BENCHMARKS. IF IT IS NECESSARY TO RELOCATE A BENCHMARK, IT SHALL BE RELOCATED BY A MASSACHUSETTS PROFESSIONAL LAND SURVEYOR AND DONE SO AT THE CONTRACTOR'S EXPENSE.
- ALL BUILDING DIMENSIONS ARE MEASURED TO THE OUTSIDE FACE OF THE BUILDING.
- ALL RADII ARE 3 FEET UNLESS OTHERWISE NOTED.
- ALL PARKING LOT AND AISLE DIMENSIONS ARE TAKEN FROM THE FACE OF CURB AND INDICATE EDGE OF PAVEMENT.
- CONSTRUCTION DURING WET WEATHER OR WINTER CONDITIONS IS TO BE ANTICIPATED AND PROVISIONS TO ADEQUATELY ADDRESS THESE CONDITIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT NO ADDITIONAL COST.
- 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.
- DISPOSAL OF ALL DEMOLISHED MATERIALS INCLUDING EXISTING MISC. CONSTRUCTION DEBRIS IS THE RESPONSIBILITY OF THE CONTRACTOR AND MUST BE DISPOSED OF OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL MUNICIPAL REQUIREMENTS AT NO ADDITIONAL COST.
- ALL DISTURBED AREAS NOT NOTED TO RECEIVE OTHER TREATMENT ARE TO RECEIVE SIX INCHES (6") MINIMUM OF TOPSOIL & SEED, AND BE MAINTAINED UNTIL ESTABLISHED & ACCEPTED.
- EXISTING STRUCTURES WITHIN CONSTRUCTION LIMITS ARE TO BE PROTECTED, ABANDONED, REMOVED OR RELOCATED AS NECESSARY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL RELOCATIONS, INCLUDING BUT NOT LIMITED TO, ALL UTILITIES, STORM DRAINAGE, SIGNS, & POLES, ETC. AS REQUIRED. ALL WORK SHALL BE IN ACCORDANCE WITH THE LOCAL MUNICIPALITY'S GOVERNING AUTHORITY'S SPECIFICATIONS AND SHALL BE APPROVED BY SAME.
- THE CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES TO DETERMINE EXACT POINT OF SERVICE CONNECTION AND DISCONNECTION AT EXISTING UTILITY.
- ALL ELEVATIONS SHOWN ARE IN REFERENCE TO THE BENCHMARKS SHOWN ON THE EXISTING CONDITIONS SITE PLAN AND MUST BE VERIFIED BY THE CONTRACTOR AT GROUND BREAKING.
- THE CONTRACTOR IS RESPONSIBLE FOR DIGGING TEST HOLES AND VERIFYING THE LOCATION OF UTILITY OR STRUCTURE PRIOR TO CONSTRUCTION. CONTRACTOR SHALL VERIFY THAT BASED ON EXACT LOCATION OF EXISTING UTILITIES/STRUCTURES THERE ARE NO CONFLICTS BETWEEN THE EXISTING AND THE PROPOSED UTILITIES/DRAINAGE STRUCTURES.
- CONTRACTOR SHALL ADHERE TO ALL PERMIT CONDITIONS PROVIDED BY ALL GOVERNING AGENCIES AT NO ADDITIONAL COSTS. THIS INCLUDES BUT IS NOT LIMITED TO BUILDING PERMITS, DEMOLITION PERMITS, PLUMBING, GAS AND ELECTRICAL PERMITS. PERMITS FROM THE PLANNING BOARD OR CITY OF READING. CALL 811 OR 1-888-344-7233 BEFORE DIGGING.

- DURING EXCAVATION, ANY EXISTING EARTH CUT MATERIALS THAT DO NOT MEET THE "ORDINARY FILL" SPECIFICATIONS OR "LOAM" SPECIFICATIONS AND CANNOT BE REUSED SHALL BE REMOVED OFFSITE BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNERS. MATERIAL WHICH DOES NOT MEET THE SPECIFICATION INCLUDES ALL BOULDERS, ROCKS, CONSTRUCTION DEBRIS, AND MISC. MATERIAL. PRIOR TO REUSE, CONTRACTOR TO PROVIDE TESTING REPORT OF SIEVE ANALYSIS TO ENGINEER FOR APPROVAL. CONTRACTOR CAN AMEND MATERIALS AND CONTINUE TO RETEST AS NECESSARY AT NO ADDITIONAL COST TO OWNER. AFTER AMENDING, IF MATERIAL STILL DOES NOT MEET THE SPECIFICATIONS, IT IS TO BE REMOVED FROM SITE AT NO ADDITIONAL COST TO THE OWNER AND IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
- ANY PROPOSED SIGNAGE SHALL BE APPROVED BY SEPARATE APPLICATION TO THE APPROPRIATE MUNICIPAL AUTHORITY INCLUDING BUT NOT LIMITED TO THE ZONING BOARD OF APPEALS AND CITY COUNCIL. ALL PROPOSED SIGNAGE MUST MEET THE REQUIREMENTS OF THE LOCAL ZONING CODE.

GRADING & DRAINAGE NOTES:

- EXISTING PAVEMENT SHALL BE SAW-CUT AND PAVEMENT JOINT SHALL BE INSTALLED WHERE NECESSARY TO ENSURE A SMOOTH CONTINUOUS GRADE.
- PITCH EVENLY BETWEEN SPOT GRADES. ALL PAVED AREAS MUST PITCH TO DRAIN AT A MINIMUM OF 1/8" PER FOOT UNLESS OTHERWISE SPECIFIED. ANY DISCREPANCIES NOT ALLOWING THIS MINIMUM PITCH SHALL BE REPORTED TO THE ENGINEER PRIOR TO CONTINUING WORK.
- ALL GRADING OPERATIONS SHALL BE COORDINATED WITH THE APPROPRIATE UTILITY COMPANIES.
- IN LANDSCAPED AREAS THE TOP ELEVATION OF MANHOLES SHALL MATCH THE FINISH GRADE OF THE TOPSOIL. IN PAVED AREAS THE TOP ELEVATIONS OF MANHOLES SHALL MATCH FINISH GRADE.
- ALL AREAS DISTURBED DURING CONSTRUCTION SHALL BE STABILIZED AS SOON AS POSSIBLE UPON COMPLETION OF CONSTRUCTION WORK IN THE AREA.
- TEMPORARY TUBULAR BARRIER PROTECTION AND/OR SILT SACKS SHALL BE INSTALLED AND MAINTAINED AT EXISTING DRAINAGE STRUCTURES DURING CONSTRUCTION, TO PREVENT SEDIMENT LADEN RUNOFF FROM ENTERING THE DRAINAGE SYSTEM.
- CONTRACTOR IS RESPONSIBLE FOR DEMOLITION OF EXISTING STRUCTURES INCLUDING REMOVAL OF ANY EXISTING UTILITIES SERVING THE STRUCTURE PER DEMOLITION PLAN.
- ALL CATCH BASINS, MANHOLES, INFILTRATION SYSTEMS, AND WATER QUALITY STRUCTURES ARE TO BE CLEANED TO REMOVE ALL CONSTRUCTION SILT AND DEBRIS PRIOR TO FINAL APPROVAL.
- IF ANY EXISTING UTILITY STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION, IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO EXISTING CONDITIONS OR BETTER AT NO ADDITIONAL COST.
- ALL STORM PIPES ENTERING STRUCTURES SHALL BE GROUTED TO ENSURE CONNECTION AT STRUCTURE IS WATERTIGHT.
- ALL STORM DRAIN MANHOLES SHALL HAVE TRAFFIC BEARING RING & COVERS & SHALL BE LABELED "DRAIN".
- THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
- CONTRACTOR SHALL ENSURE POSITIVE DRAINAGE AWAY FROM BUILDINGS FOR ALL NATURAL AND PAVED AREAS.
- CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES STEEPER THAN 3H:1V.
- ALL DRAINAGE SYSTEM COMPONENTS SHALL CONFORM TO LOCAL REQUIREMENTS.

UTILITY NOTES:

- THE LATEST STANDARDS OF THE LOCAL MUNICIPALITY SHALL BE FOLLOWED WHEN INSTALLING ANY STORM DRAIN WORK. STORM DRAIN WORK WILL BE INSPECTED BY THE LOCAL GOVERNING AUTHORITY PERSONNEL AND ALL COSTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE CONTRACTOR, AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION.
- ABANDONED EXISTING UTILITIES AND UTILITIES TO BE ABANDONED SHALL EITHER BE ABANDONED IN PLACE AS NOTED OR SHALL BE REMOVED AND DISPOSED OF AS SPECIFIED. ALL UTILITIES SCHEDULED FOR ABANDONMENT OR REMOVAL AND DISPOSAL MUST BE COORDINATED BY THE CONTRACTOR WITH THE RESPECTIVE UTILITY OWNER. WHEN ABANDONED UTILITIES ARE TO BE LEFT IN PLACE, PLUG OR CAP THE ENDS OF THE CONDUITS AND PIPES. REMOVE ABANDONED UTILITY MANHOLES, JUNCTION BOXES AND SIMILAR STRUCTURES TO A MINIMUM DEPTH OF 4 FEET BELOW FINISHED GRADE AND PUNCTURE OR BREAK THE BOTTOM SLABS OF MANHOLES AND SIMILAR STRUCTURE TO ALLOW DRAINAGE. BACKFILL AND COMPACT EXCAVATIONS RESULTING FROM REMOVAL OF UTILITY FACILITIES, AS REQUIRED TO RESTORE THE ORIGINAL GRADE.
- THE CONTRACTOR SHALL MAKE ARRANGEMENTS FOR THE ALTERATION AND ADJUSTMENTS OF NATURAL GAS, ELECTRIC, TELEPHONE AND ANY OTHER UTILITY BY THE UTILITY OWNER.
- THE CONTRACTOR SHALL USE THE FOLLOWING PIPE MATERIALS:
 - DRAIN - HDPE (HIGH DENSITY CORRUGATED POLYETHYLENE PIPE WITH SMOOTH INNER WALL), ASTM D2321 (UNLESS OTHERWISE SPECIFIED ON PLAN)
- BEFORE UTILITY WORK BEGINS, THE CONTRACTOR WILL COORDINATE WITH THE LOCAL MUNICIPALITY FOR THE APPROPRIATE PERMIT AND INSPECTION FEES.
- A MINIMUM OF 10 FEET CLEAR HORIZONTALLY SHALL BE MAINTAINED BETWEEN WATER MAINS AND SANITARY SEWER MAINS AND/OR STORM DRAINS. 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 DIFFERENCE IN ELEVATION BETWEEN THE WATER MAIN AND THE SEWER MAIN SHALL BE AT LEAST 18 INCHES.
- ALL FILL MATERIAL IS TO BE IN PLACE, AND COMPACTED BEFORE

INSTALLATION OF PROPOSED UTILITIES.

- CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
- MINIMUM TRENCH WIDTH SHALL BE 2 FEET.
- CONTRACTOR SHALL MAINTAIN A MINIMUM OF 5'-0" COVER AND A MAXIMUM OF 8'-0" COVER ON ALL WATERLINES.
- IN THE EVENT OF A VERTICAL CONFLICT BETWEEN WATERLINES, SANITARY LINES, STORM LINES AND GAS LINES (EXISTING AND PROPOSED), THE SANITARY LINE SHALL BE DUCTILE IRON PIPE WITH MECHANICAL JOINTS AT LEAST 10 FEET ON BOTH SIDES OF CROSSING. THE WATERLINE SHALL HAVE MECHANICAL JOINTS WITH APPROPRIATE THRUST BLOCKING AS REQUIRED TO PROVIDE A MINIMUM OF 18" CLEARANCE BETWEEN THE PIPES. WHERE THE WATERLINE IS LESS THAN THE 18" VERTICAL CLEARANCE AND MEETING 10' HORIZONTAL CLEARANCE CANNOT BE MET, THE WATER MUST BE ENCASED IN CONCRETE.
- ALL CONCRETE FOR ENCASEMENTS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 3000 P.S.I.
- CONTRACTOR IS RESPONSIBLE FOR COMPLYING WITH THE SPECIFICATIONS OF THE LOCAL AUTHORITIES WITH REGARDS TO MATERIALS AND INSTALLATION OF THE WATER, SEWER, GAS AND ELECTRICAL AND TELECOMMUNICATIONS LINES.
- ALL NECESSARY INSPECTIONS AND/OR CERTIFICATIONS REQUIRED BY CODES AND/OR UTILITY SERVICE COMPANIES SHALL BE PERFORMED PRIOR TO ANNOUNCED BUILDING POSSESSION AND THE FINAL CONNECTION OF SERVICE.
- DRAWINGS DO NOT NECESSARILY SHOW ALL EXISTING UTILITIES.

ABBREVIATIONS

ABAN	ABANDON	L	LENGTH
ADJ	ADJUST	LB	LEACHING BASIN
		LP	LIGHT POLE
B	BORING	MAT	MATERIAL
BC	BOTTOM OF CURB	MAX	MAXIMUM
BIT	BITUMINOUS	MH	MANHOLE
BCB	BITUMINOUS CONCRETE BERM	MIN	MINIMUM
BLDG	BUILDING	MISC	MISCELLANEOUS
BM	BENCH MARK	MTD	MOUNTED
BOS	BOTTOM OF SLOPE	MW	MONITORING WELL
BOW	BOTTOM OF WALL	N	NORTH
BRK	BRICK	NO	NOT IN CONTRACT
BV&B	BUTTERFLY VALVE & BOX	NTS	NUMBER
BVW	BORDERING VEGETATED WETLAND		NOT TO SCALE
CATV	CABLE TELEVISION	OC	ON CENTER
CB	CATCH BASIN	OD	OUTSIDE DIAMETER
CF	CUBIC FEET	OHW	OVERHEAD WIRE
CFS	CUBIC FEET PER SECOND	OHVD	OVERHEAD
CI	CAST IRON (PIPE)	OW	OBSERVATION WELL
CL	CENTERLINE	PC	POINT OF CURVATURE
CLDI	CEMENT LINED DUCTILE IRON (PIPE)	PCC	PRECAST CONCRETE CURB
CM	CONSTRUCTION MANAGER	PI	POINT OF INTERSECTION
CMP	CORRUGATED METAL PIPE	PKG	PARKING
CO	CLEAN OUT	PL	PROPERTY LINE
CONC	CONCRETE	PLMB	PLUMBING
CONST	CONSTRUCTION	POC	POINT OF CURVATURE
CONT	CONTRACTOR	POT	POINT ON TANGENT
CRD	COORDINATE	PRC	POINT OF REVERSE CURVATURE
CPP	CORRUGATED POLYETHYLENE PIPE	PROP, P	PROPOSED
CUL	CULVERT	PT	POINT (OR POINT OF TANGENT)
CY	CUBIC YARD	PVC	POLYVINYL CHLORIDE (PIPE)
DB	DISTRIBUTION BOX	R&R	REMOVE & RESET/REPLACE
DBL	DOUBLE	R&S	REMOVE & STACK
DEM	DEMOLISH	RCP	REINFORCED CONCRETE PIPE
DET	DETENTION	RD	ROAD (OR ROOF DRAIN)
DI	DUCTILE IRON (PIPE)	RED	REDUCER
DIA	DIAMETER	RELOC	RELOCATE
DIM	DIMENSION	REM	REMOVE
DMH	DRAIN MANHOLE	RET	RETAIN, RETAINING OR RETENTION
DW	DOMESTIC WATER (OR DRY WELL)	RIF	RIGHT OF WAY
DWG	DRAWING	RR	RAILROAD
DYCL	DOUBLE YELLOW CENTERLINE	RWL	RAIN WATER LEADER
		RWY	ROADWAY
EHH	ELECTRIC HANDHOLE	SD	SUBDRAIN
EL	ELEVATION	SF	SQUARE FEET
ELEC	ELECTRIC	SGC	SLOPED GRANITE CURB
EMH	ELECTRIC MANHOLE	SMH	SEWER MANHOLE
EOP	EDGE OF PAVEMENT	SP	STANDPIPE
EOR	EDGE OF ROAD	SPEC	SPECIFICATION
EOW	EDGE OF WETLANDS	STA	STATION
ETC	ELECTRIC, TELEPHONE, CABLE	STC	STORMCEPTOR
EXIST	EXISTING	STD	STANDARD
EXT	EXTERIOR	STRTL	STRUCTURAL
		SWEL	SOLID WHITE EDGE LINE
FA	FIRE ALARM	SW	SIDEWALK
FCC	FLUSH CONCRETE CURB	SWLL	SOLID YELLOW LANE LINE
FES	FLARED END SECTION	SYCL	SOLID YELLOW CENTERLINE
FFE	FINISH FLOOR ELEVATION		
FLNP	FIRE LANE NO PARKING	TB	TEST BORING
FPS	FEET PER SECOND	TC	TOP OF CURB
FS	FIRE SERVICE	TD	TRENCH DRAIN
FT	FOOT/FEET	TEL	TELEPHONE
		TMH	TELEPHONE MANHOLE
GC	GENERAL CONTRACTOR	TOS	TOP OF SLOPE
GEN	GENERAL	TOW	TOP OF WALL
GG	GAS GATE	TP	TEST PIT
GR	GUIDE RAIL	TS&V	TAPPING SLEEVE & VALVE
GRAN	GRANITE	TYP	TYPICAL
GV	GATE VALVE	UD	UNDERDRAIN
GV&B	GATE VALVE & BOX	UL	UNDERWRITERS LABORATORY
GW	GROUND WATER	UP	UTILITY POLE
		VCP	VITRIFIED CLAY PIPE
HCR	HANDICAP RAMP	VERT	VERTICAL
HOR	HORIZONTAL	VGC	VERTICAL GRANITE CURB
HT	HEIGHT		
HW	HEADWALL	WD	WOOD
HWY	HIGHWAY	WG	WATER GATE
HYD	HYDRANT	WM	WATER MAIN
		WMH	WATER MANHOLE
ID	INSIDE DIAMETER	WSO	WATER SHUTOFF
IN	INCHES		
INCL	INCLUDE		
INST	INSTALLED		
INV, I.E.	INVERT, INVERT ELEVATION		



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV DATE DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND
RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

SCALE: NONE DWG. NAME: C-2389-08

DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

PREPARED BY:

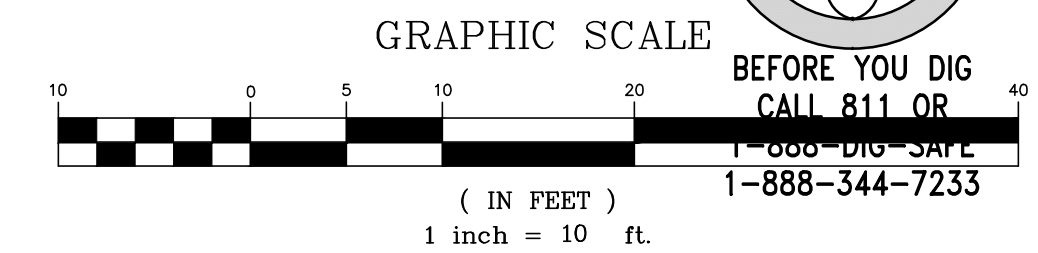
ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: ABBREVIATIONS & NOTES SHEET No. C-001

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EROSION CONTROL NOTES

EROSION & SEDIMENTATION CONTROL NOTES:

1. EROSION CONTROL SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE. ANY MODIFICATIONS TO SILT CONTROLS SHOWN ON THE APPROVED PLANS AS A RESULT OF ACTUAL FIELD CONDITIONS OR CONSTRUCTION PRACTICES SHALL BE INSTALLED IN ACCORDANCE WITH B.M.P. (BEST MANAGEMENT PRACTICES) PER THE E.P.A. 2022 "CONSTRUCTION GENERAL PERMIT" MANUAL, AND MASSACHUSETTS 2003 EROSION & SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS. ANY SUCH MODIFICATIONS FROM THE ABOVE MANUALS SHALL BE INSTALLED AS APPROVED BY THE ENGINEER OR THE LOCAL MUNICIPALITY.
2. AREAS OF EXPOSED SOIL UNDERGOING CONSTRUCTION THAT WILL NOT BE COVERED AND/OR FINISHED GRADED SHALL BE STABILIZED AS SOON AS PRACTICABLE BUT IN NO CASE MORE THAN 14 DAYS AFTER THE CONSTRUCTION ACTIVITY (UNLESS MUNICIPALITY HAS STRICTER REQUIREMENTS WHICH SHALL BE FOLLOWED) IN THAT PORTION OF THE SITE HAS TEMPORARILY OR PERMANENTLY CEASED. TEMPORARY EROSION CONTROL MEASURES SHALL INCLUDE EROSION CONTROL MESH, NETTING OR MULCH AS DIRECTED BY THE OWNER'S REPRESENTATIVE AND SHOWN ON THE DESIGN PLANS. IF MULCH IS USED, STRAW MULCH SHALL BE APPLIED AT THE RATE OF 4 BALES PER 1,000 SQUARE FEET. APPLICATION AREA SHALL BE SUFFICIENTLY COVERED WITH MULCH TO AVOID ANY VISIBLE SOIL EXPOSURE. MULCH SHALL BE KEPT MOIST TO AVOID LOSS DUE TO WIND. MULCH AND NETTING SHALL BE APPLIED IN THE BASE OF ALL GRASSED WATERWAYS, IN VEGETATIVE SLOPES WHICH EXCEED 15% AND DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS.
3. IF DISTURBED AREAS DO NOT RECEIVE FINAL SEEDING BY OCTOBER 1ST OF THE CONSTRUCTION YEAR, THEN ALL DISTURBED AREAS SHALL BE SEED WITH A WINTER COVER CROP AT THE RATE OF 3 LBS PER 1,000 SQUARE FEET. WINTER SEEDING SHALL BE COVERED WITH EROSION CONTROL MESH (MULCH AND NETTING). HEAVY GRADE MATS SHALL BE USED IN THE BASE OF ALL GRASSED WATERWAYS ON VEGETATED SLOPES IN EXCESS OF 15%, AND ANY DISTURBED AREAS WITHIN 100 FEET OF WETLANDS OR STREAMS. MULCH AND NETTING SHALL ALSO BE PROVIDED FOR ADDITIONAL WINTER PROTECTION.
4. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEED WITH RYE AT 3LBS PER 1,000 SQUARE FOOT AND MULCHED, AND REUSED AS REQUIRED. TUBULAR BARRIERS SHALL BE PLACED DOWN GRADIENT FROM STOCKPILED LOAM. LOAM SHALL BE STOCKPILED AT LOCATIONS DESIGNATED BY THE OWNER AND ENGINEER.
5. ALL TUBULAR BARRIERS, SILT SACKS, AND EROSION CONTROL BERMS SHALL BE INSTALLED ACCORDING TO THE SITE PREPARATION PLAN. THESE SHALL BE MAINTAINED DURING DEVELOPMENT TO REMOVE SEDIMENT FROM RUNOFF WATER. ALL THE FILTER BARRIERS AND EROSION CONTROL BERMS SHALL BE INSPECTED AFTER ANY RAINFALL OR RUNOFF EVENT, MAINTAINED AND CLEANED UNTIL ALL AREAS HAVE AT LEAST 85-90% VIGOROUS PERENNIAL COVER OF GRASSES.
6. ADJACENT ROADS SHALL BE PERIODICALLY SWEEP OR WASHED TO AVOID TRACKING MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA AS OFTEN AS NECESSARY (WHICH COULD BE ON A DAILY BASIS) TO REMOVE ANY SOIL OR SEDIMENTS AT NO ADDITIONAL COST TO THE OWNER. A WATERING TRUCK WILL BE USED TO PERIODICALLY SPRINKLE CONSTRUCTION AREAS IN ORDER TO KEEP THE LEVEL OF DUST TO A MINIMUM DURING THE DRY MONTHS AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL USE EXTREME CAUTION TO AVOID ALLOWING SEDIMENTS TO ENTER THE STORM DRAIN SYSTEM DURING CONSTRUCTION. BOTH EXISTING AND PROPOSED CATCH BASIN INLETS SHALL BE PROTECTED DURING CONSTRUCTION BY THE USE SILT SACKS AND/OR TUBULAR BARRIERS AROUND EACH INLET AS NOTED ON THE PLANS. INLET PROTECTION MAY BE REMOVED ONLY AFTER FINISHED AREAS ARE PAVED AND THE VEGETATED SLOPES ARE ESTABLISHED WITH AT LEAST 85-90% OF VIGOROUS PERENNIAL GROWTH.
8. AS APPLICABLE, EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISHED SEEDING AREAS AS SPECIFIED ON THE DESIGN PLANS.
9. AT A MINIMUM, ALL TUBULAR BARRIERS AND FILTER FABRIC SHALL REMAIN IN PLACE UNTIL SEEDINGS OR PLANTINGS HAVE BECOME 85-90% ESTABLISHED. THE LOCAL CONSERVATION COMMISSION MUST APPROVE THE REMOVAL OR RELOCATION OF ANY OF THE TUBULAR BARRIERS AND FILTER FABRIC. ONCE THE TUBULAR BARRIERS ARE REMOVED THE AREAS ARE TO BE LOAMED AND SEED TO ACHIEVE FULL STABILIZATION.
10. AT THE OWNER'S DISCRETION ADDITIONAL EROSION CONTROL MEASURES MAY BE REQUIRED TO MAINTAIN STABILITY OF EARTHWORKS AND FINISHED GRADED AREAS. THE CONTRACTOR, AT HIS EXPENSE, WILL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY ADDITIONAL MEASURES AS SPECIFIED BY THE OWNER. THIS INCLUDES BUT IS NOT LIMITED TO REQUESTS BY MA DEP, THE ENGINEER AND THE LOCAL MUNICIPALITY, AS AUTHORIZED BY THE OWNER. FAILURE TO COMPLY WITH THE OWNER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.
11. INSPECTIONS AND MONITORING MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. WEEKLY INSPECTIONS SHALL BE HELD THROUGH THE DURATION OF CONSTRUCTION ACTIVITY. WEEKLY INSPECTION REPORTS SHALL BE MAINTAINED BY THE CONTRACTOR AND LOCATED IN THE CONTRACTORS FIELD OFFICE ONSITE. IN ADDITION TO THE NORMAL WEEKLY INSPECTIONS, THE CONTRACTOR SHALL PERFORM AN INSPECTION OF ALL EROSION CONTROL MEASURES AFTER EACH RAINFALL OR RUNOFF EVENT, AND PERFORM THE NECESSARY REPAIRS. THE INSPECTIONS SHALL INCLUDE BUT NOT BE LIMITED TO THE SITE'S DOWN STREAM DISCHARGE POINTS.
12. IF ANY EVIDENCE OF SEDIMENTATION IS OBSERVED AT THE STORMWATER MANAGEMENT AREA INLETS, THE CONTRACTOR SHALL, AT HIS OWN EXPENSE, PROVIDE A PLAN TO THE ENGINEER TO REMOVE ANY ACCUMULATED SEDIMENT IN THESE AREAS. THE CONTRACTOR SHALL ALSO IMMEDIATELY PROVIDE ADDITIONAL ON SITE EROSION AND SEDIMENTATION CONTROL MEASURES TO PREVENT FURTHER DEGRADATION OF THE AREA.
13. FOLLOWING THE TEMPORARY OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMI-MONTHLY TO ENSURE THE AREAS HAVE A MINIMUM OF 85-90% VEGETATED VIGOROUS GROWTH. RE-SEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.
14. CONTRACTOR & ALL SITE SUBCONTRACTORS SHALL BE FAMILIAR WITH & FOLLOW ALL APPROVED PERMITS AND CONDITIONS. CONTRACTOR SHALL MAINTAIN A COPY OF ALL APPROVED PERMITS ONSITE. ALL CONDITIONS & RECOMMENDATIONS WITHIN THE APPROVED PERMITS SHALL BE COMPLETED.

15. ALL EROSION MEASURES SHALL BE INSTALLED PRIOR TO CONSTRUCTION AND SHALL BE ADEQUATE TO MAINTAIN SEDIMENT ON SITE. ANY MODIFICATIONS SHALL BE INSTALLED AS DIRECTED BY THE ENGINEER OR THE LOCAL MUNICIPALITY.
16. EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE MAINTAINED DURING CONSTRUCTION, AND SHALL REMAIN IN PLACE UNTIL ALL SITE WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED.
17. TOP OF STOCKPILES SHALL BE COVERED IN SUCH MANNER THAT STORMWATER DOES NOT INFILTRATE THE MATERIALS AND THEREBY RENDER THE SAME UNSUITABLE FOR FILL USE.
18. ALL DISTURBED OR EXPOSED AREAS SUBJECT TO EROSION SHALL BE STABILIZED WITH MULCH OR SEED FOR TEMPORARY VEGETATIVE COVER. NO AREA SUBJECT TO EROSION SHALL BE LEFT DISTURBED AND UNSTABILIZED FOR PERIODS LONGER THAN IS ABSOLUTELY NECESSARY TO CARRY OUT THAT PORTION OF THE CONSTRUCTION WORK OR SIX MONTHS AFTER SOIL HAS BEEN DISTURBED WHICHEVER IS LESS.
19. CULVERT/PIPE INLETS AND OUTFALLS SHALL BE PROTECTED BY TUBULAR BARRIER FILTERS AND STONE CHECK DAMS UNTIL DISTURBED AREAS ARE PERMANENTLY STABILIZED.
20. TUBULAR BARRIER DIKES SHALL BE CONSTRUCTED AT ALL EXISTING & PROPOSED CATCH BASINS, NO SEDIMENTATION SHALL ENTER THE ON-SITE OR OFF-SITE DRAINAGE SYSTEMS AT ANY TIME.
21. ALL EROSION CONTROL MEASURES SHALL BE ROUTINELY INSPECTED, CLEANED AND REPAIRED OR REPLACED AS NECESSARY THROUGHOUT ALL PHASES OF CONSTRUCTION. IN ADDITION, INSPECTIONS SHALL TAKE PLACE WEEKLY AND BEFORE AND AFTER EACH RAINFALL EVENT.
22. ALL PROPOSED SLOPES STEEPER THAN 3:1 SHALL BE STABILIZED WITH JUTE MESH AND PROTECTED FROM EROSION UNTIL WORK IS COMPLETE AND GROUND COVER IS ESTABLISHED.
23. THE CONTRACTOR SHALL KEEP ON SITE AT ALL TIMES ADDITIONAL TUBULAR BARRIERS FOR INSTALLATION AT THE DIRECTION OF THE ENGINEER OR THE TOWN ENGINEER TO MITIGATE ANY EMERGENCY CONDITION.
24. AS CONSTRUCTION DISTURBANCE IS GREATER THAN 1 ACRE, A NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) CONSTRUCTION GENERAL PERMIT NOI AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP) WILL NEED TO BE SUBMITTED TO THE EPA. THE NPDES PERMIT FOR STORM WATER DISCHARGE, & CONSTRUCTION GENERAL PERMIT NOI WILL BE REQUIRED TO BE SUBMITTED AT LEAST 14 DAYS PRIOR TO COMMENCING CONSTRUCTION BY THE CONTRACTOR.
25. OWNER AND CONTRACTOR ARE RESPONSIBLE FOR COMPLIANCE WITH THE CONSTRUCTION GENERAL PERMIT NOI. WEEKLY SWPPP INSPECTION REPORTS TO BE PERFORMED BY CONTRACTOR. COPIES OF ALL SWPPP INSPECTION REPORTS SHALL BE PROVIDED TO THE LOCAL MUNICIPALITY, EPA, DEP, OR ANY OTHER AUTHORITY REQUESTING WITHIN 3 DAYS OF EACH INSPECTION.
26. APPLICABLE WORK AND MATERIALS SHALL COMPLY WITH ALL LOCAL, MA DEP, EPA CONSTRUCTION GENERAL PERMIT STANDARDS. ALL CONSTRUCTION SHALL CONFORM TO THE APPLICABLE SITE PLAN REGULATIONS FROM THE LOCAL AND USDA SOIL CONSERVATION SERVICE VEGETATIVE PRACTICES IN SITE DEVELOPMENT.
27. A WATERING TRUCK SHALL BE USED TO PERIODICALLY SPRINKLE CONSTRUCTION AREAS IN ORDER TO KEEP THE LEVEL OF DUST TO A MINIMUM DURING THE DRY MONTHS AND AS REQUIRED.
28. IF DEWATERING IS NECESSARY IT SHALL ONLY BE COMPLETED AS FOLLOWS: THE DISCHARGE SHALL BE STOPPED IMMEDIATELY IF THE RECEIVING AREA SHOWS ANY SIGN OF INSTABILITY OR EROSION. ALL CHANNELS, SWALES, AND DITCHES DUG FOR DISCHARGING WATER FROM THE EXCAVATED AREA SHALL BE STABLE PRIOR TO DIRECTING DISCHARGE TO THEM. IF A CONSTRUCTION EQUIPMENT BUCKET IS USED, IT SHALL BE EMPTY. THE MATERIAL TO A STABLE AREA. NO DEWATERING SHALL OCCUR DURING PERIODS OF INTENSE, HEAVY RAIN. FLOW TO THE SEDIMENT REMOVAL STRUCTURE SHALL NOT EXCEED THE STRUCTURE'S CAPACITY TO SETTLE AND FILTER FLOW OR ITS VOLUME CAPACITY. WHENEVER POSSIBLE, THE DISCHARGE FROM THE SEDIMENT REMOVAL STRUCTURE SHALL DRAIN TO A WELL-VEGETATED BUFFER BY SHEET FLOW WHILE MAXIMIZING THE DISTANCE TO THE NEAREST WATER RESOURCE AND MINIMIZING THE SLOPE OF THE BUFFER AREA. THERE SHALL BE NO DIRECT DISCHARGE TO EXISTING WETLANDS OR STREAMS. ALL DISCHARGE SHALL BE IN COMPLIANCE WITH STATE, LOCAL, AND FEDERAL REQUIREMENTS.
29. INITIATE STABILIZATION OF EXPOSED AREAS IMMEDIATELY IF CONSTRUCTION WORK TEMPORARILY OR PERMANENTLY CEASES.
30. ALL DISCHARGES FROM POLLUTION SOURCES ARE PROHIBITED ONSITE SUCH AS FUELS, WASTEWATER FROM WASH OUT OF CONCRETE, WASTEWATER FROM CLEAN OUT OF PAINTS, FORM RELEASE OILS, SOLVENTS, ADHESIVES, CURING COMPOUNDS, POLLUTANTS USED FOR MAINTENANCE OF VEHICLES AND EQUIPMENT, SOAPS & SOLVENTS, TOXIC OR HAZARDOUS SUBSTANCES, CHEMICALS AND OILS. IF A POLLUTANT IS DISCHARGED IT NEEDS TO BE IMMEDIATELY CLEANED UP BY REMOVING THE CHEMICAL AND AFFECTED SOIL OR AREA OF SPILL FROM THE SITE IN ACCORDANCE WITH BOTH THE MANUFACTURER RECOMMENDATIONS, FEDERAL, STATE, AND LOCAL REQUIREMENTS. DO NOT HOSE DOWN AND SPREAD SPILLED ITEM. ALL CHEMICALS USED ON THE SITE SHALL BE IN LEAK-PROOF CONTAINERS STORED AWAY FROM WETLANDS, SURFACE WATERS, STORMWATER INLETS, AND DRAINAGE MEASURES. SPILL KITS SHALL BE AVAILABLE ONSITE FOR EMERGENCY USE. THERE SHALL BE A SECONDARY CONTAINMENT MEASURE OF ALL CHEMICALS IN ADDITION TO SPILL-PROOF CONTAINERS.
31. PRIOR TO COMMENCEMENT OF CONSTRUCTION, APPLICABLE CONTRACTOR PERSONNEL MUST HAVE AN UNDERSTANDING OF THE EPA CONSTRUCTION GENERAL PERMIT REQUIREMENTS AND THEIR SPECIFIC RESPONSIBILITIES UNDER THE PERMIT. AT A MINIMUM, PERSONNEL MUST BE TRAINED AND UNDERSTAND THE FOLLOWING: LOCATION OF ALL STORMWATER CONTROLS AND HOW TO MAINTAIN THEM. PROCEDURES FOR COMPLYING WITH THE POLLUTION PREVENTION REQUIREMENTS. PROCEDURES FOR CONDUCTING INSPECTIONS, RECORDING FINDINGS, AND TAKING CORRECTIVE ACTION.
32. ALL SEDIMENT TRACKED ONTO ROADWAYS MUST BE REMOVED AT END OF EACH WORK DAY.
33. ALL USE OF CATIONIC TREATMENT CHEMICALS (EXAMPLES INCLUDE POLYMERS, CHITOSAN, CATIONIC PAM, FLOCCULANTS OR OTHER CHEMICAL UTILIZED FOR STABILIZATION) ARE PROHIBITED. IF ALL OTHER AVAILABLE STABILIZATION MEASURES ARE NOT POSSIBLE AND USE OF CATIONIC CHEMICALS IS ABSOLUTELY NECESSARY THE CONTRACTOR WILL NEED TO CONTACT THE EPA NEW ENGLAND OFFICE IN WRITING FOR APPROVAL AND SPECIFIC REQUIREMENTS (MAXIMUM DOSAGE RATE, RESIDUAL TESTING, SPECIFIC LIMITATIONS, ETC) PRIOR TO USE.

34. IF USING NON-VEGETATIVE STABILIZATION MEASURES, IT MUST BE COMPLETED NO LATER THAN 14 DAYS AFTER INITIATING STABILIZATION. ALL AREAS OF EXPOSED SOILS MUST BE COVERED.
35. INSPECTIONS OF EROSION CONTROL MEASURES SHALL BE AT LEAST ONCE EVERY 7 DAYS BY THE CONTRACTOR. AT A MINIMUM INSPECTIONS SHALL INCLUDE ALL DISTURBED AREAS, ALL STORMWATER CONTROLS AND POLLUTION PREVENTION MEASURES. ALL LOCATIONS WHERE STABILIZATION MEASURES HAVE BEEN IMPLEMENTED, EQUIPMENT AND MATERIAL STORAGE AREAS, ALL AREAS WHERE STORMWATER FLOWS AND ALL POINTS OF DISCHARGE. WHEN CORRECTIVE ACTIONS ARE REQUIRED, THE CONTRACTOR MUST IMMEDIATELY TAKE ALL STEPS TO PREVENT POLLUTANT DISCHARGES UNTIL A PERMANENT SOLUTION IS IMPLEMENTED. AS NECESSARY NEW OR MODIFIED CONTROLS MUST BE INSTALLED AND OPERATIONAL, THE REPAIR MUST BE COMPLETED WITHIN 7 DAYS FROM THE TIME OF DISCOVERY. WITHIN 24 HOURS OF A TRIGGERING CONDITION OCCURRING THAT REQUIRES A CORRECTIVE ACTION, A CORRECTIVE ACTION REPORT MUST BE COMPLETED.

MAINTENANCE:

1. ALL MEASURES STATED ON THE STORMWATER POLLUTION PREVENTION PLANS, SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION BY CONTRACTOR UNTIL NO LONGER REQUIRED FOR A COMPLETED PHASE OF WORK OR FINAL STABILIZATION OF THE SITE. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE CHECKED BY A QUALIFIED PERSON IN ACCORDANCE WITH THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED IN ACCORDANCE WITH THE FOLLOWING:
 - INLET PROTECTION DEVICES AND BARRIERS SHALL BE REPAIRED OR REPLACED IF THEY SHOW SIGNS OF UNDERMINING, OR DETERIORATION.
 - ALL SEEDING AREAS SHALL BE CHECKED REGULARLY TO SEE THAT A HEALTHY STAND OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.
 - ALL SEDIMENT CONTROLS SHALL BE REPAIRED TO THEIR ORIGINAL CONDITIONS IF DAMAGED. SEDIMENT SHALL BE REMOVED FROM THE TUBULAR SEDIMENT CONTROLS WHEN IT REACHES HALF THE HEIGHT OF THE CONTROL MEASURE OR AS REQUESTED BY THE OWNER OR ENGINEER.
 - THE CONSTRUCTION ENTRANCES SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE CONSTRUCTION ENTRANCES AS CONDITIONS DEMAND.
 - THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE). THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.
 - OUTLET STRUCTURES IN THE SEDIMENTATION BASINS SHALL BE MAINTAINED IN OPERATIONAL CONDITIONS AT ALL TIMES. SEDIMENT SHALL BE REMOVED FROM SEDIMENT BASINS OR TRAPS WHEN THE DESIGN CAPACITY HAS BEEN REDUCED BY 50%.

CONSTRUCTION GENERAL PERMIT NOTES AND NARRATIVE:

1. NARRATIVE: THE STORMWATER POLLUTION PREVENTION PLANS CONSIST OF THE SITE PREPARATION PLAN TOGETHER WITH AN EXISTING CONDITIONS PLANS, GRADING PLANS, ABBREVIATIONS AND NOTES SHEETS, AND DETAIL SHEETS.
2. THE EROSION CONTROL PLAN WILL BE IMPLEMENTED TO:
3. TREAT EROSION AS SOON AS POSSIBLE AFTER DISTURBANCE.
4. PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION AREA AND ENTERING THE RECEIVING WATERS.
5. CONSTRUCTION ACTIVITIES SHALL BE SCHEDULED TO MINIMIZE EROSION.
6. ONLY DISTURB, CLEAR, OR GRADE AREAS NECESSARY FOR CONSTRUCTION.



Carlton M. Quinn
PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:

281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:

**MIXED-USE RETAIL AND
RESIDENTIAL DEVELOPMENT**
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

SCALE: NONE DWG. NAME: C-2389-08

DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

PREPARED BY:



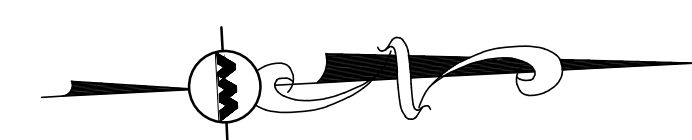
**ALLEN & MAJOR
ASSOCIATES, INC.**
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOUBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

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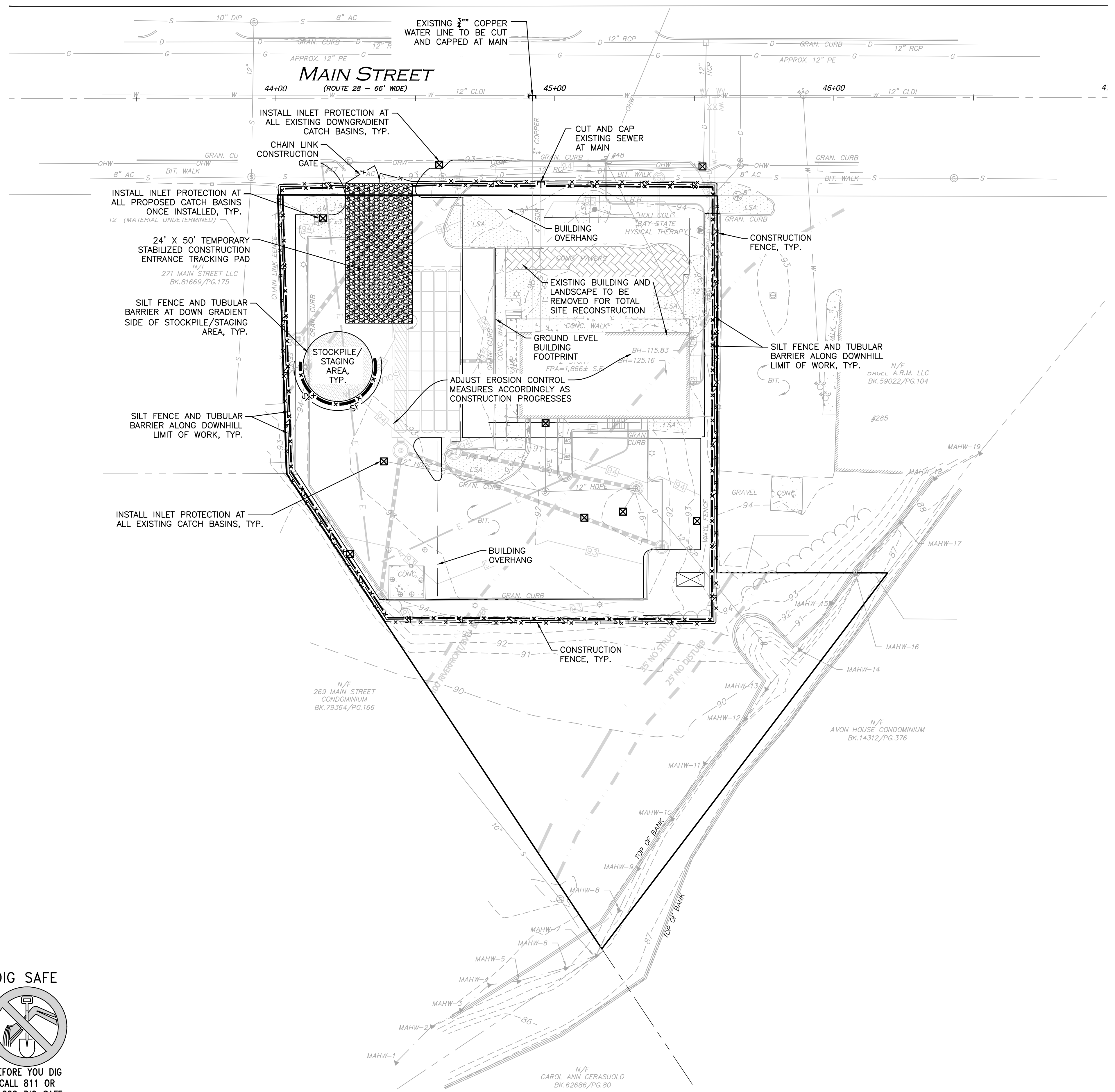
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DRAWING TITLE: ABBREVIATIONS & NOTES	SHEET No. C-002
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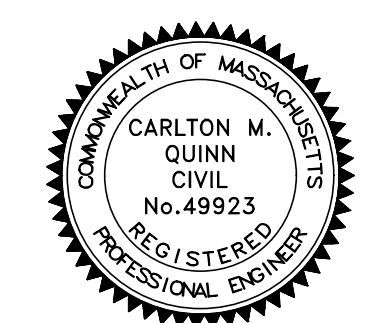
N:\PROJECTS\2398-08\CIVIL\DRAWINGS\CURRENT\C2398-08_EROSION CONTROL AND SITE PREP.DWG



LEGEND	
SILT FENCE	—SF—
TUBULAR BARRIER	—X—X—X—
EROSION CONTROL FABRIC	—E—E—E—
CATCH BASIN FILTER	—C—C—C—
STONE CHECK DAM	—S—S—S—
STABILIZED ENTRANCE	—SE—SE—SE—
TURBIDITY CURTAIN	—TC—TC—TC—
STOCKPILE/STAGING AREA	—S—S—S—



- NOTES:**
1. THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 2. ALL ELEVATIONS REFER TO NAVD 88.
 3. THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.
 4. THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF READING DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.
DIGSAFE: 800-344-7233
READING DEPT. OF PUBLIC WORKS: 781-942-9092
 5. SEE THE ABBREVIATIONS AND NOTES PLAN, C-001 AND C-002 FOR GENERAL NOTES, AND EROSION CONTROL NOTES.
 6. EXISTING CONDITIONS BASE PLAN WAS PREPARED BY ALLEN & MAJOR ASSOCIATES.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

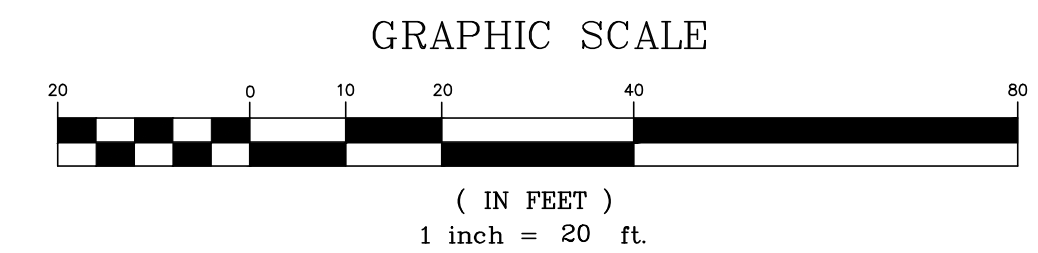
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PROJECT NO.	2389-08	DATE:	2025-11-24
SCALE:	1"=20'	DWG. NAME:	C-2389-08
DESIGNED BY:	DMR/MB/BDP	CHECKED BY:	CMQ

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896

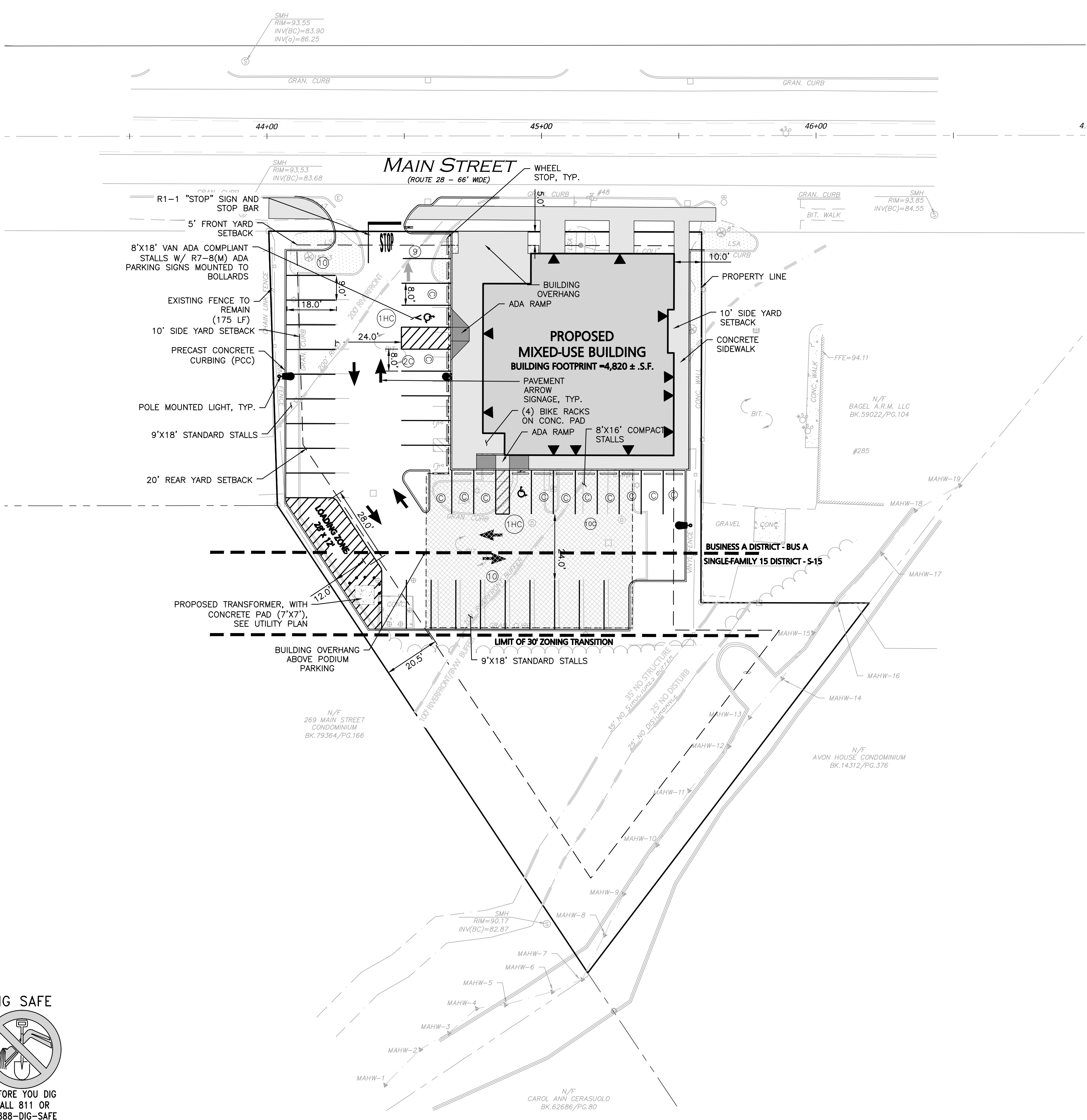
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LEGEND

PROP. PROPERTY LINE	---
SIGN	—
BOLLARD	•
BUILDING	▭
BUILDING ARCHITECTURE	▭
BUILDING INTERIOR WALLS	▭
CURB	—
RETAINING WALL	—
PARKING STRIPING	▨
ROADWAY STRIPING	▨
TRAFFIC ARROWS	→
SIDEWALK	▭
ADA ACCESSIBLE RAMP	▭
ADA DET. WARNING SURFACE	▨
SETBACK LINE	---
PARKING COUNT	⑩
COMPACT PARKING STALL	⊙
PRIVACY FENCE	—
CHAIN LINK FENCE	—
SILENT FENCE	—
TRANSFORMER	⊠
LIGHTING	•

- ### GENERAL NOTES:
- THE EXISTING CONDITIONS USED IN THIS DRAWING IS FROM AN EXISTING CONDITIONS PLAN PREPARED BY ALLEN & MAJOR ASSOCIATES, INC.
 - THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 - THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. ITS INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

OFF-STREET PARKING SUMMARY

USE: PER TOWN OF READING ZONING BYLAW SECTION 5.6.7.4A, MIXED-USE DEVELOPMENTS, RESIDENTIAL USES:

A MINIMUM OF 1.25 SPACES FOR EACH DWELLING UNIT SHALL BE PROVIDED.

RETAIL STORES/OFFICES/CONSUMER SERVICE ESTABLISHMENTS
ONE SPACE PER 300 SQUARE FEET (S.F.) OF GROSS FLOOR AREA

ONE LOADING SPACE MINIMUM FOR EVERY 20 UNITS.

PARKING SUMMARY:

24 UNIT APARTMENT BUILDING: 24 UNITS x 1.25 SPACES/UNIT	=30 SPACES
RETAIL SPACES REQUIRED: 2,400 S.F. / 300 S.F.	=8 SPACES (1)
TOTAL OFF-STREET PARKING REQUIREMENT	=38 SPACES

ADA REQUIRED: THERE ARE BETWEEN 26-50 PARKING SPACES, REQUIRING 2 TOTAL PARKING STALLS TO BE ACCESSIBLE AND 1 BEING VAN ACCESSIBLE.

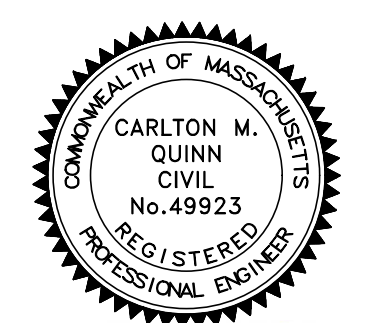
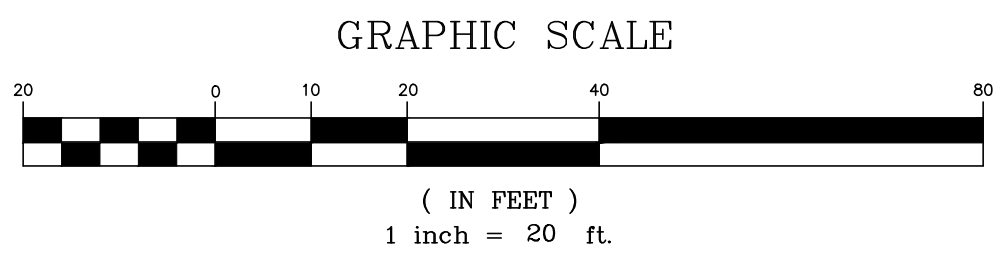
ADA PROVIDED: 2 TOTAL ACCESSIBLE PARKING, WITH 1 BEING VAN ACCESSIBLE.

LOADING SPACES REQUIRED = 1 REQUIRED, 1 PROVIDED. (1 LOADING SPACE PER 20 UNITS WITH 24 TOTAL UNITS PROPOSED)(1)

STANDARD (9' x 18')	COMPACT (8' x 16')	ACCESSIBLE (8' WIDE)	TOTAL REQUIRED	TOTAL PROVIDED
26	12 (30%)	2	38	40

DIMENSIONAL REQUIREMENTS: BUSINESS-A DISTRICT (BUS. A) AND MIXED-USE DEVELOPMENT PER SECTION 5.6.7 OF THE ZONING BYLAW

ITEM	REQUIRED/ALLOWED	EXISTING	PROPOSED
LOT AREA (MIN.)	N/A	33,554± S.F. 0.77± ACRES	33,554± S.F. 0.77± ACRES
LOT FRONTAGE (MIN.)	N/A	157.7'	157.7'
FRONT YARD BUILDING SETBACK	5' (MIN.)	42.0'	5'
SIDE YARD BUILDING SETBACK	10' (MIN.)	16.0'	10'
REAR YARD BUILDING SETBACK	20' (MIN.)	79.0'	21'
BUILDING LOT COVERAGE (MAX.)	60%	5.4%	33%
BUILDING HEIGHT (MAX.)	45'	TBD	<45'
OPEN SPACE (%)	N/A	TBD	57%



Carlton Quinn
PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

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281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND
RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 **DATE:** 2025-11-24
SCALE: 1" = 20' **DWG. NAME:** C-2389-08
DESIGNED BY: DMR/MB/BDP **CHECKED BY:** CMQ

PREPARED BY:

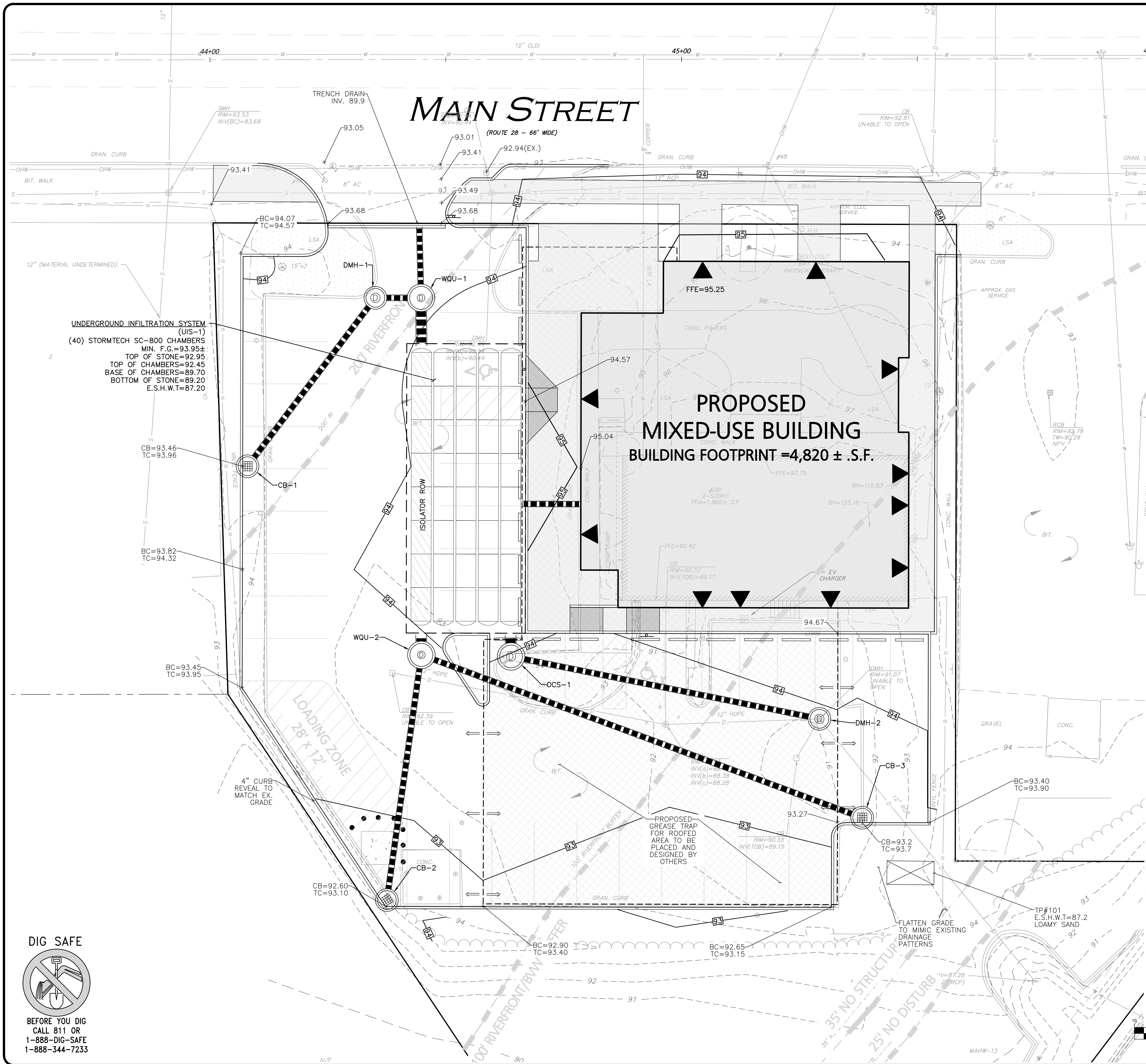
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100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
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DRAWING TITLE: LAYOUT & MATERIALS PLAN
SHEET No. C-102

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LEGEND

- DRAIN MANHOLE (DMH)
- CATCH BASIN (CB)
- CATCH BASIN - DOUBLE GRATE
- OUTLET CONTROL (OCS)
- DIVERSION WEIR
- WATER QUALITY UNIT (WQU)
- AREA DRAIN (AD)
- FLARED END SECTION (FES)
- DRAIN LINE
- RIPRAP OUTFALL
- HEADWALL
- 5' CONTOUR
- 1' CONTOUR
- SPOT GRADE
- INFILTRATION SYSTEM
- INFILTRATION PIPE
- DETECTION PIPE
- UNDERDRAIN
- FLOW DIRECTION

DRAIN PIPE TABLE

PIPE SEGMENT	SIZE	LENGTH	SLOPE	MATERIAL
CB-1 - DMH-1	12"	44.8'	1.00%	HDPE
CB-2 - WQU-2	12"	52.5'	0.67%	HDPE
CB-3 - WQU-2	12"	99.7'	0.95%	HDPE
DMH-1 - WQU-1	12"	9.7'	1.03%	HDPE
DMH-2 - EXISTING OUTLET	12"	72.0'	1.00%	HDPE
OCS-1 - DMH-2	12"	66.7'	2.40%	HDPE
ROOF DRAIN - UIS-1C	12"	12.7'	1.18%	HDPE
TD-1 - WQU-1	12"	15.3'	1.31%	HDPE
UIS-1D OUT - OCS-1	24"	5.0'	0.00%	HDPE
WQU-1 - UIS-1A	24"	10.7'	0.93%	HDPE
WQU-2 - UIS-1B	24"	4.8'	1.05%	HDPE

DRAIN STRUCTURE TABLE

STRUCTURE	STRUCTURE DETAILS
CB-1	RIM = 93.46 INV OUT = 90.45 (DMH-1)
CB-2	RIM = 92.60 INV OUT = 90.10 (WQU-2)
CB-3	RIM = 93.20 INV OUT = 90.70 (WQU-2)
DMH-1	RIM = 94.00 INV IN = 90.00 (CB-1) INV OUT = 89.90 (WQU-1)
DMH-2	RIM = 94.00 INV IN = 88.10 (OCS-1) INV OUT = 88.00 (EXISTING OUTLET)
OCS-1	RIM = 94.50 INV IN = 89.70 (UIS-1D OUT) INV OUT = 89.70 (DMH-2)
WQU-1	RIM = 94.00 INV IN = 89.80 (DMH-1) INV IN = 89.80 (TD-1) INV OUT = 89.80 (UIS-1A)
WQU-2	RIM = 94.00 INV IN = 89.75 (CB-3) INV IN = 89.75 (CB-2) INV OUT = 89.75 (UIS-1B)



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

SCALE: 1" = 10' DWG. NAME: C-2389-08

DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

PREPARED BY:



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civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
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TEL: (781) 935-6889
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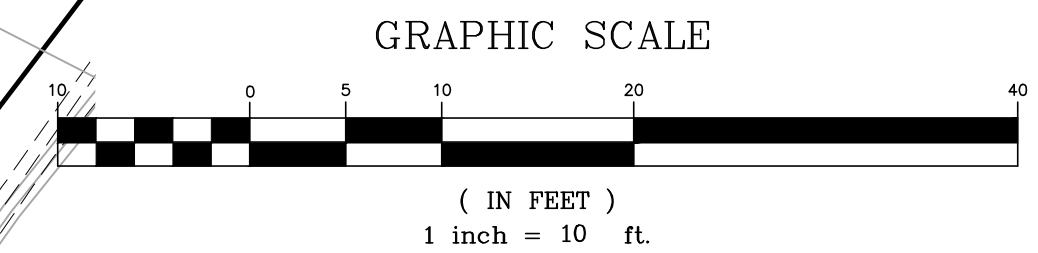
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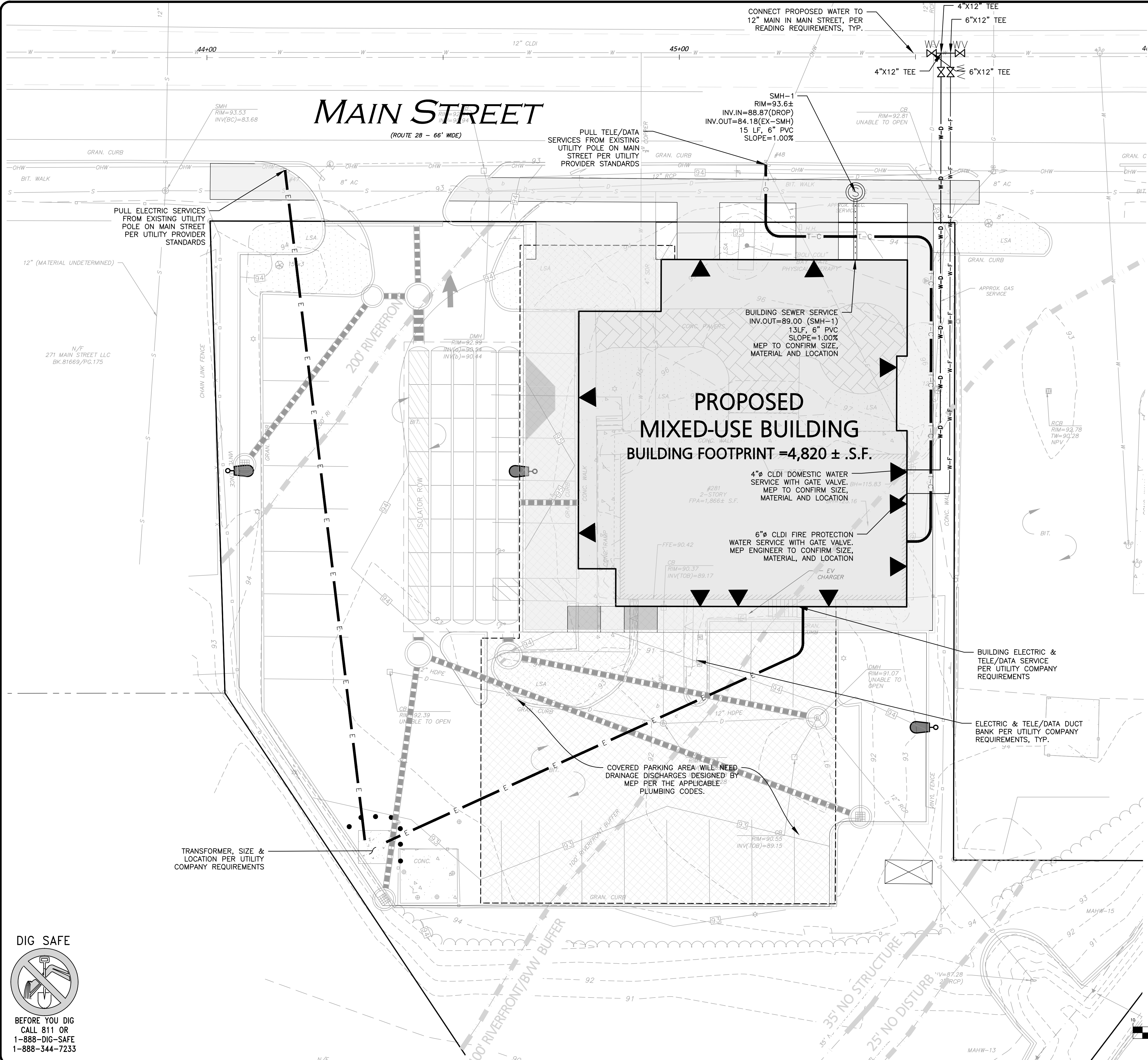
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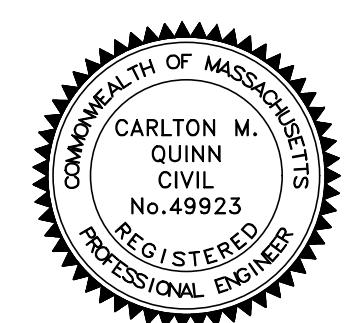
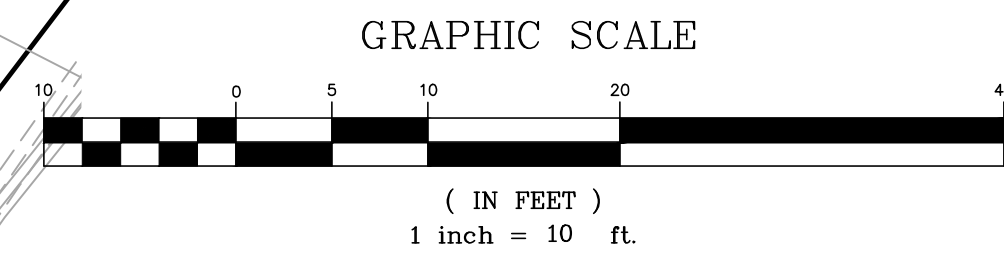
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LEGEND	
SEWER MANHOLE	⊙
SEWER CLEANOUT	⊙
SEWER VENT	⊙
SEWER LINE	—
SEWER FORCEMAIN	FM
CONCRETE PIPE ENCASMENT	—
WATER LINE	W
WATER (FIRE SERVICE)	W-F
WATER (DOMESTIC SERVICE)	W-D
WATER VALVE	⊕
HYDRANT	⊕
WATER LINE REDUCER	▶
GAS LINE	GAS
GAS VALVE	⊕
SEPTIC/HOLDING TANK	⊕
GREASE TRAP	⊕
LIGHT FIXTURE	⊕
OVER HEAD WIRE	—
UTILITY POLE	⊕
ELECTRIC MANHOLE/SPLICE BOX	⊕
SWITCHING STATION	⊕
HAND HOLE	⊕
ELECTRICAL CONDUIT	—
LIGHTING CONDUIT	—
IRRIGATION SLEEVE	—
ELEC/TELE/CABLE CONDUIT	—
TELE/CABLE CONDUIT	—
TELE/FIRE CONDUIT	—

- NOTES:**
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 - ALL ELEVATIONS REFER TO NAVD 88.
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 - THE CONTRACTOR SHALL CONTACT "DIGSAFE" AND THE TOWN OF READING DEPARTMENT OF PUBLIC WORKS AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST THE LOCATION OF THE EXISTING UTILITIES.
DIGSAFE: 800-344-7233
READING DEPT. OF PUBLIC WORKS: 781-942-9092
 - ALL WATER CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH TOWN OF READING STANDARDS, TYP.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

APPLICANT/OWNER:
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281 MAIN STREET
READING, MA 01867

PROJECT:
**MIXED-USE RETAIL AND
RESIDENTIAL DEVELOPMENT**
281 MAIN STREET
READING, MA

PROJECT NO.	2389-08	DATE:	2025-11-24
SCALE:	1" = 10'	DWG. NAME:	C-2389-08
DESIGNED BY:	DMR/MB/BDP	CHECKED BY:	CMQ

PREPARED BY:

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civil engineering • land surveying
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DRAWING TITLE:	SHEET No.
UTILITIES PLAN	C-104

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LUMINAIRE SCHEDULE		DESCRIPTION	MOUNTING	NOTE 1	TOTAL LUMENS	LAMP DEPRECIATION	QUANTITY
CALLOUT	SYMBOL	HUBBELL OUTDOOR LIGHTING CIMARRON LED CL1-60L-4K-3-BC	POLE	Mounting Height: 15'-0"	14977	0.9	3
		HUBBELL OUTDOOR LIGHTING CIMARRON LED CL1-60L-4K-3	WALL	Mounting Height: 12'-0"	14977	0.9	1

GENERAL PHOTOMETRIC SCHEDULE	
AVERAGE FOOT-CANDLES	1.16
MAXIMUM FOOT-CANDLES	12.8
MINIMUM FOOT-CANDLES	0.0

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1-888-344-7233



LEGEND

- SINGLE POLE LIGHT
- WALL MOUNT LIGHT
- 1 FOOTCANDLE CONTOUR
- .5 FOOTCANDLE CONTOUR
- LIGHTING LEVELS GIVEN IN FOOT-CANDLES

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 - FOOT CANDLE VALUES SHOWN ON THE PLAN ARE PRODUCED UTILIZING DESIGN MASTER PHOTOMETRICS SOFTWARE AND ASSOCIATED IES FILES BY THE MANUFACTURER FOR THE PROPOSED LIGHT FIXTURE.
 - ALL PHOTOMETRIC DATA REFERS TO UNITS IN FOOT CANDLES (FC). THE LIMIT OF 1.0 FC ILLUMINATION IS SHOWN IN A RED SOLID LINE AND THE LIMIT OF THE 0.5 FOOT CANDLE (FC) ILLUMINATION IS SHOWN IN BLUE.
 - ALL ILLUMINATION ON PARKING LOTS MUST BE SHIELDED SO AS NOT TO SHINE UPON ADJUTING PROPERTIES.
 - SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL LIGHTING INFORMATION.
 - ALL PROPOSED LIGHTING FIXTURES SHALL BE DARK SKY COMPLIANT.
 - LIGHT POLES ADJACENT TO PARKING SHALL HAVE THE 3'-0" REVEAL FOOTING. LIGHT POLES ADJACENT TO SIDEWALKS SHALL HAVE FOOTING IN A FLUSH CONDITION.

PRODUCT IMAGE(S)

DIMENSIONS

GRAPHIC SCALE

(IN FEET)
1 inch = 10 ft.

PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV DATE DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2398-08 DATE: 2025-11-24
SCALE: 1" = 10' DWG. NAME: C-2389-08
DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

PREPARED BY:

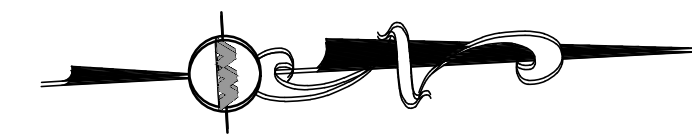
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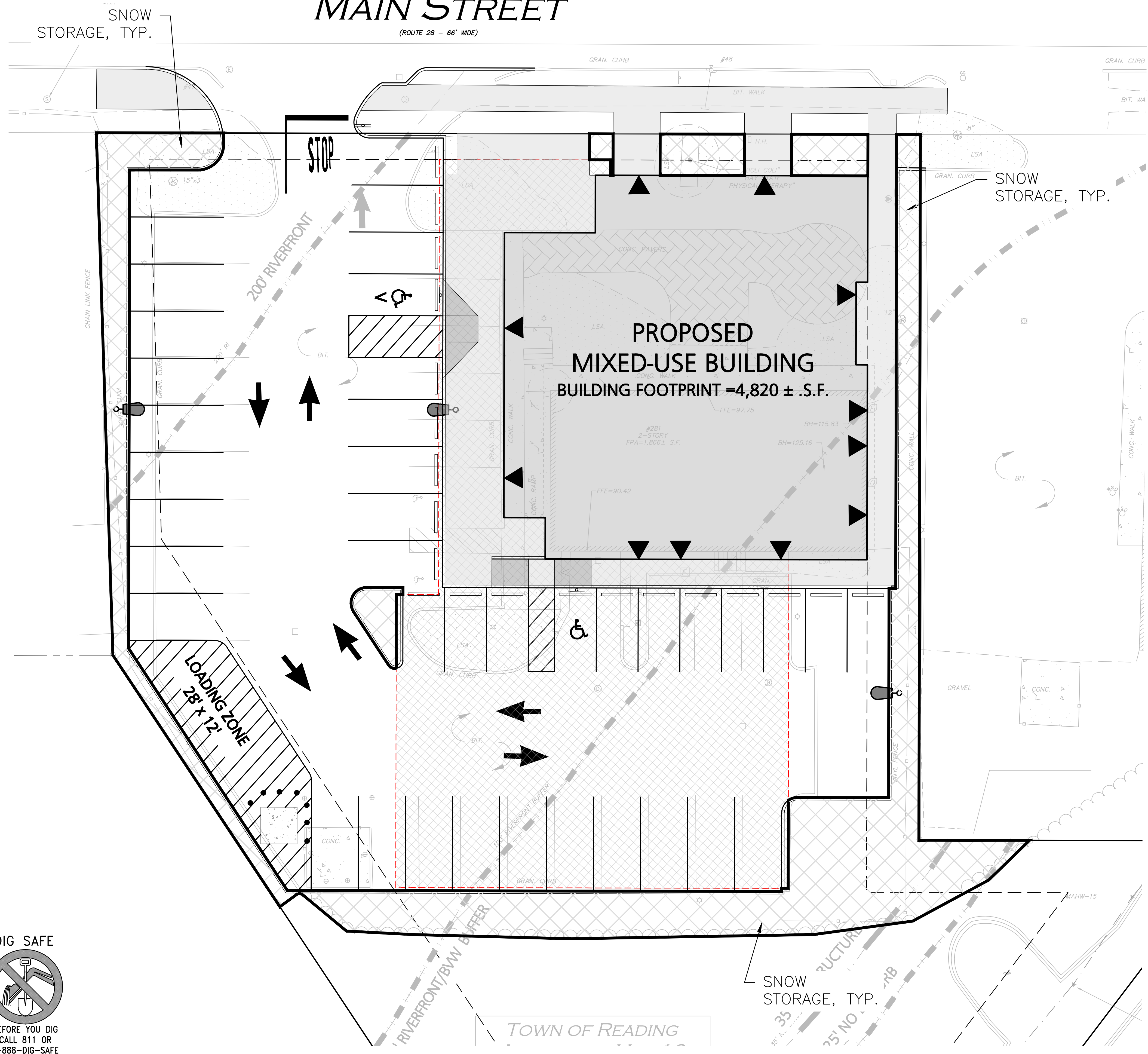
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MAIN STREET

(ROUTE 28 - 66' WIDE)



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2. THE PLAN DEPICTS APPROXIMATELY 3,325 S.F. OF AREA AVAILABLE FOR PRIMARY SNOW STORAGE WITHIN THE PROJECT AREA FOR AN AREA OF 8,834 SF REQUIRING SNOW REMOVAL. THE AREA IS ESTIMATED TO ACCOMMODATE AN APPROXIMATE 7.5' OF SNOWFALL, ASSUMING A 5:1 COMPACTION AND AN AVERAGE SNOW PILE HEIGHT OF 4.0'.
3. IT IS UNLIKELY THIS PROJECT WOULD NEED SNOW TO BE REMOVED OFF-SITE, BUT IF NECESSARY, SNOW WILL BE STOCKPILED ON SITE UNTIL THERE IS NOT ENOUGH SPACE. AS NECESSARY, THE SNOW WILL BE REMOVED AND DISPOSED OF OFF-SITE. IT WILL BE THE RESPONSIBILITY OF THE SNOW REMOVAL CONTRACTOR TO PROPERLY DISPOSE OF TRANSPORTED SNOW ACCORDING TO MASSACHUSETTS DEP BUREAU OF RESOURCE PROTECTION - MASSACHUSETTS DEPARTMENT OF ENVIRONMENTAL PROTECTION BUREAU OF WATER RESOURCES SNOW DISPOSAL GUIDANCE EFFECTIVE DATE: DECEMBER 23, 2019, GOVERNING THE PROPER DISPOSAL OF SNOW. IT WILL BE THE RESPONSIBILITY OF THE SNOW REMOVAL CONTRACTOR TO FOLLOW THESE GUIDELINES AND ALL APPLICABLE LAWS AND REGULATIONS.
4. UNDER NO CIRCUMSTANCES SHALL SNOW BE STORED IN ANY WETLAND RESOURCE AREA OR PROPOSED STORMWATER MANAGEMENT SYSTEM.
5. SNOW STORAGE WILL BE IMPLEMENTED TO AVOID HYDRANTS, FENCES LANDSCAPING AND OTHER PERMANENT FEATURES.



PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

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 281 MAIN STREET
 READING, MA 01867

PROJECT:
**MIXED-USE RETAIL AND
 RESIDENTIAL DEVELOPMENT**
 281 MAIN STREET
 READING, MA

PROJECT NO.	2389-08	DATE:	2025-11-24
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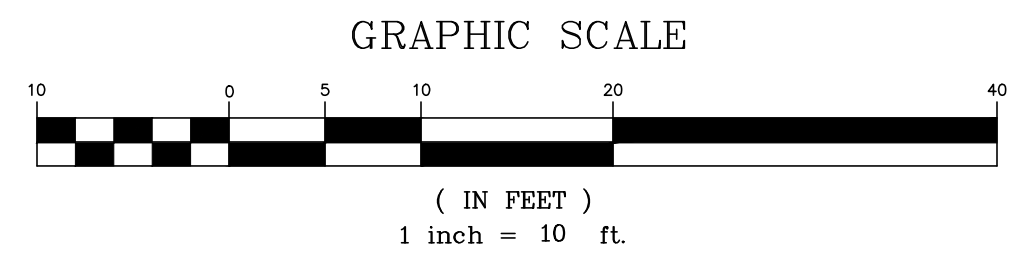
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SNOW STORAGE PLAN	C-106

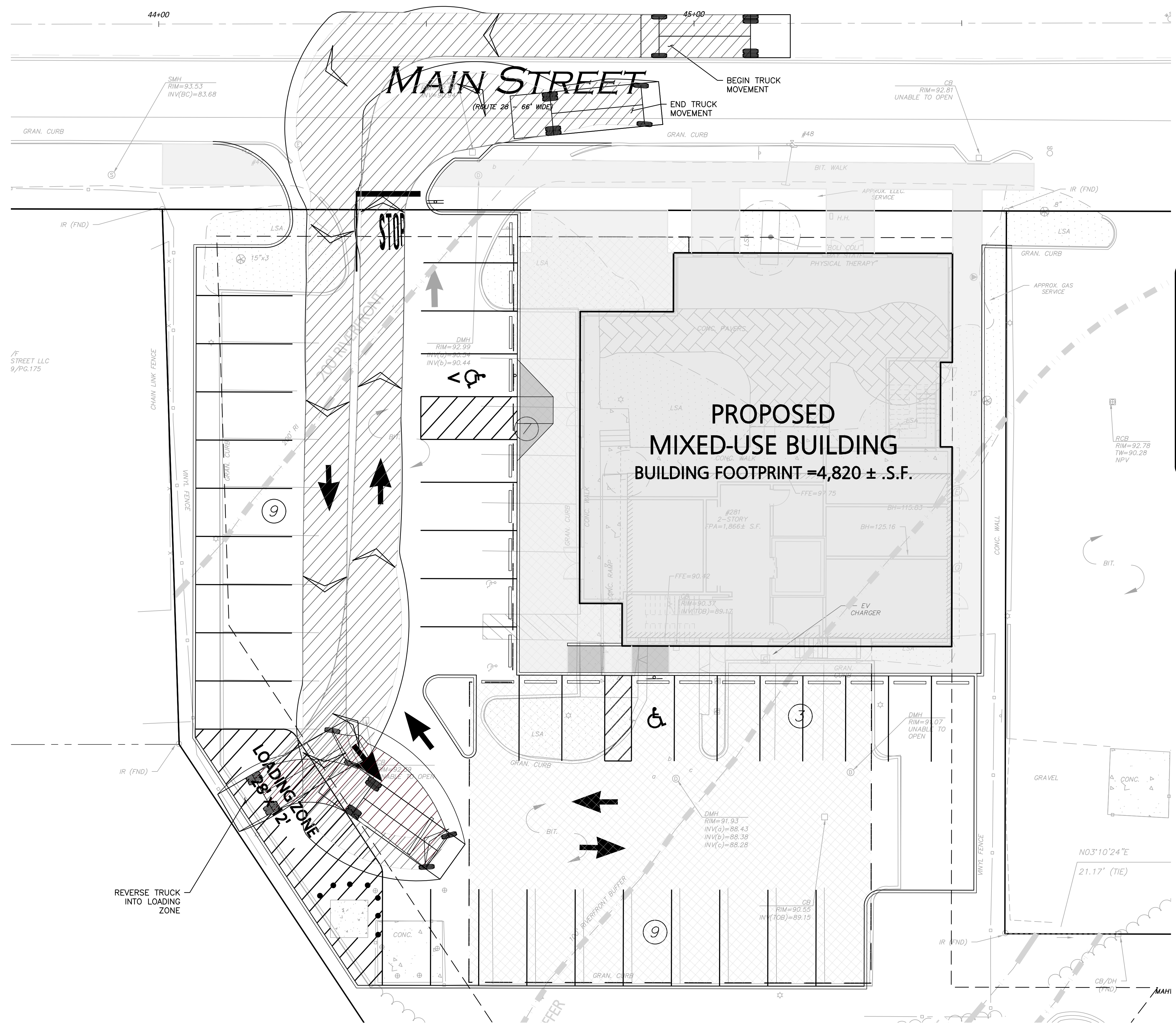
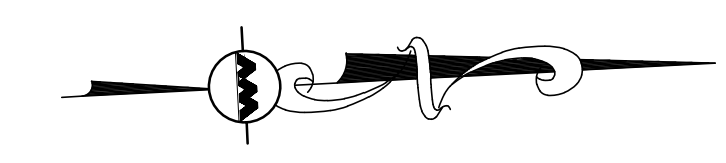


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N:\PROJECTS\2398-08\CIVIL\DRAWINGS\CURRENT\C-2398-08_VEHICLE MOVEMENT.DWG



- NOTES:**
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 2. FIRE TRUCK DIMENSIONS USED IN VEHICLE SWEEP PATH ANALYSIS WERE PROVIDED BY THE TOWN OF READING FIRE DEPARTMENT.

Hino 338 M + Wayne Royal GT14 Refuse Truck
 Overall Length 27.883ft
 Overall Width 3.983ft
 Overall Body Height 17.083ft
 Min Body Ground Clearance 1.315ft
 Track Width 8.042ft
 Lock-to-lock time 6.905
 Curb to Curb Turning Radius 27.400ft



PROFESSIONAL ENGINEER FOR
 ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
 281 READING, LLC
 281 MAIN STREET
 READING, MA 01867

PROJECT:
 MIXED-USE RETAIL AND
 RESIDENTIAL DEVELOPMENT
 281 MAIN STREET
 READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

SCALE: DWG. NAME: C-2389-08

DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

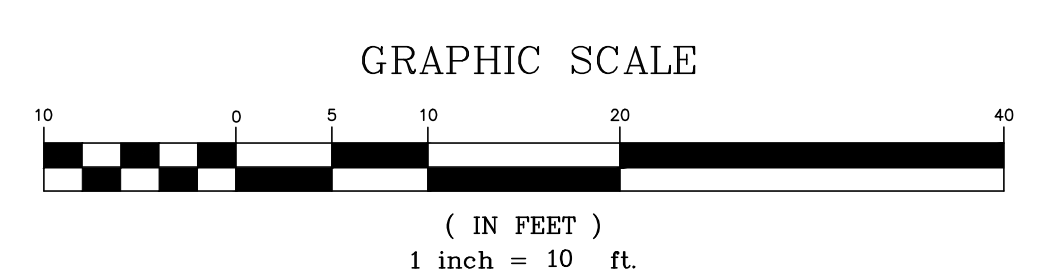
PREPARED BY:

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 civil engineering • land surveying
 environmental consulting • landscape architecture
 www.allenmajor.com
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 WOBURN MA 01801
 TEL: (781) 935-6889
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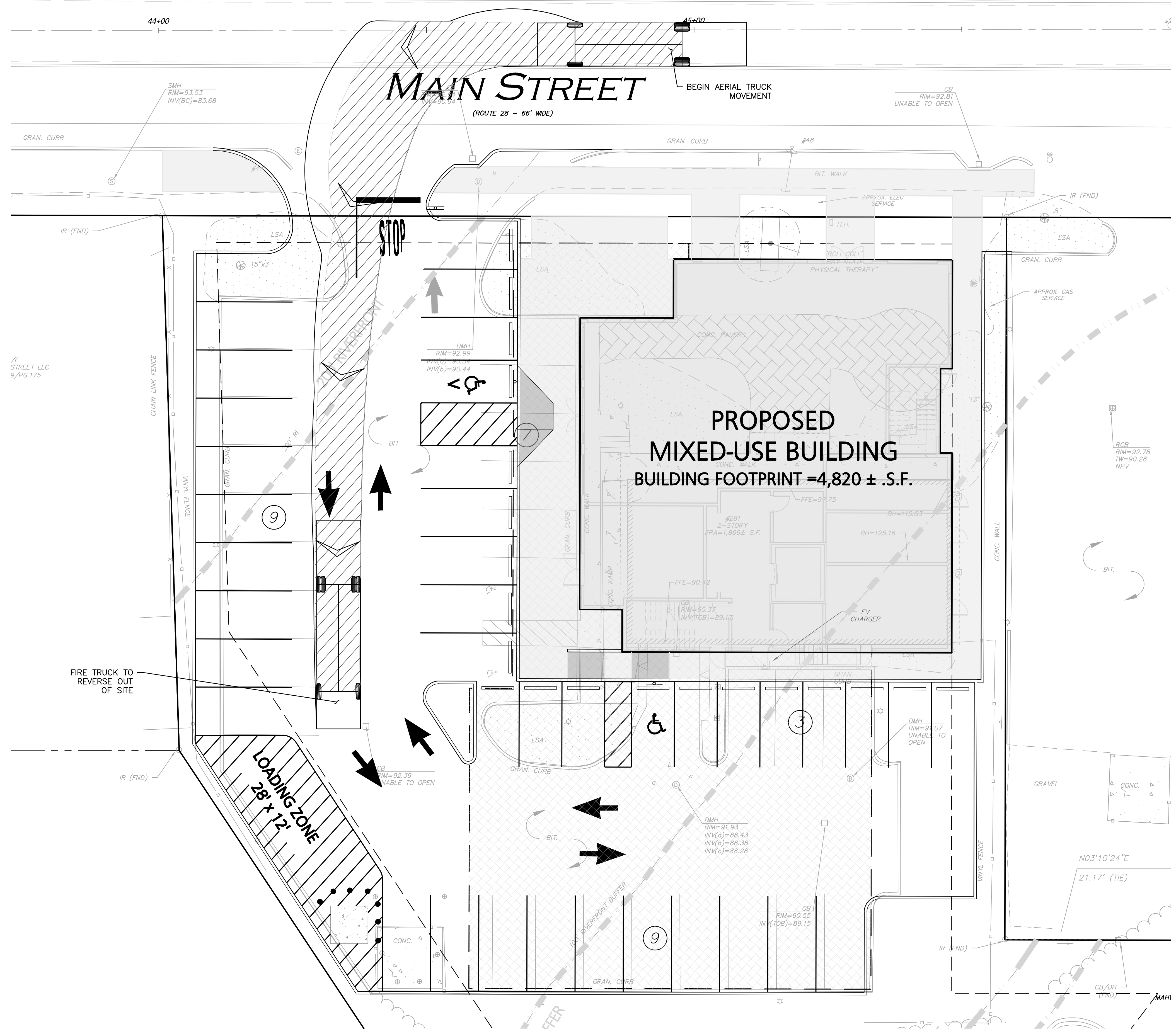
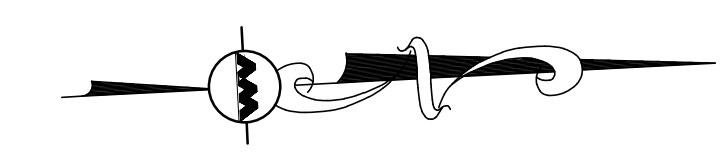
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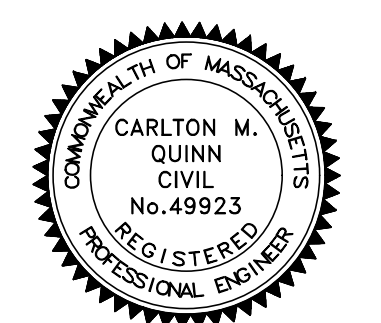
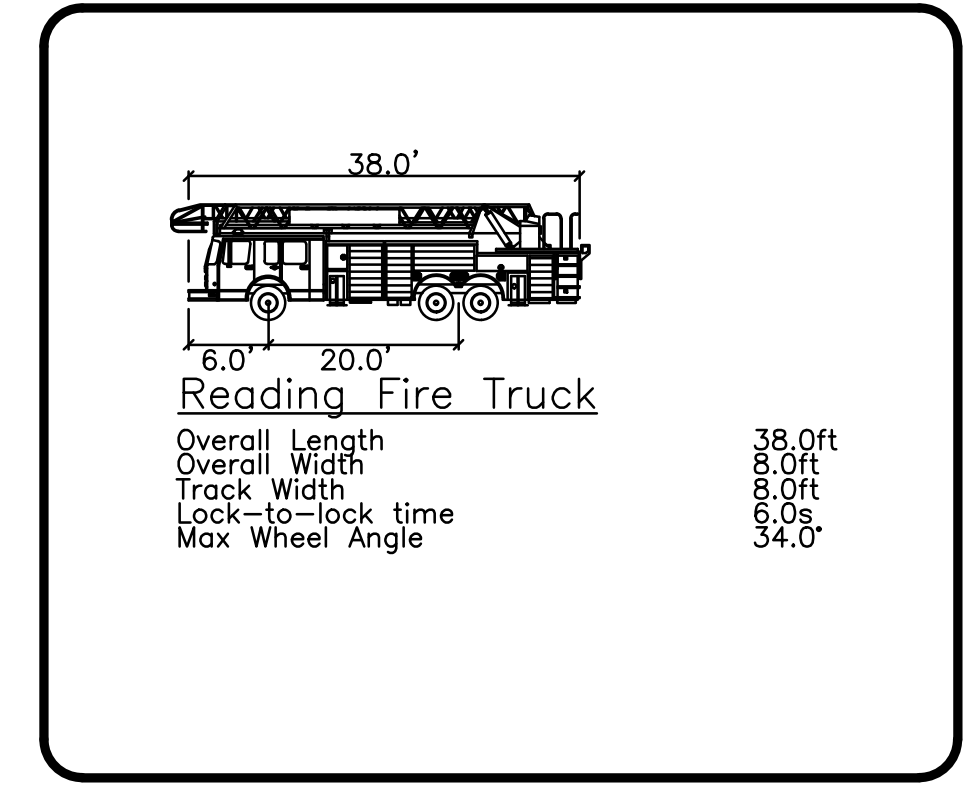
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 1-888-344-7233

N:\PROJECTS\2398-08\CIVIL\DRAWINGS\CURRENT\C-2398-08_FIRE TRUCK TURNING.DWG



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Carlton M. Quinn
 PROFESSIONAL ENGINEER FOR
 ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

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 281 MAIN STREET
 READING, MA 01867

PROJECT:
**MIXED-USE RETAIL AND
 RESIDENTIAL DEVELOPMENT**
 281 MAIN STREET
 READING, MA

PROJECT NO.	2389-08	DATE:	2025-11-24
SCALE:		DWG. NAME:	C-2389-08
DESIGNED BY:	DMR/MB/BDP	CHECKED BY:	CMQ

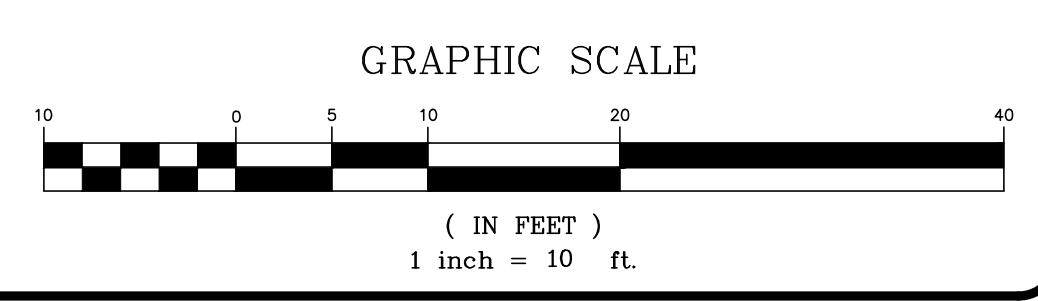
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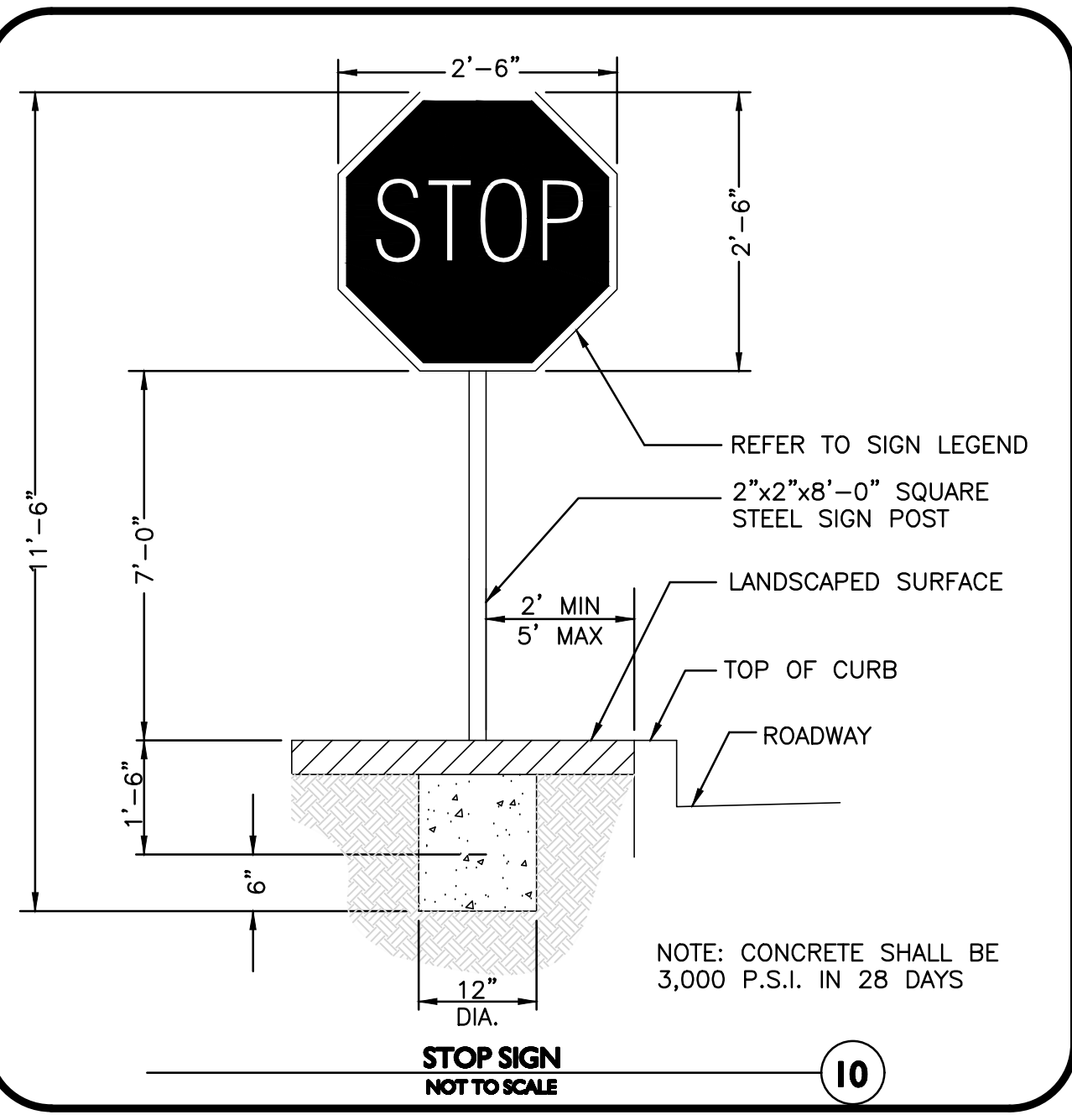
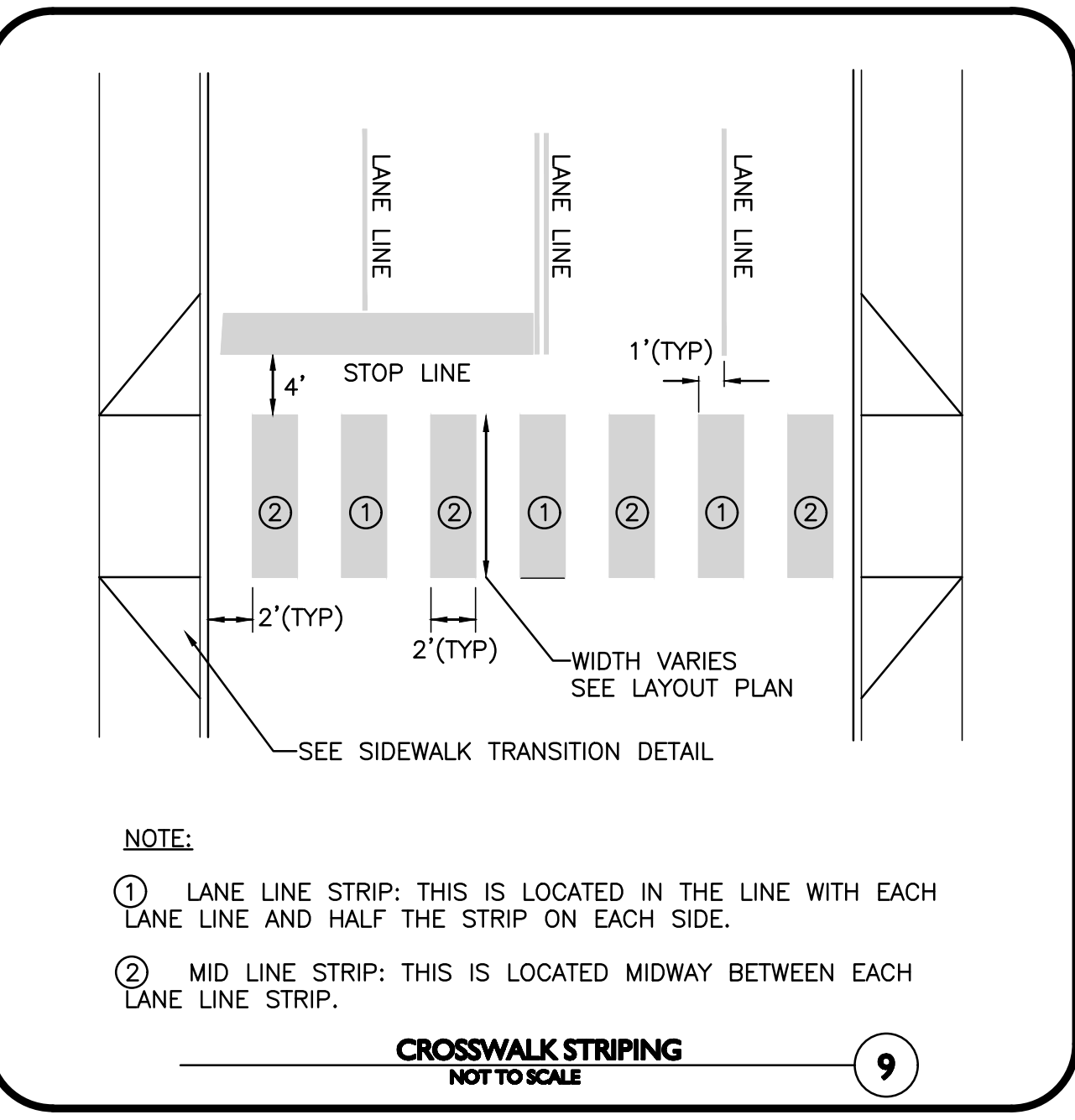
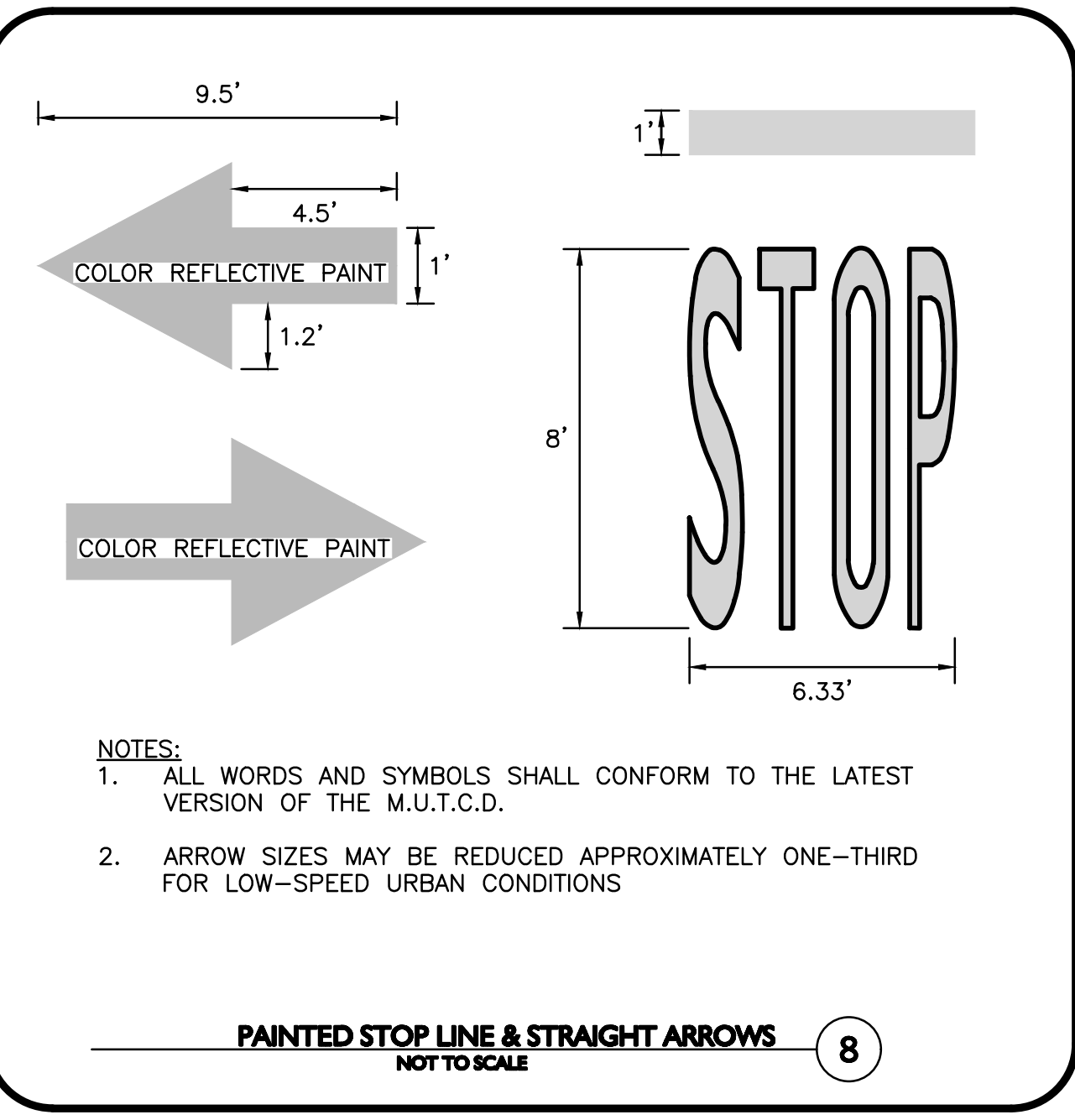
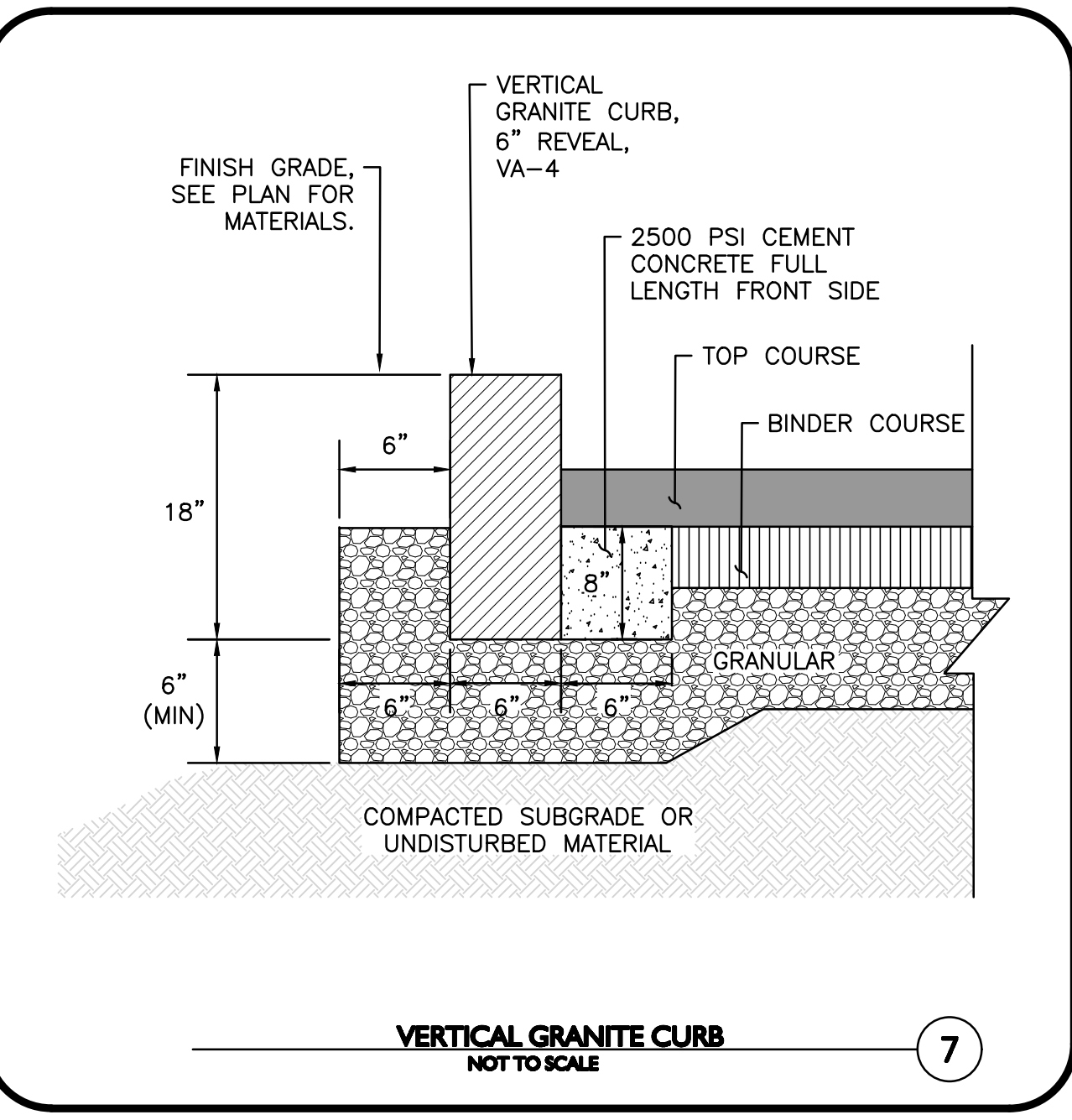
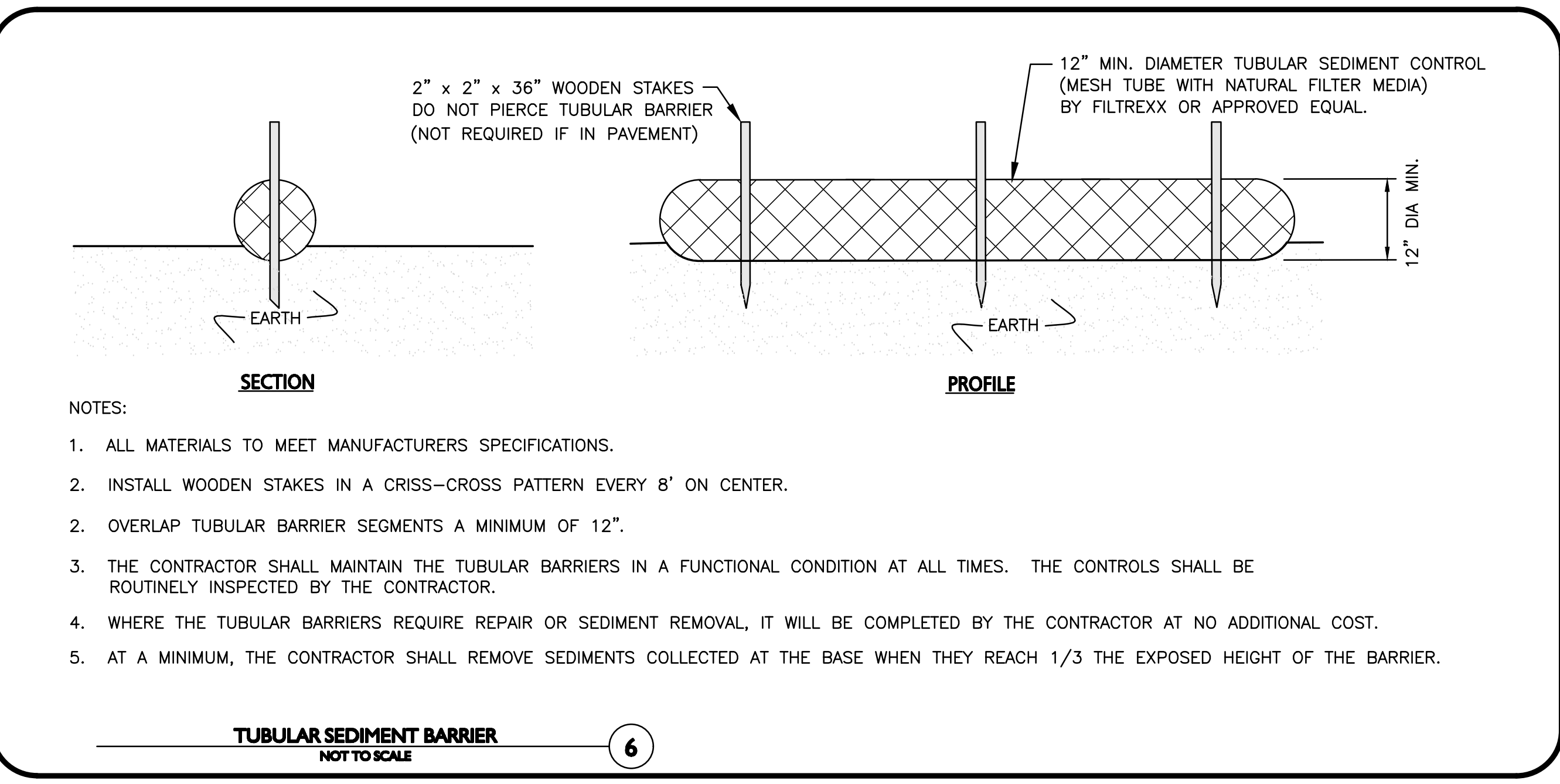
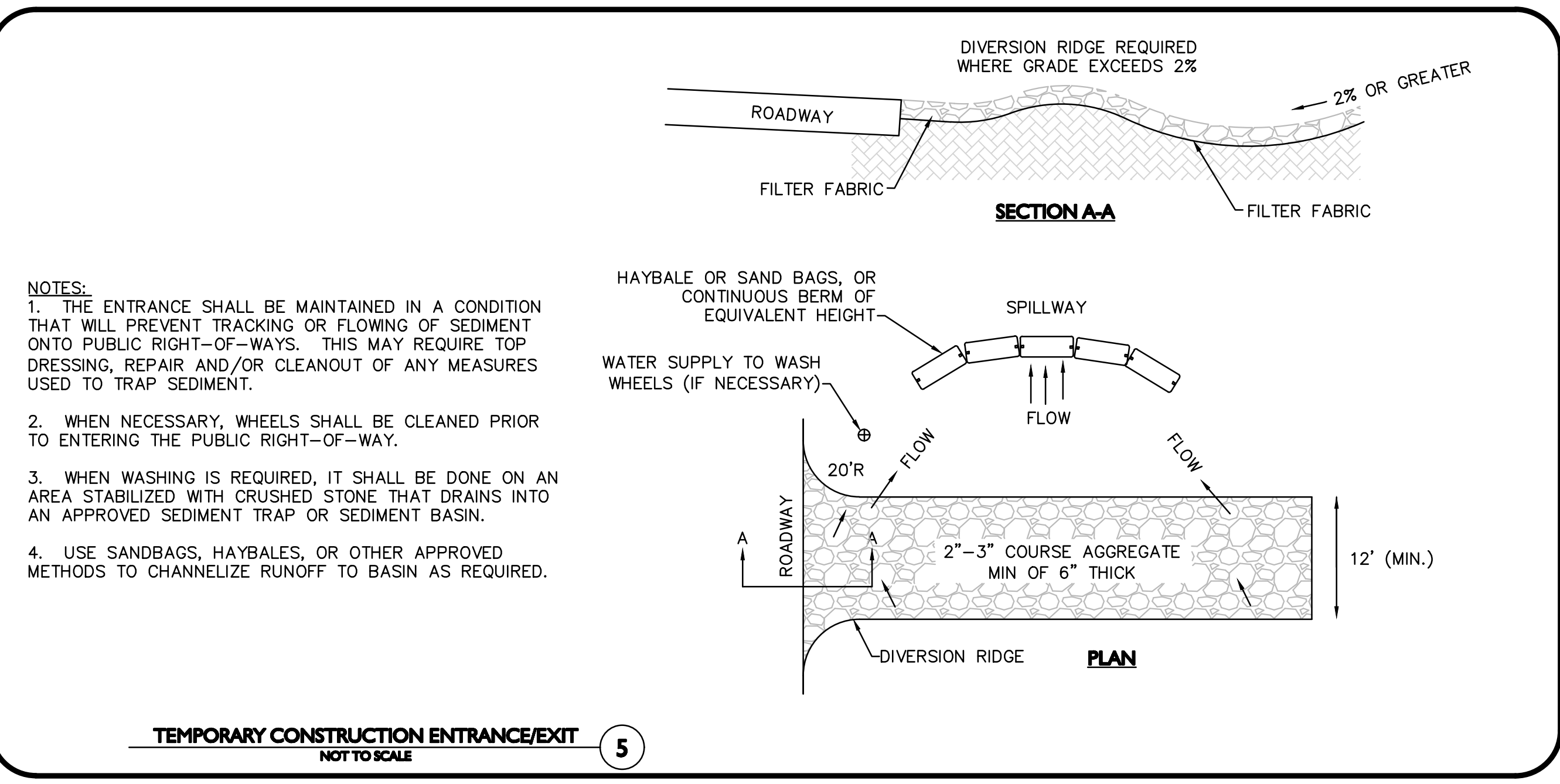
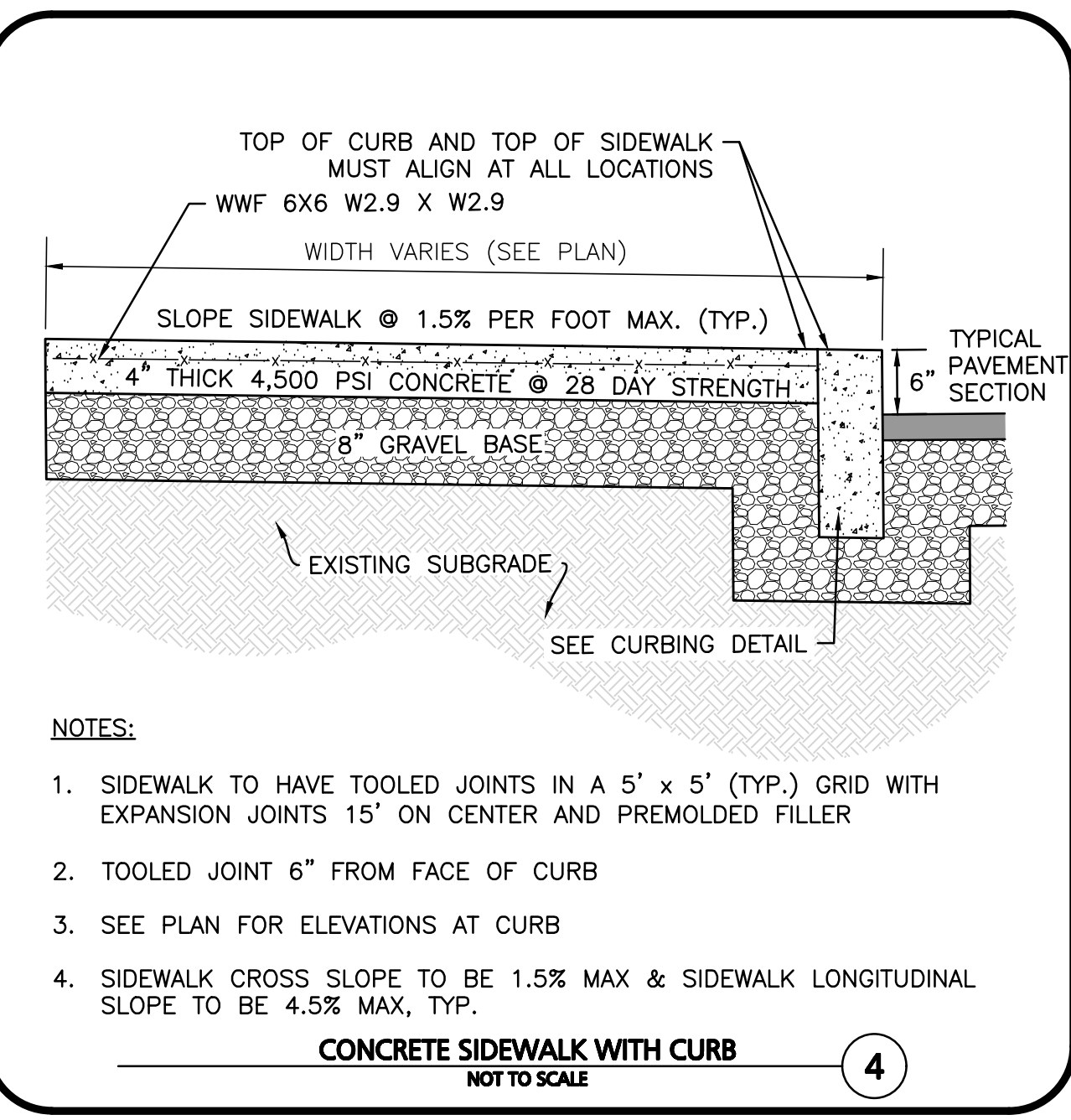
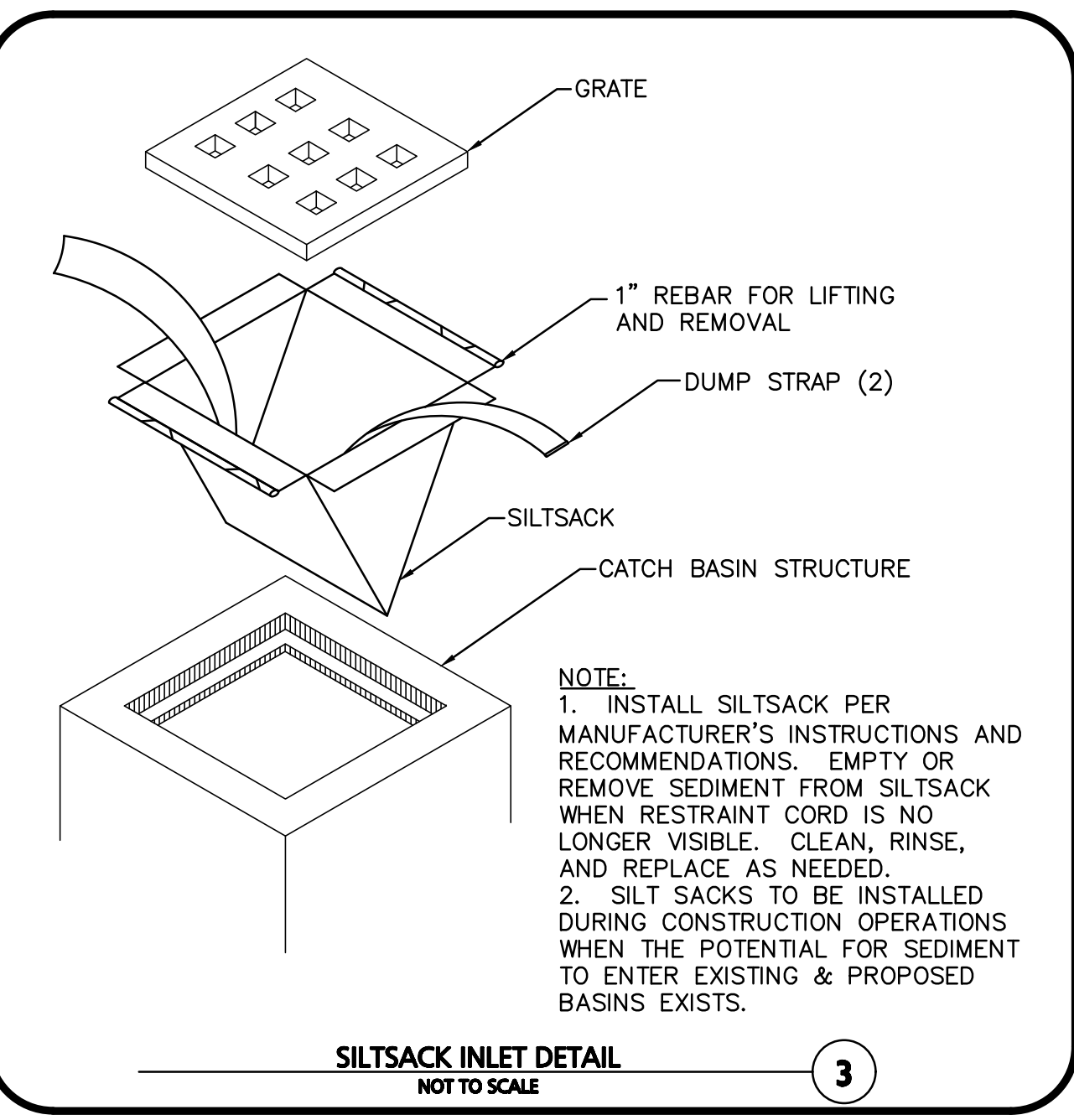
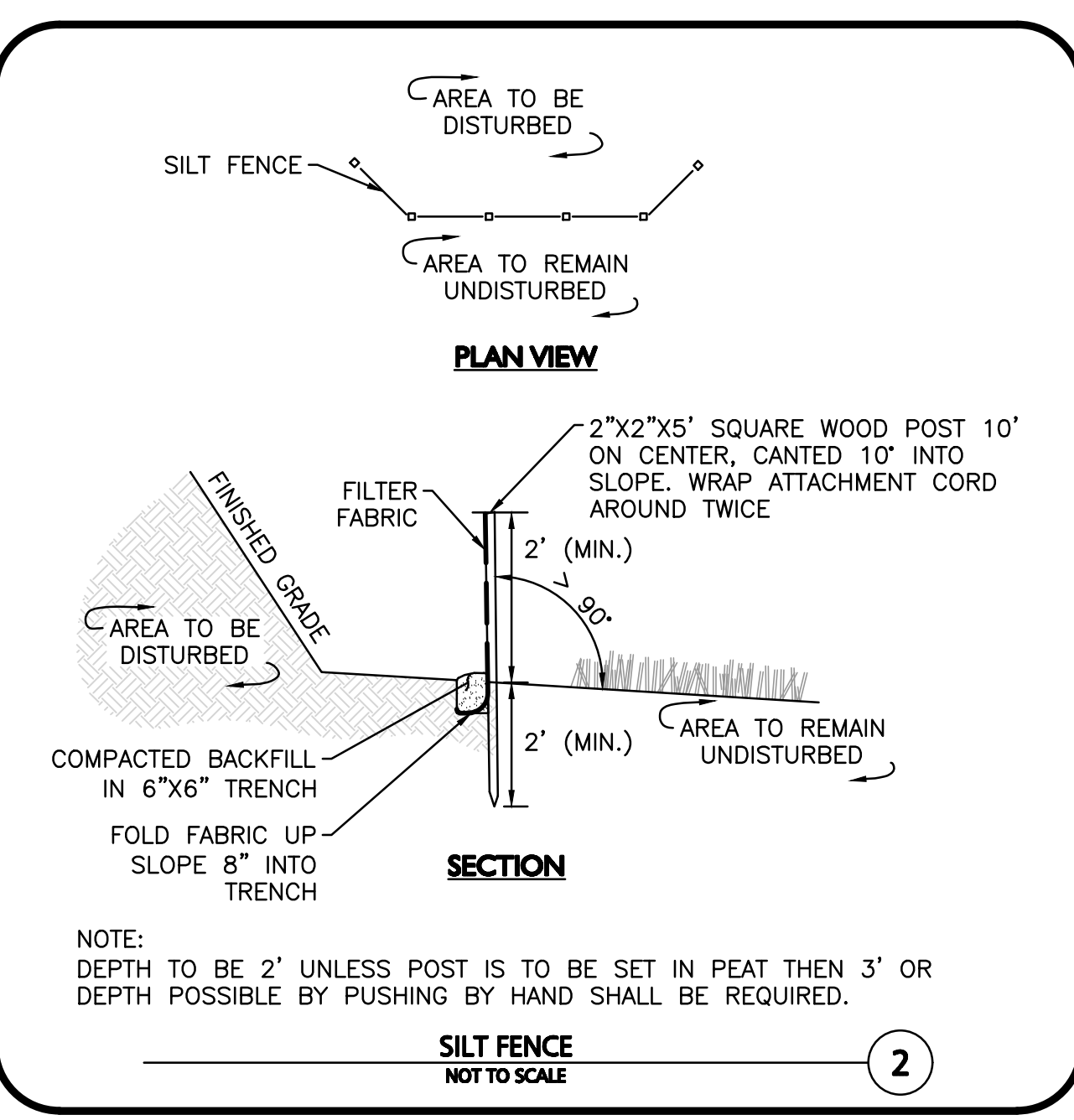
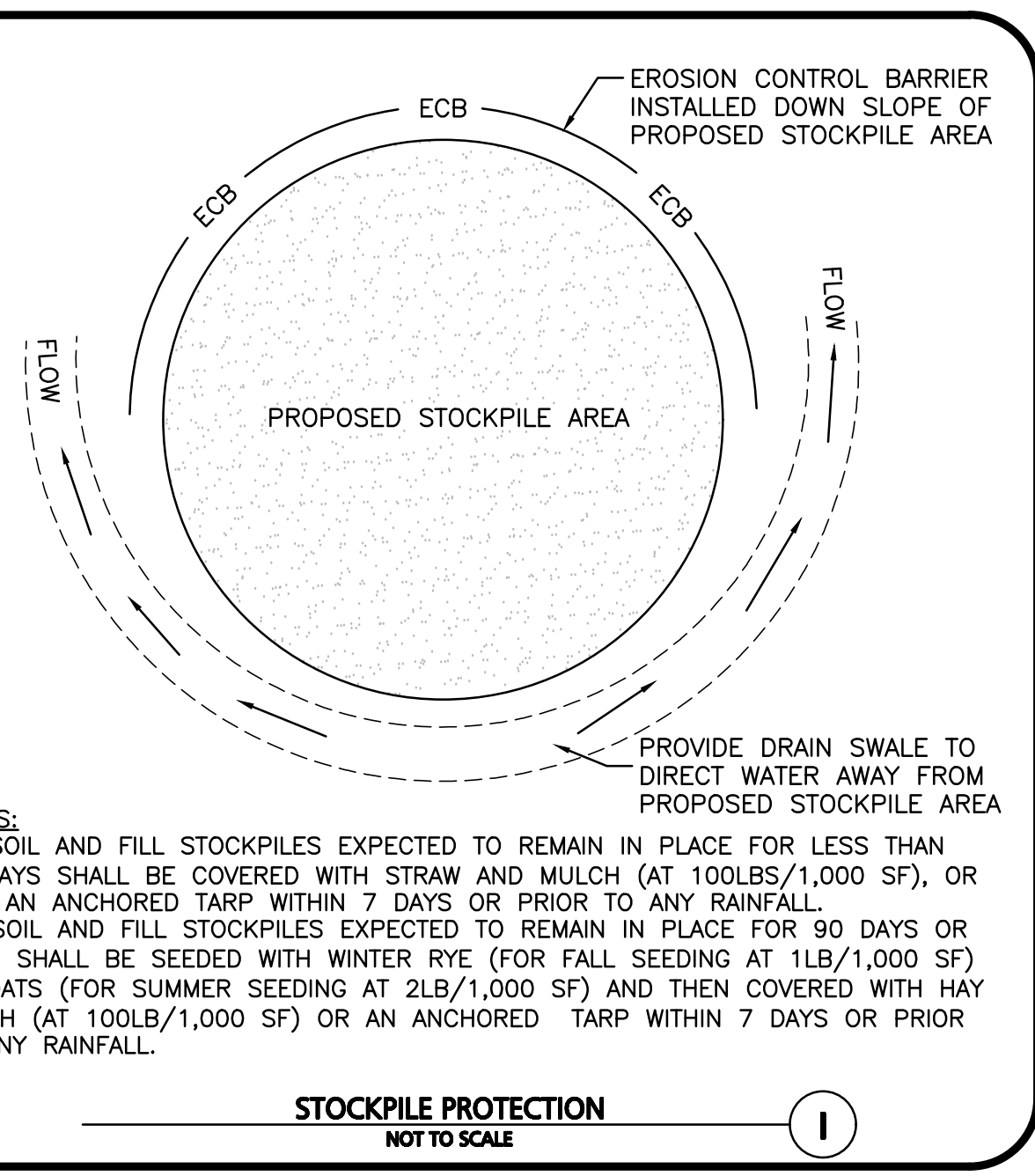
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DRAWING TITLE:	SHEET No.
FIRE TRUCK TURNING PLAN	C-108



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PROFESSIONAL ENGINEER FOR
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REV	DATE	DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24
SCALE: AS SHOWN DWG. NAME: C-2389-08
DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

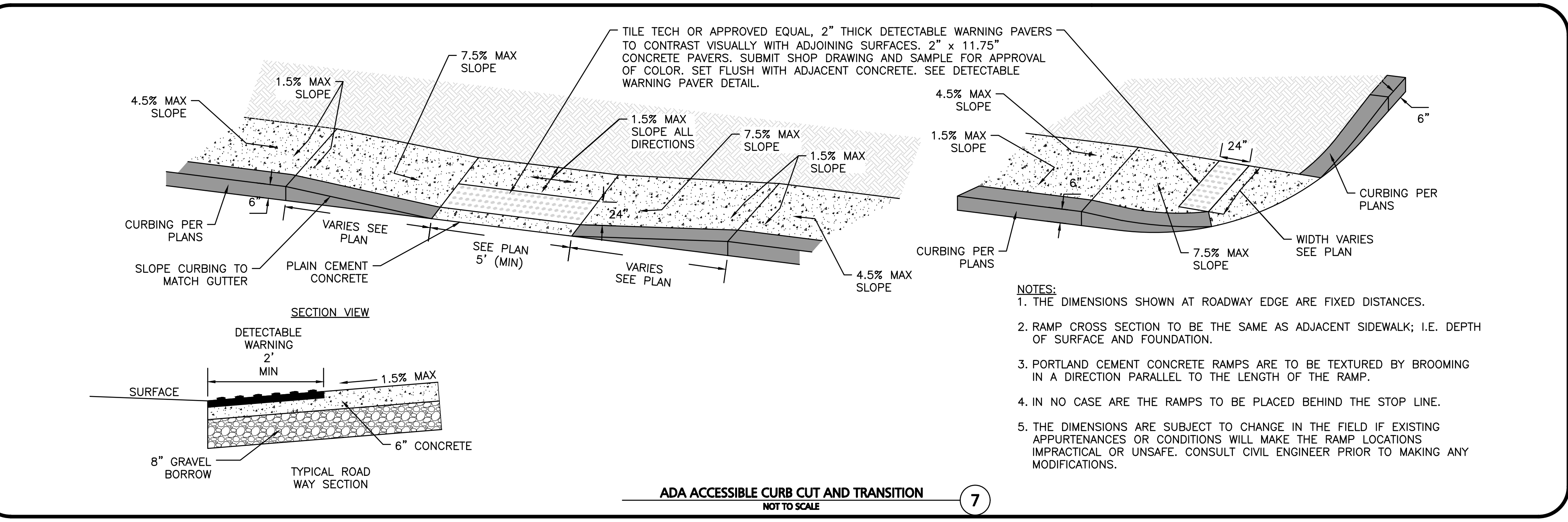
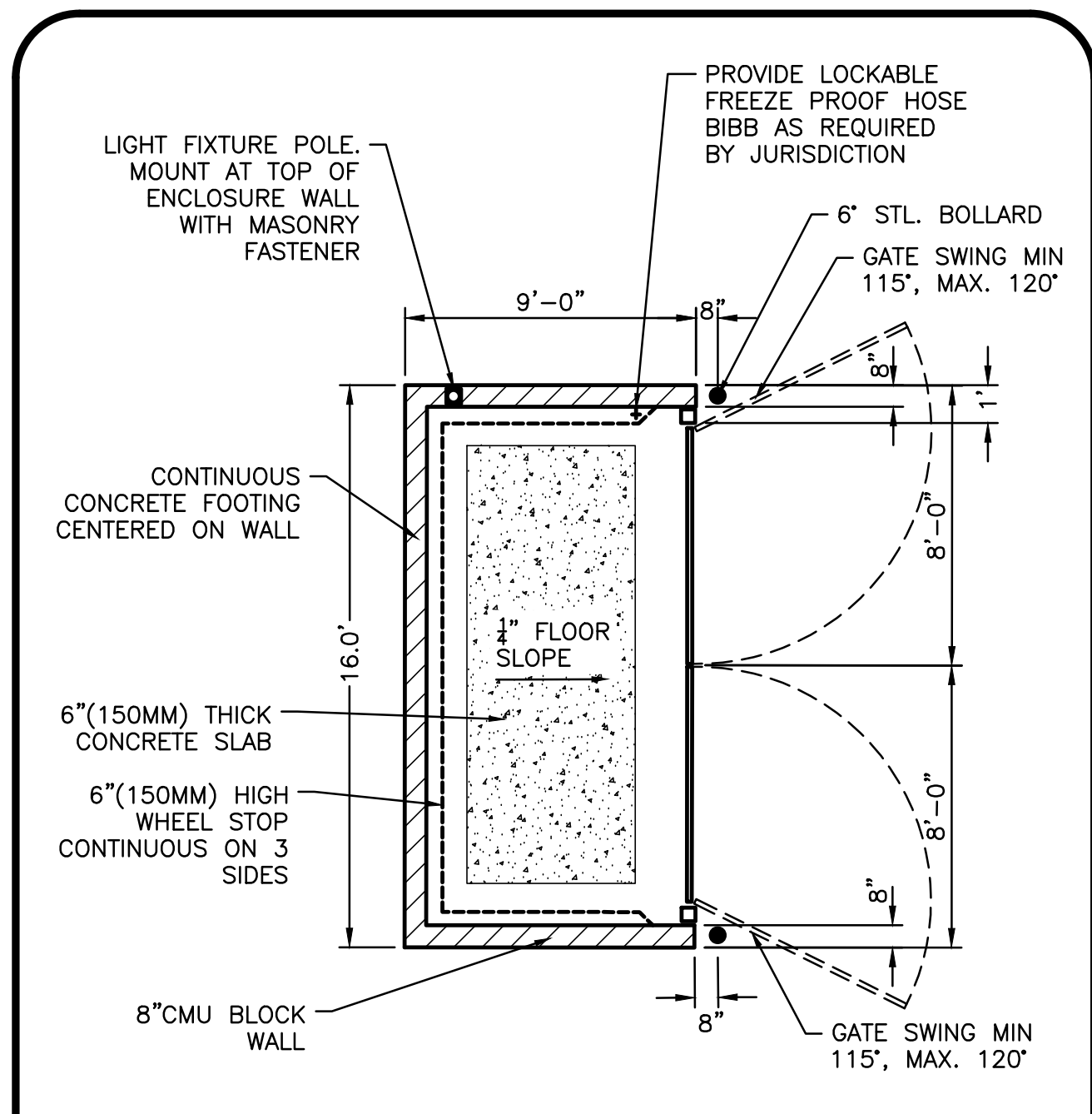
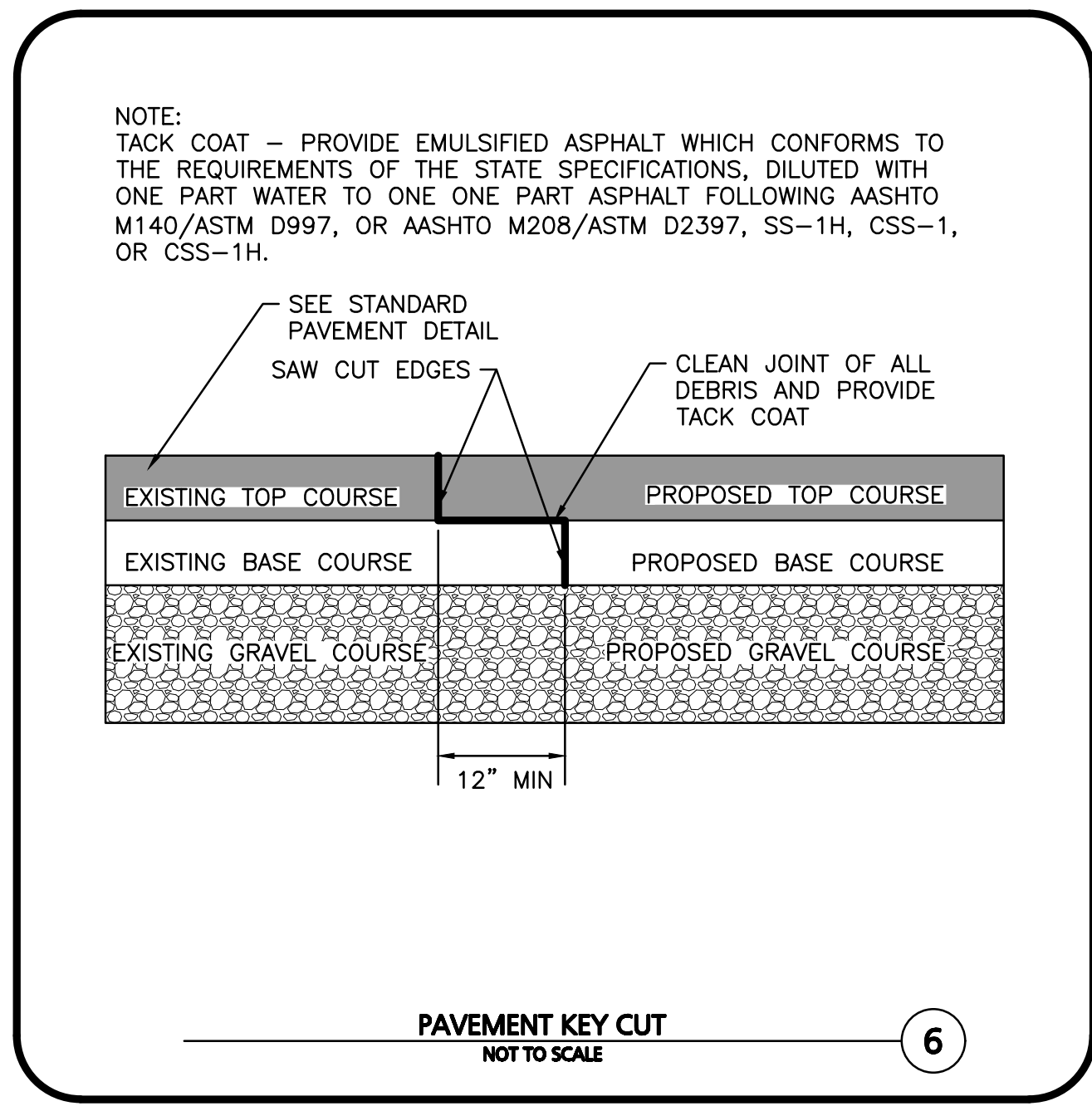
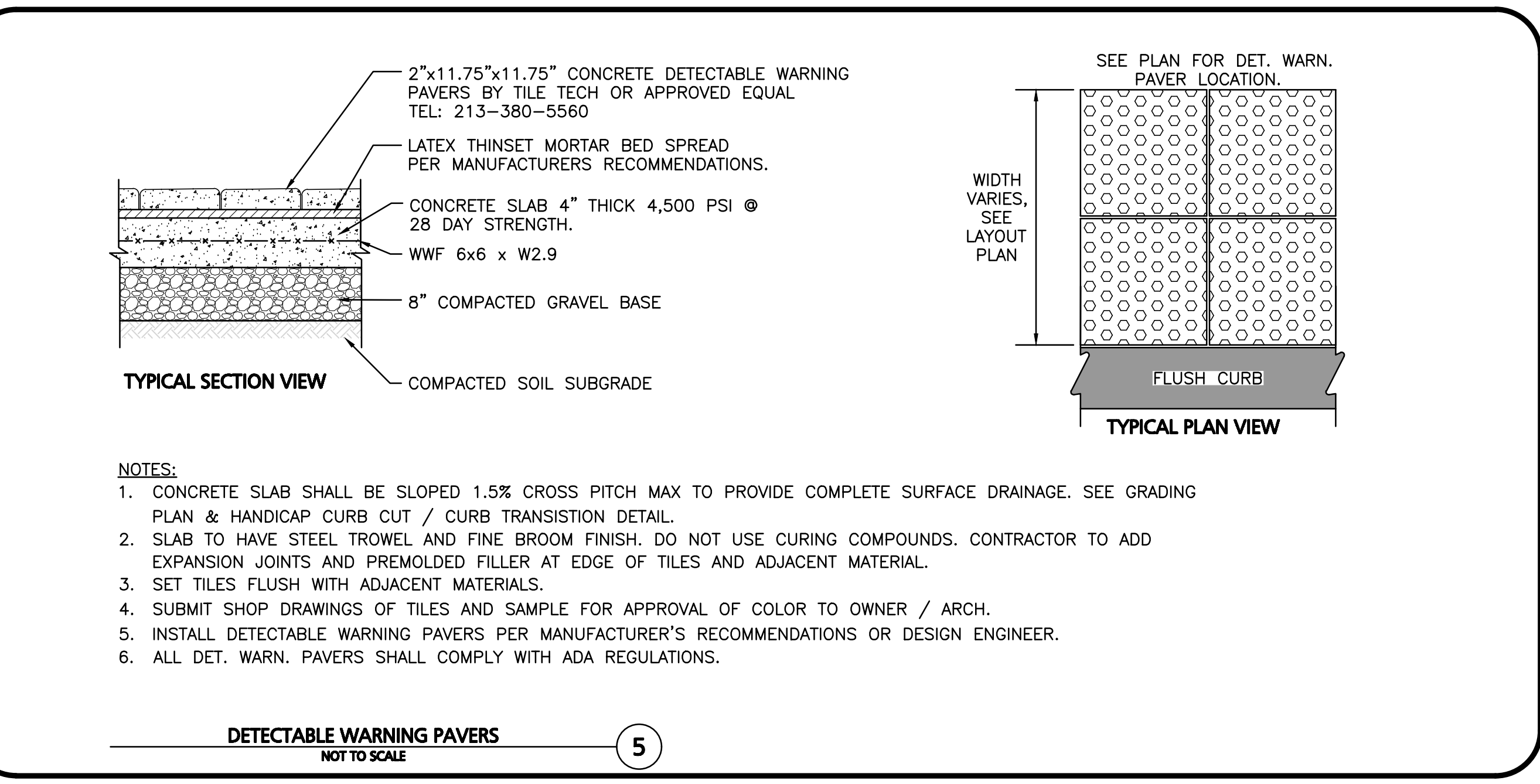
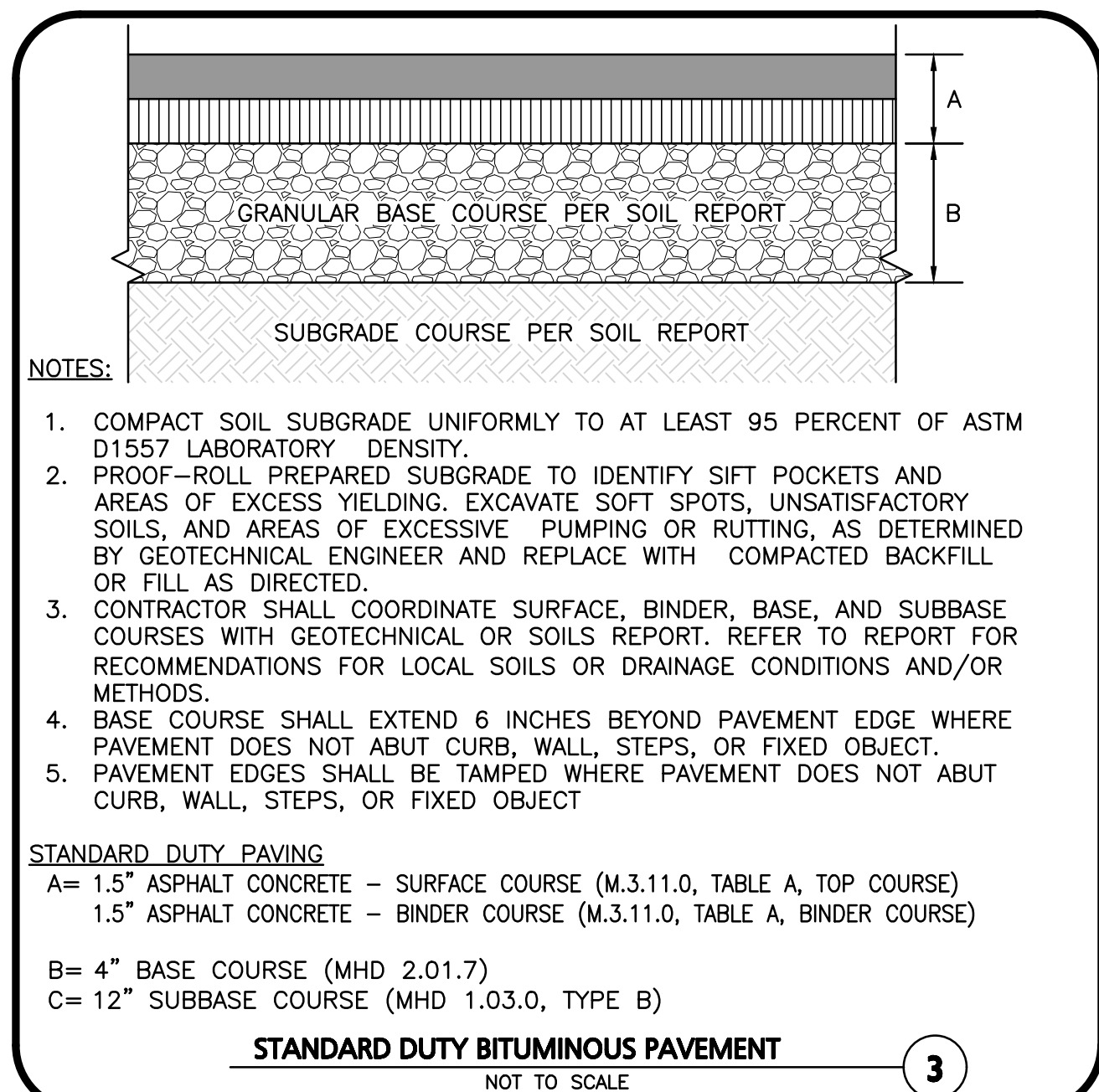
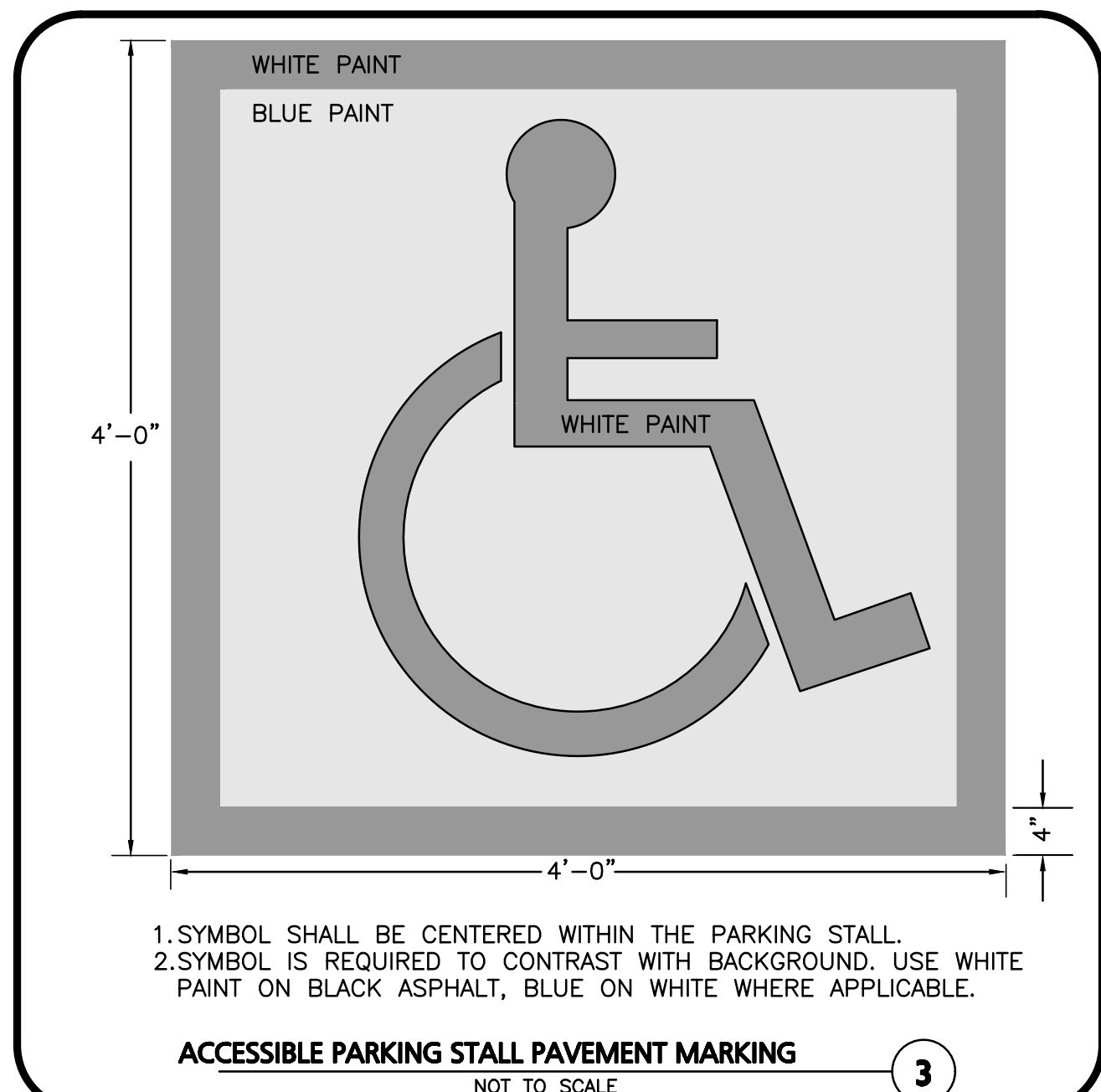
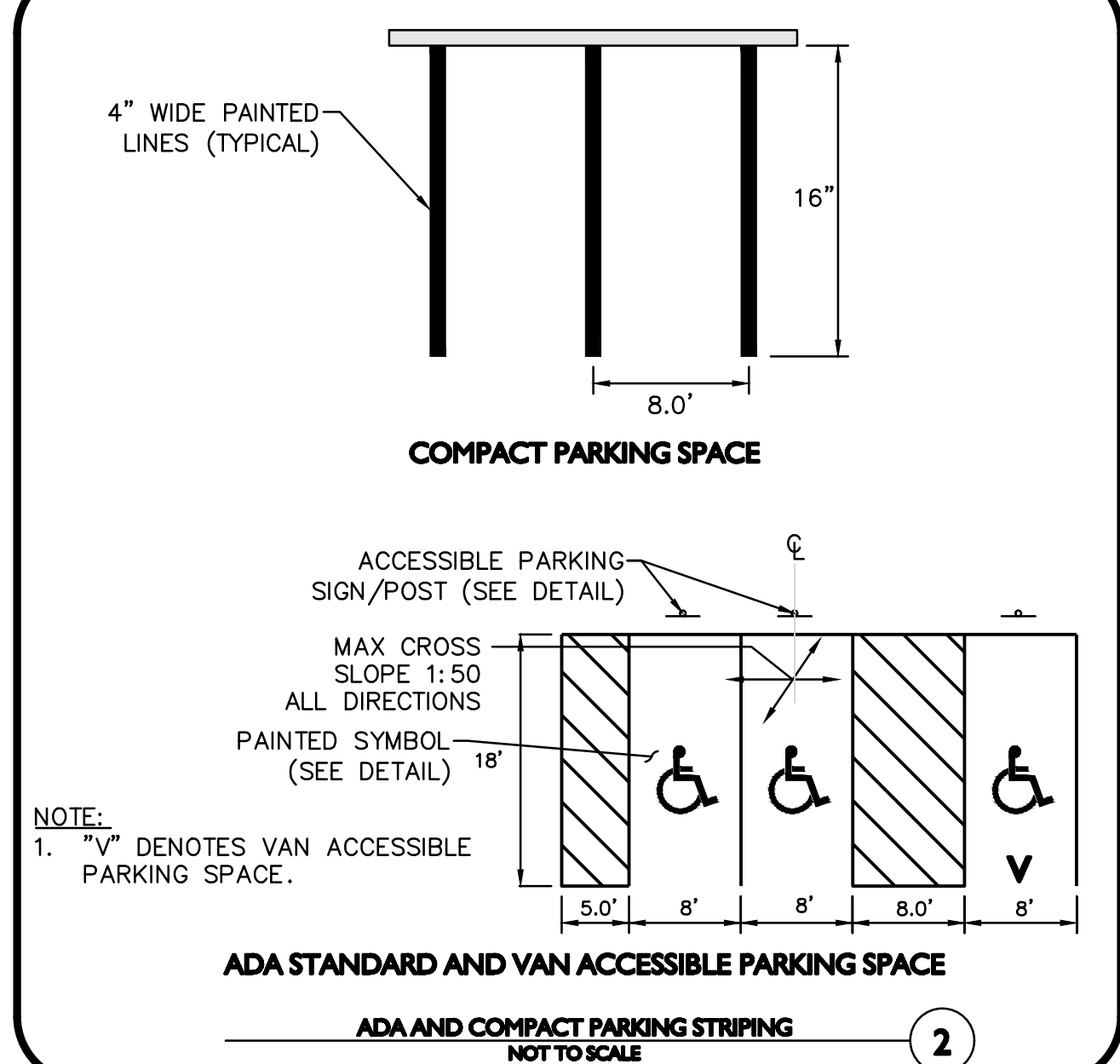
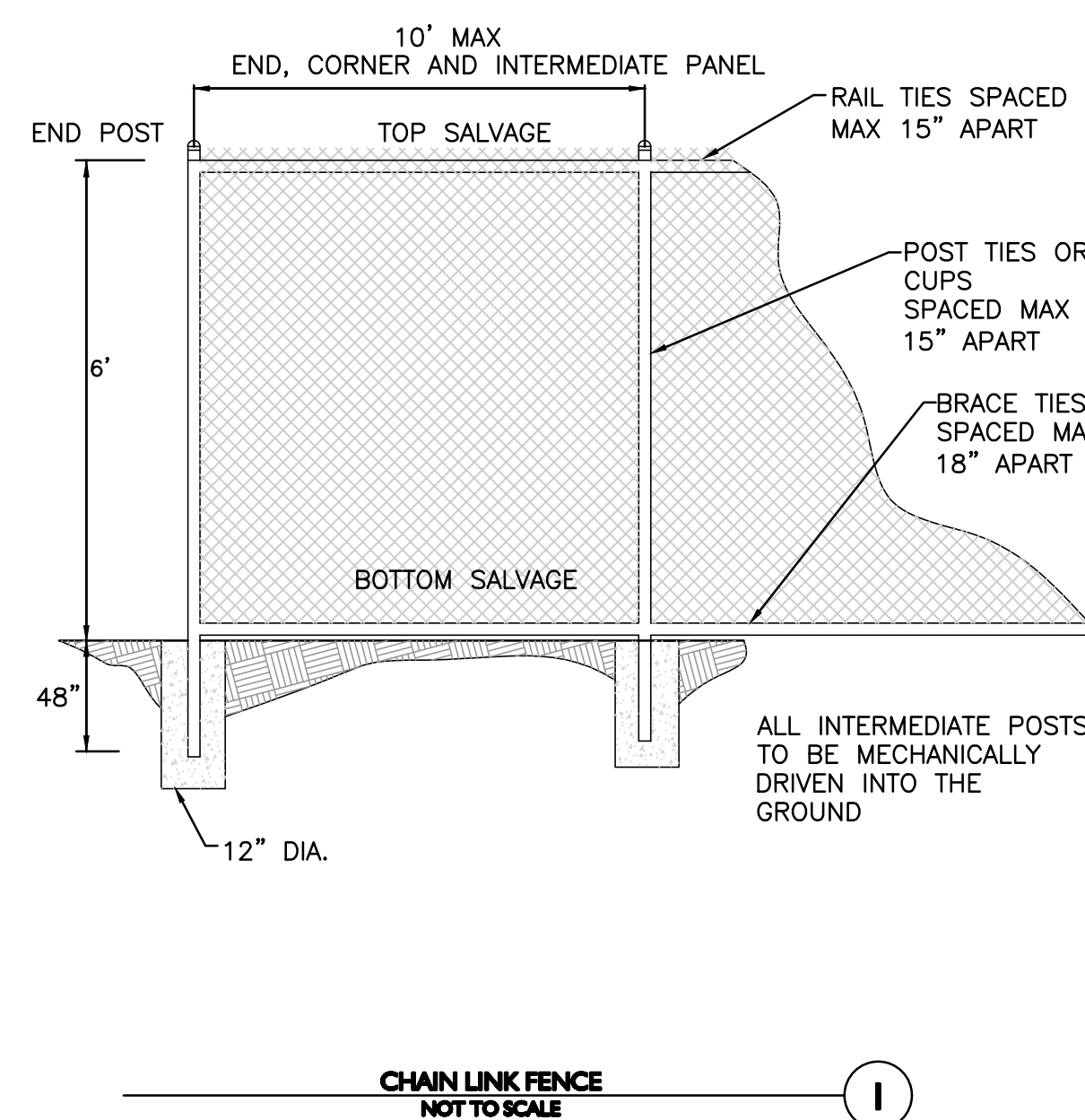
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WOBURN MA 01801
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DRAWING TITLE: **DETAILS** SHEET No. **C-501**

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COMMONWEALTH OF MASSACHUSETTS
CARLTON M. QUINN
CIVIL ENGINEER
No. 49923
REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

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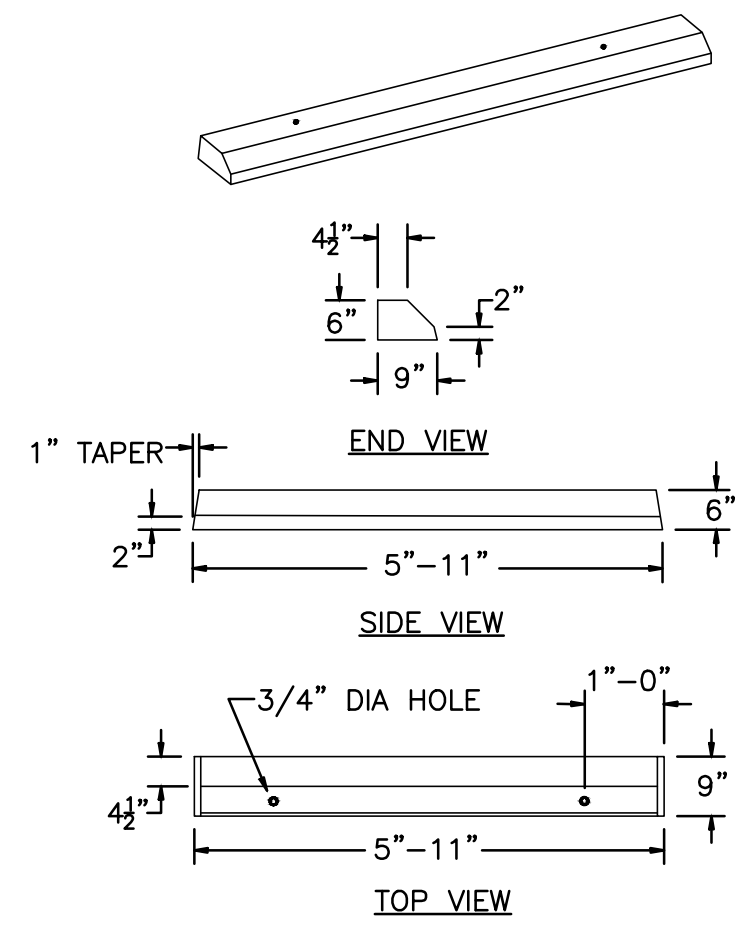
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DRAWING TITLE: DETAILS SHEET No. C-502

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NOT USED
NOT TO SCALE

1

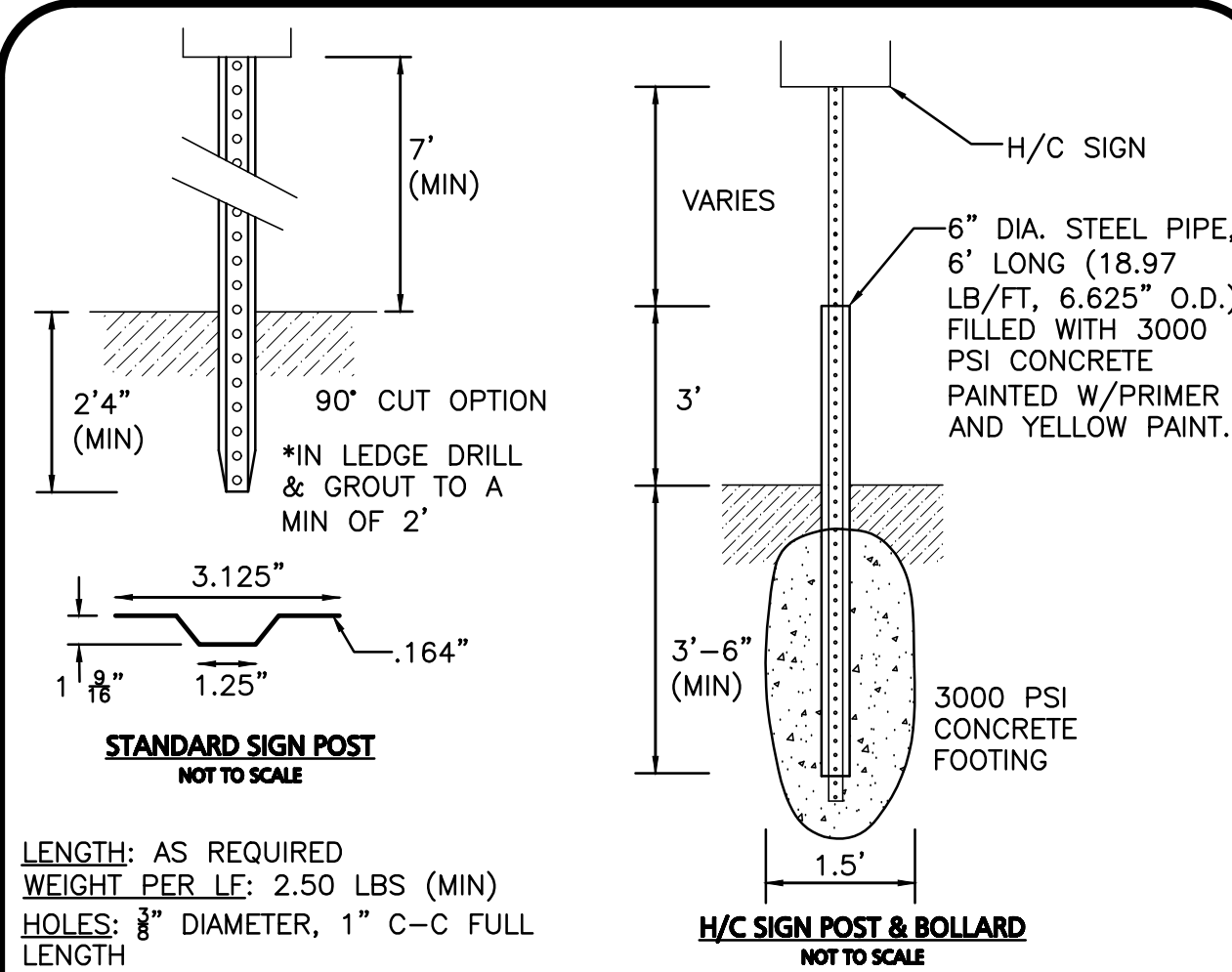


NOTES

- 1. CONCRETE: 4,500 PSI MINIMUM AFTER 28 DAYS.
2. PINS AVAILABLE.
3. APPROXIMATE WEIGHT: 265 LBS.

BUMPER CURBING SINGLE FACE
NOT TO SCALE

2



STANDARD SIGN POST
NOT TO SCALE

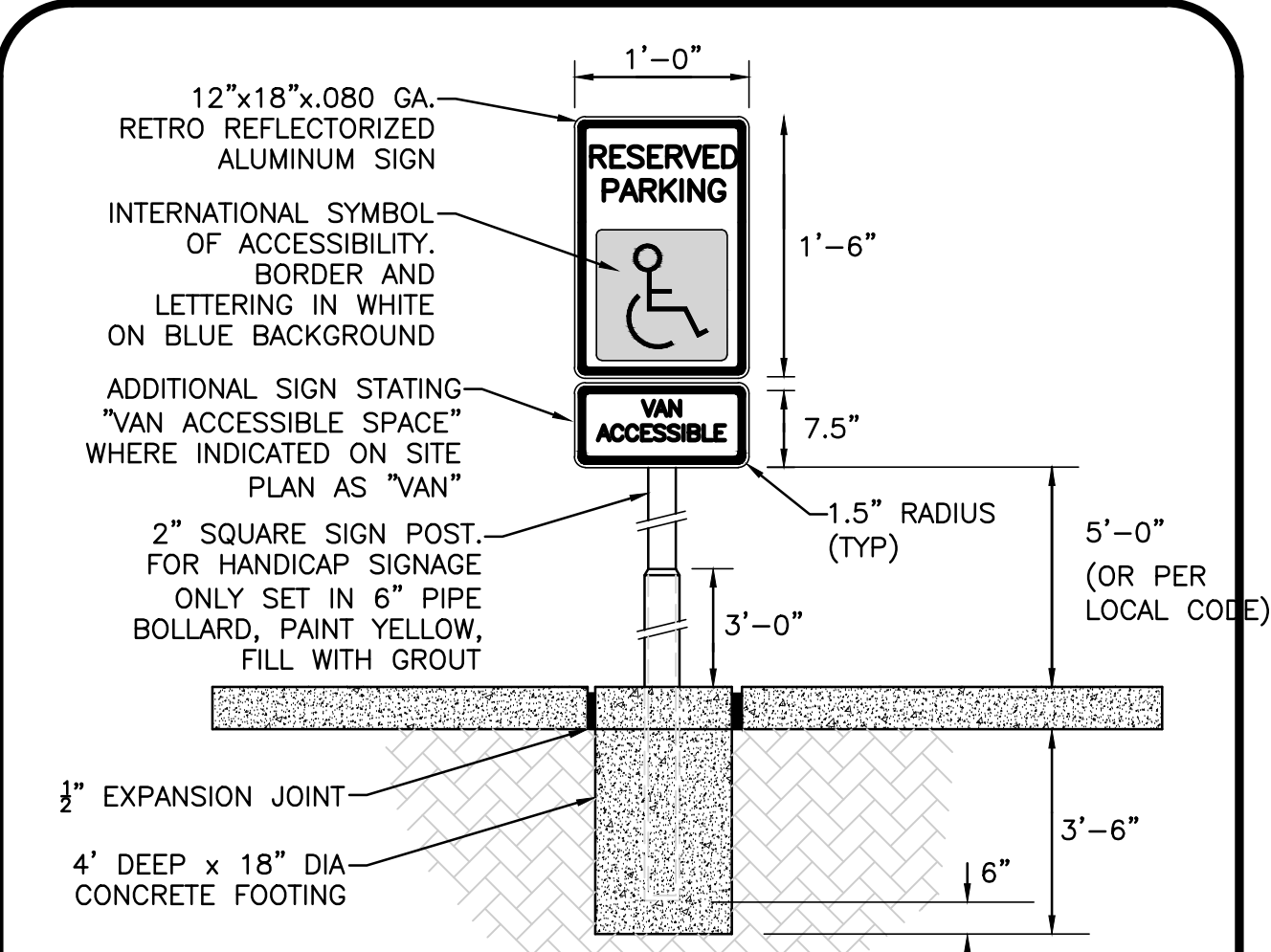
LENGTH: AS REQUIRED
WEIGHT PER LF: 2.50 LBS (MIN)
HOLES: 3/8" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 OR ASTM A-576
FINISH: SHALL BE PAINTED WITH 2 COATS OF AN APPROVED MEDIUM GREEN, BAKED ON OR AIR DRIED, PAINT OF WEATHER RESISTANT QUALITY.

H/C SIGN POST & BOLLARD
NOT TO SCALE

NOTE:
1. STEEL PIPE BOLLARD & CONCRETE FOOTING TO BE USED ON POST MOUNTED SIGNS IN PAVED AREAS.

SIGN POST DETAILS
NOT TO SCALE

3



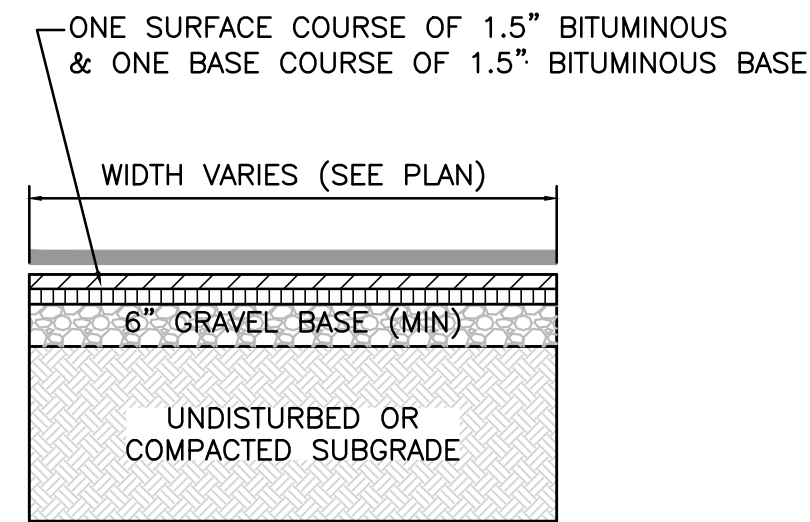
- 1. SPECIFIC CODE SHALL BE REFERENCED FOR LOCAL AND STATE REQUIREMENTS.
2. PROVIDE (1) SIGN PER HANDICAP SPACE. SEE SITE PLAN FOR EXACT LOCATION.
3. EXPANSION JOINT MATERIAL NOT REQUIRED WITH FLEXIBLE PAVEMENT.

ADA ACCESSIBLE PARKING / TRAFFIC CONTROL SIGNAGE
NOT TO SCALE

4

NOT USED
NOT TO SCALE

5



NOTES

- 1. SEE PLAN FOR ELEVATIONS.

BITUMINOUS WALKWAY
NOT TO SCALE

6

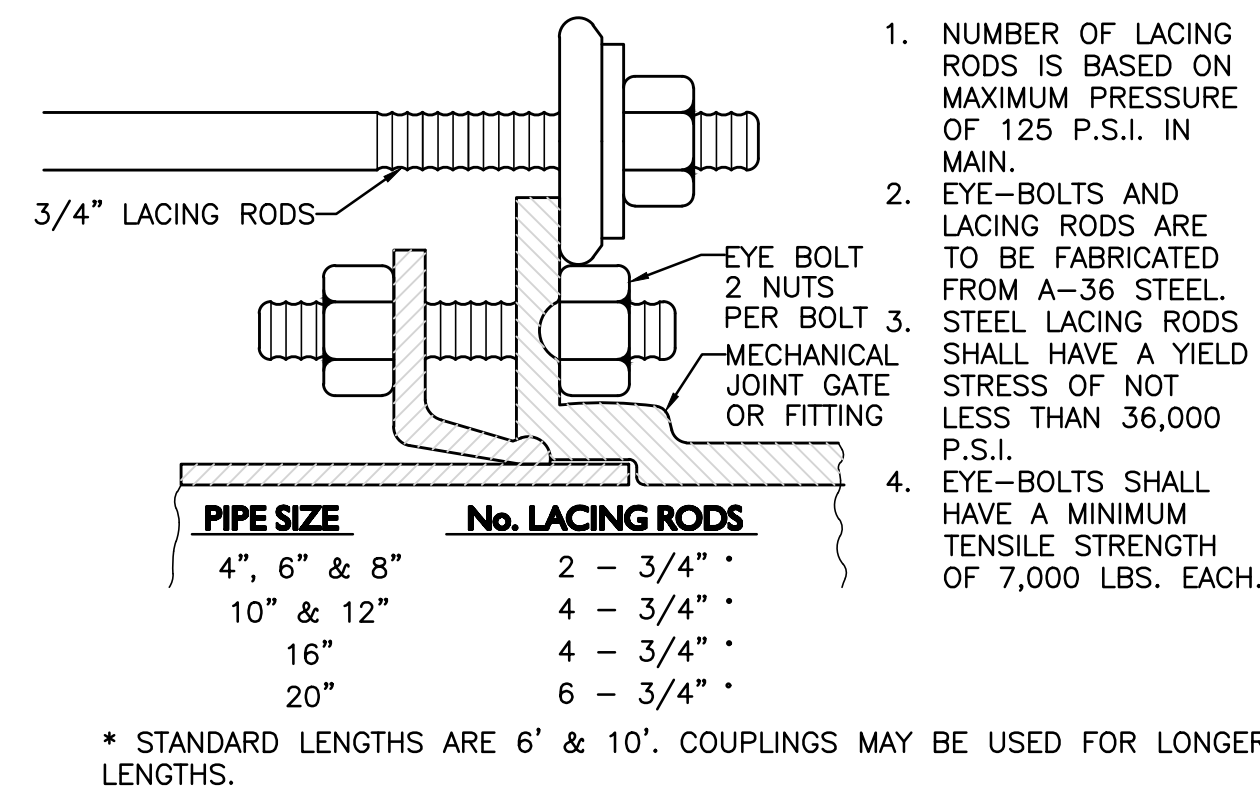
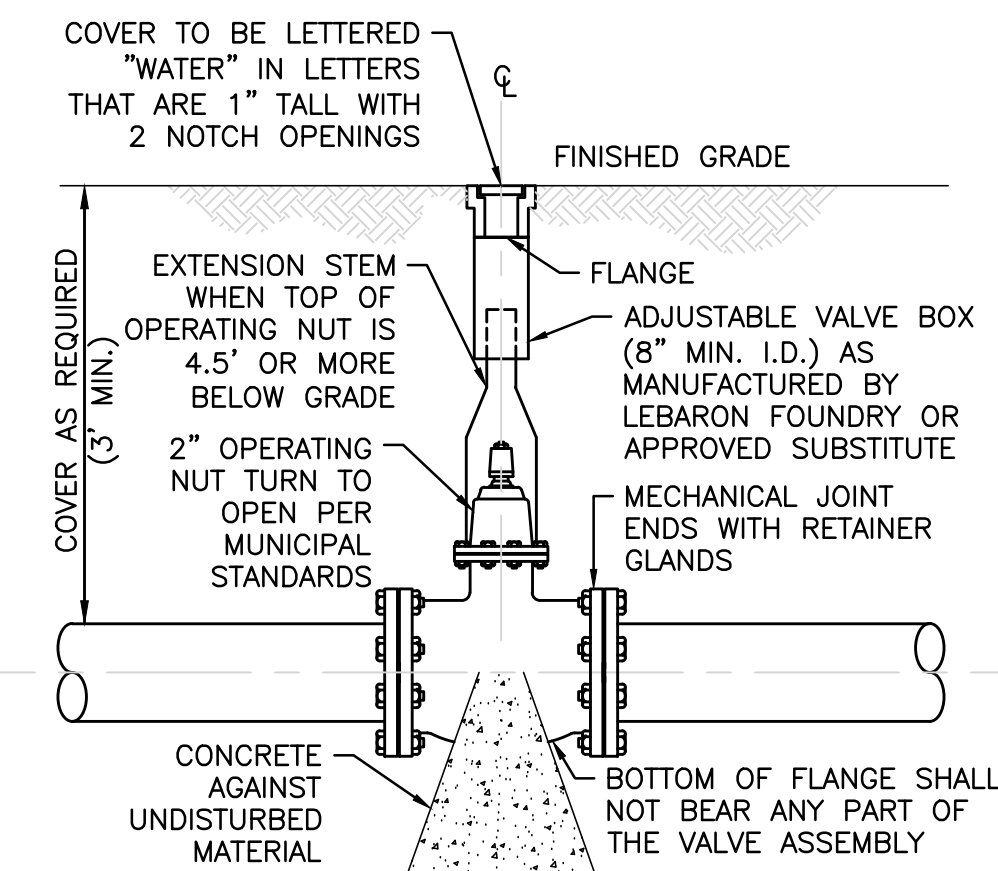


Table with 2 columns: PIPE SIZE and No. LACING RODS. Rows include 4, 6 & 8 inch pipes (2 rods), 10 & 12 inch pipes (4 rods), 16 inch pipes (4 rods), and 20 inch pipes (6 rods).

* STANDARD LENGTHS ARE 6' & 10'. COUPLINGS MAY BE USED FOR LONGER LENGTHS.

MECHANICAL JOINT LACING DETAIL
NOT TO SCALE

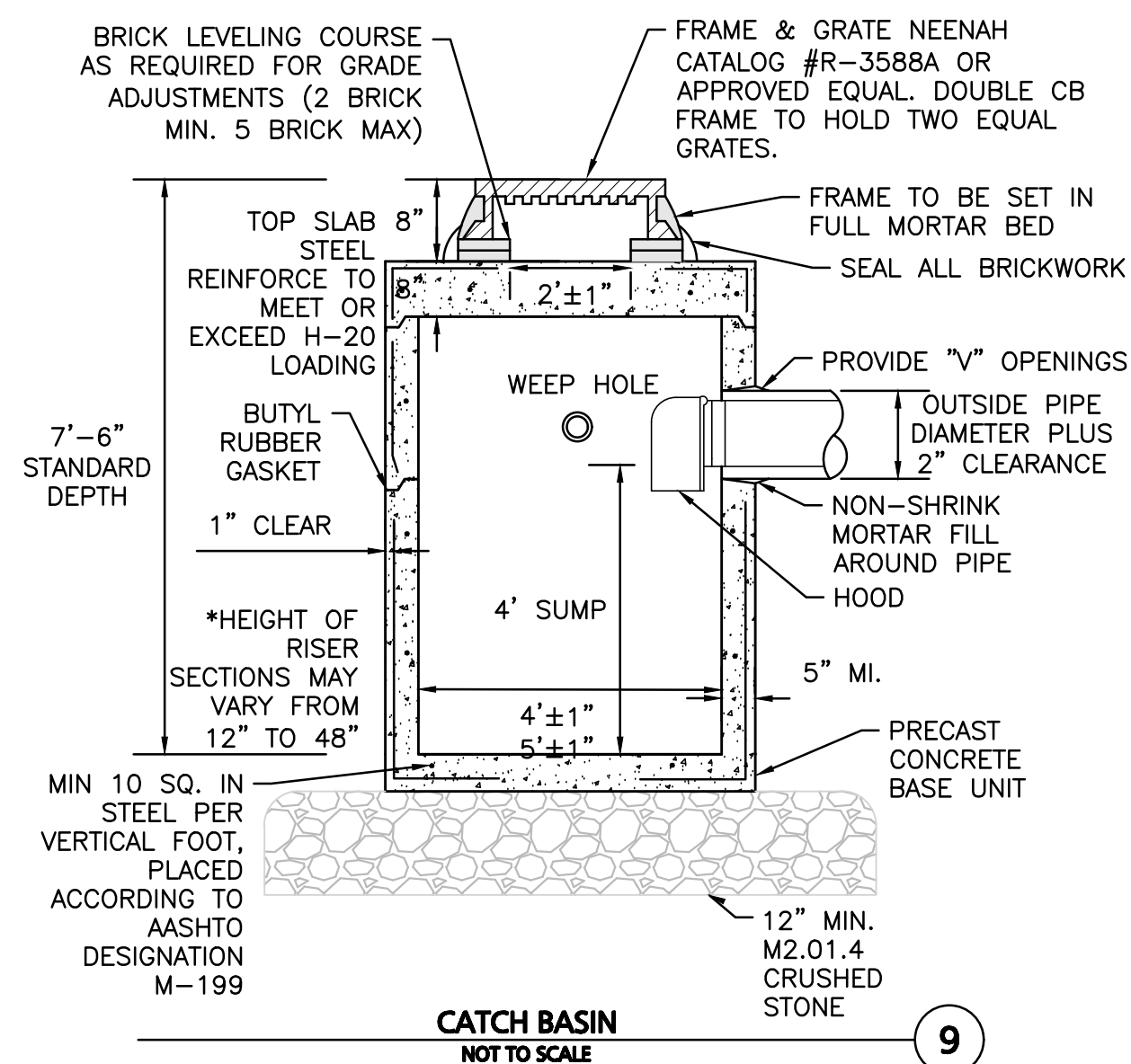
7



- 1. CONTRACTOR MAY USE ANCHOR TEES AT HIS OPTION.
2. HYDRANTS AND VALVES TO OPERATE PER MUNICIPAL STANDARDS

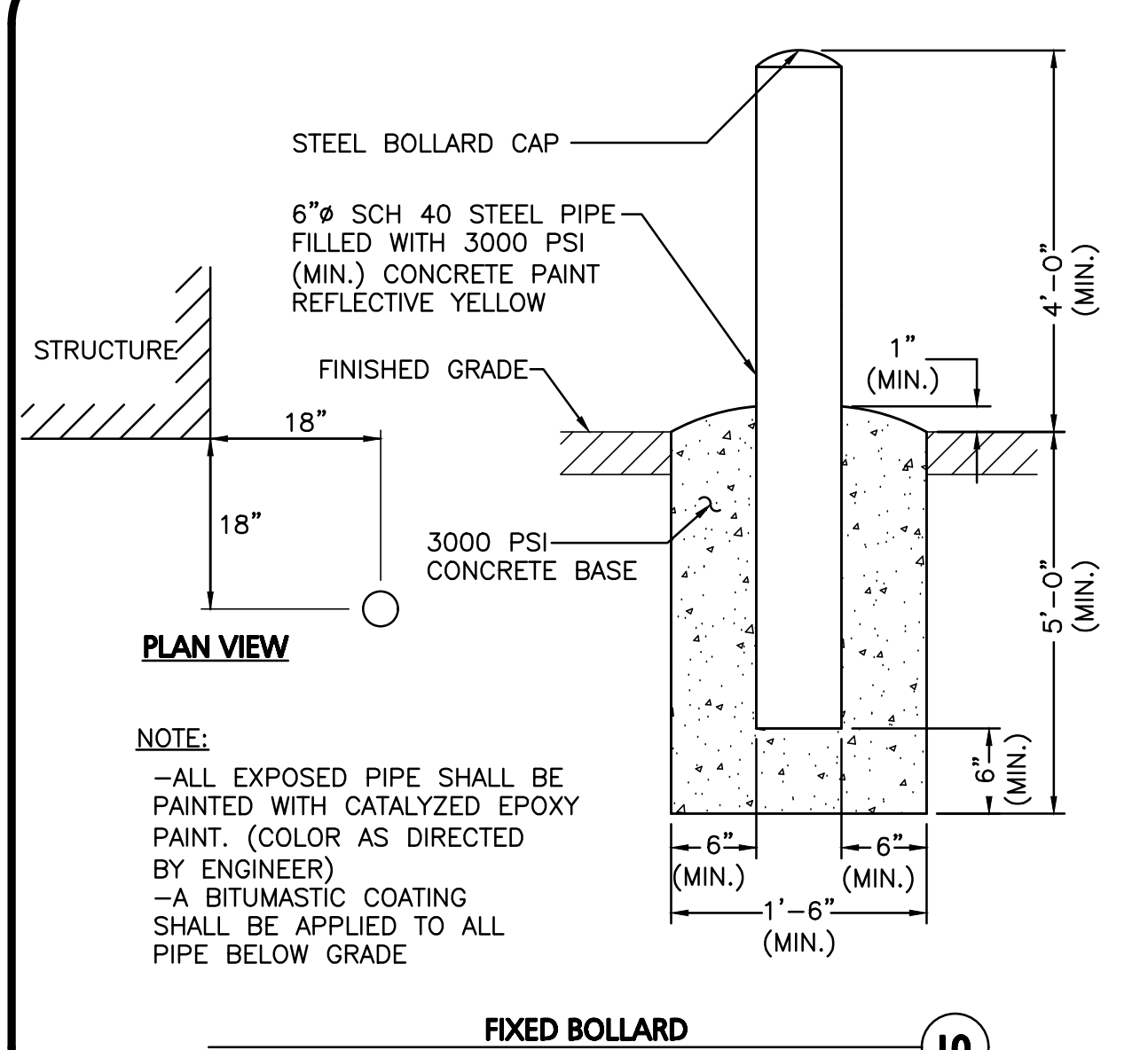
GATE VALVE
NOT TO SCALE

8



CATCH BASIN
NOT TO SCALE

9

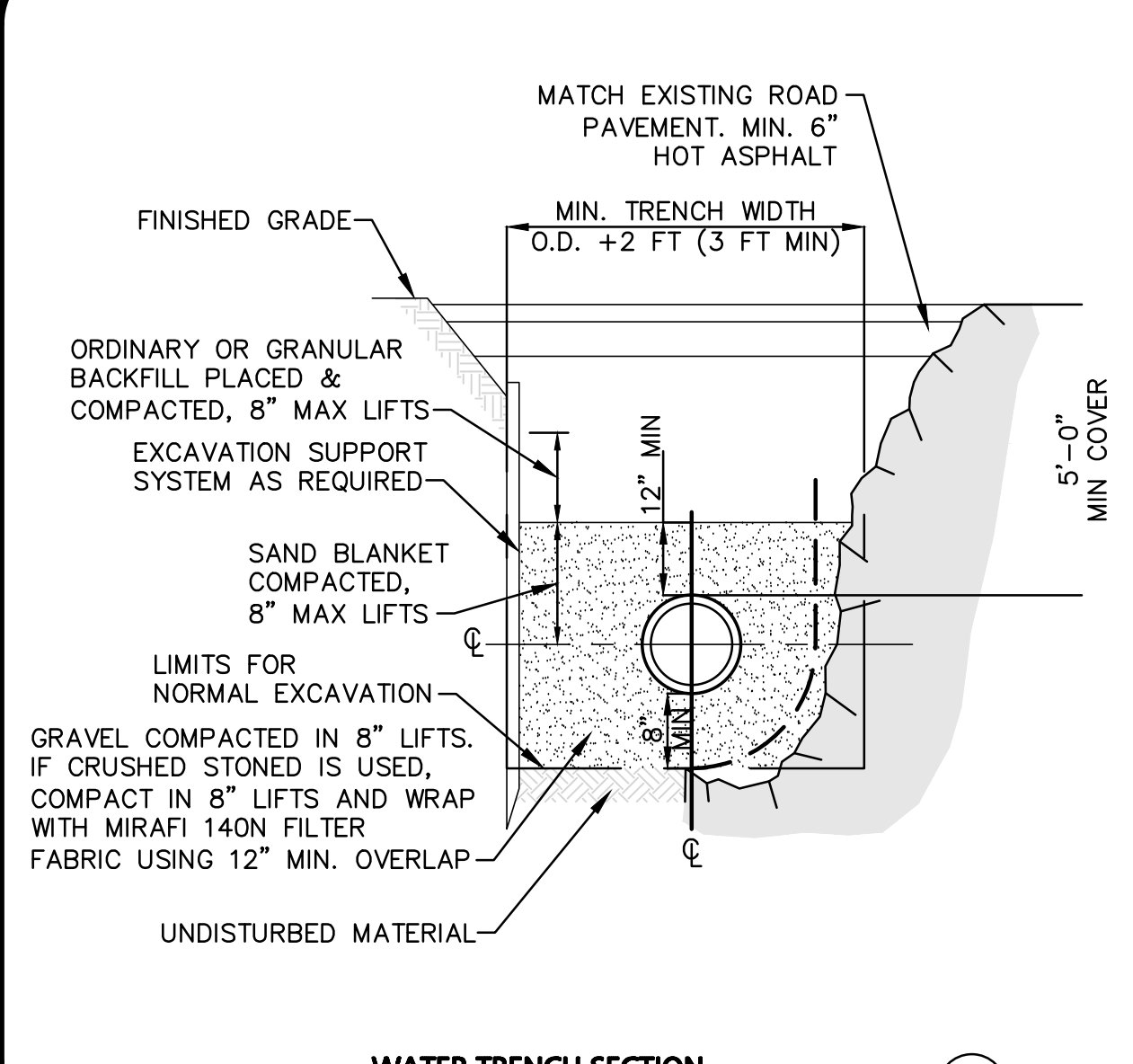


NOTE:

- ALL EXPOSED PIPE SHALL BE PAINTED WITH CATALYZED EPOXY PAINT. (COLOR AS DIRECTED BY ENGINEER)
-A BITUMASTIC COATING SHALL BE APPLIED TO ALL PIPE BELOW GRADE

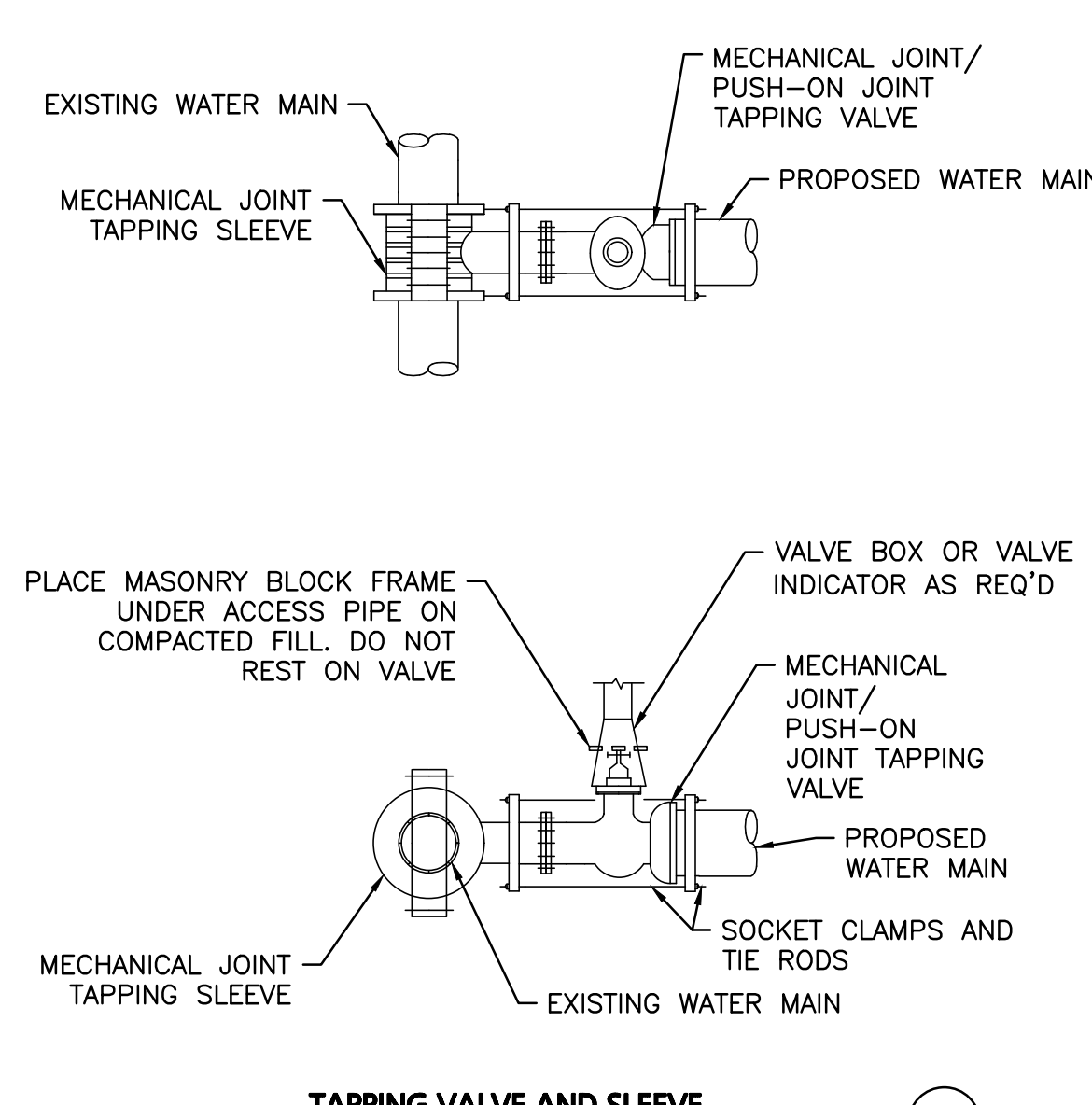
FIXED BOLLARD
NOT TO SCALE

10



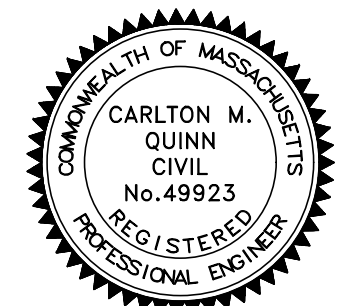
WATER TRENCH SECTION
NOT TO SCALE

11



TAPPING VALVE AND SLEEVE
NOT TO SCALE

12



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV DATE DESCRIPTION

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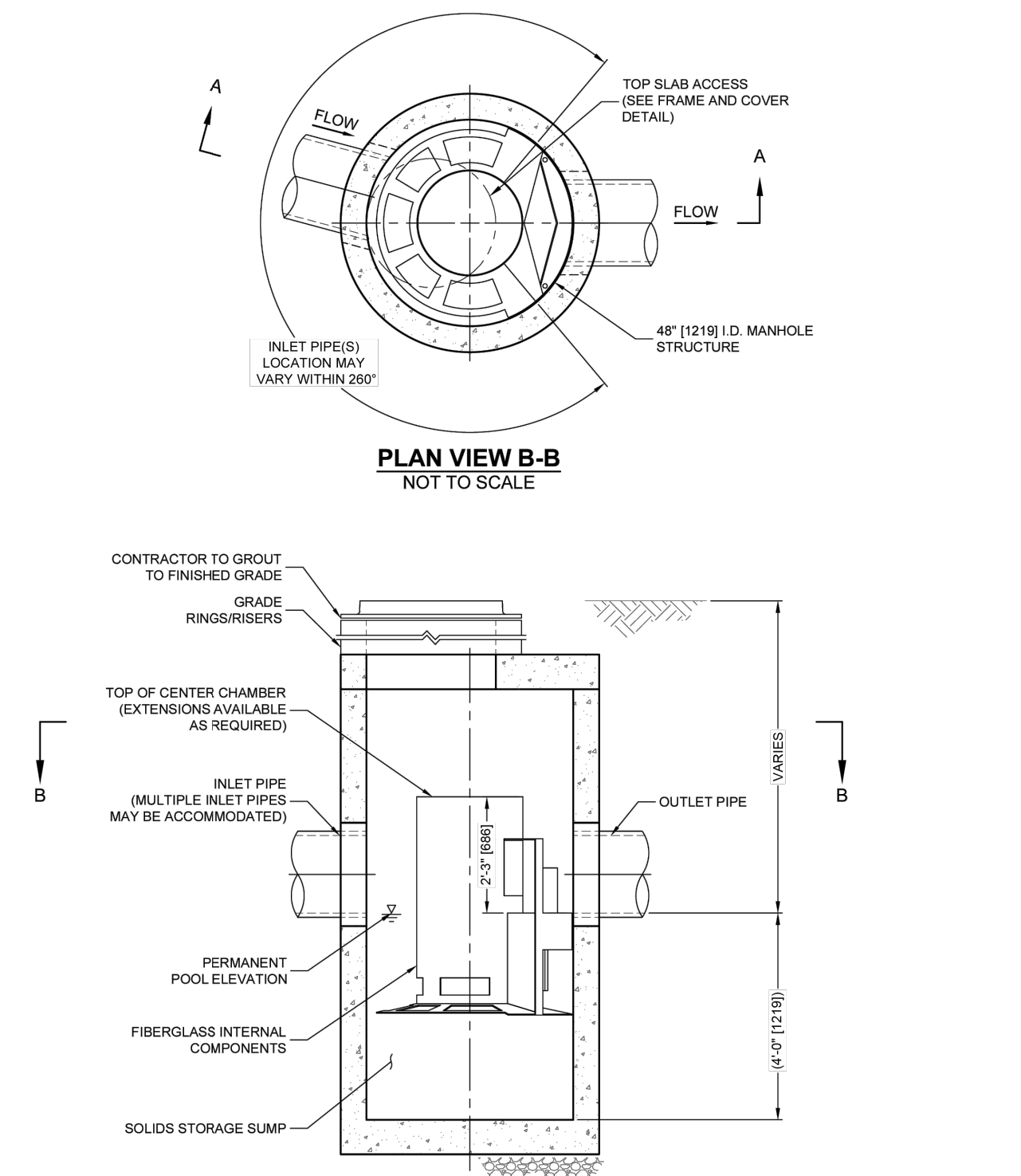
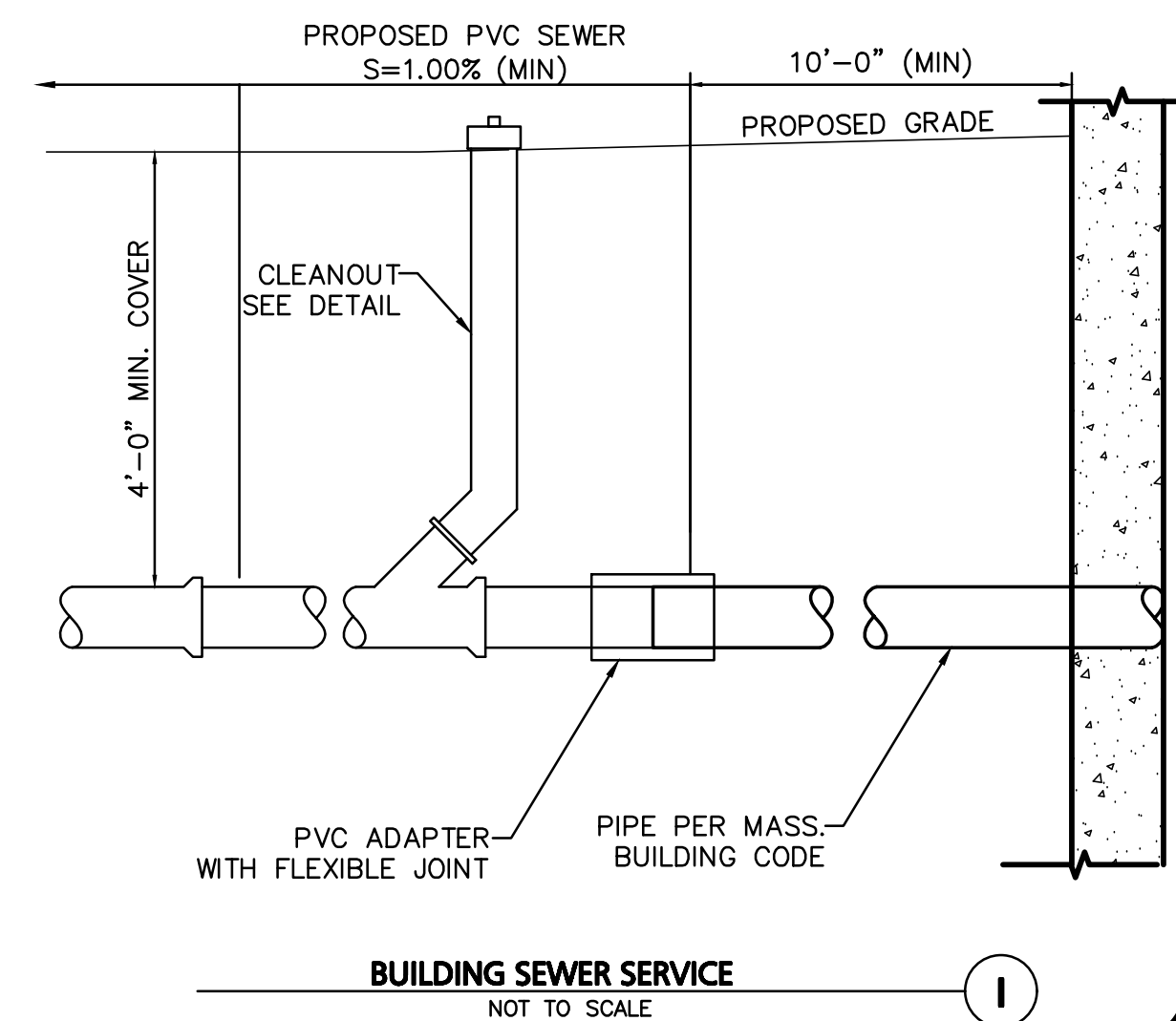
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DETAILS

SHEET No.

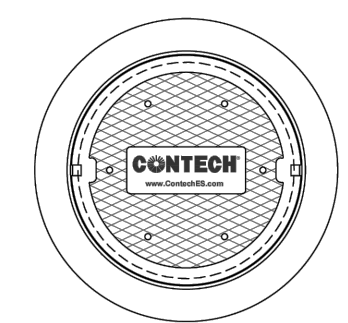
C-503



CS-4 RATED TREATMENT CAPACITY IS 2.0 CFS, OR PER LOCAL REGULATIONS. THE STANDARD CS-4 CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

CONFIGURATION DESCRIPTION	
GRATED INLET ONLY (NO INLET PIPE)	
GRATED INLET WITH INLET PIPE OR PIPES	
CURB INLET ONLY (NO INLET PIPE)	
CURB INLET WITH INLET PIPE OR PIPES	

SITE SPECIFIC DATA REQUIREMENTS			
STRUCTURE ID			
WATER QUALITY FLOW RATE (cfs [L/s])			
PEAK FLOW RATE (cfs [L/s])			
RETURN PERIOD OF PEAK FLOW (yrs)			
RIM ELEVATION			
PIPE DATA:			
INLET PIPE 1	INVERT	MATERIAL	DIAMETER
INLET PIPE 2			
OUTLET PIPE			
NOTES / SPECIAL REQUIREMENTS:			



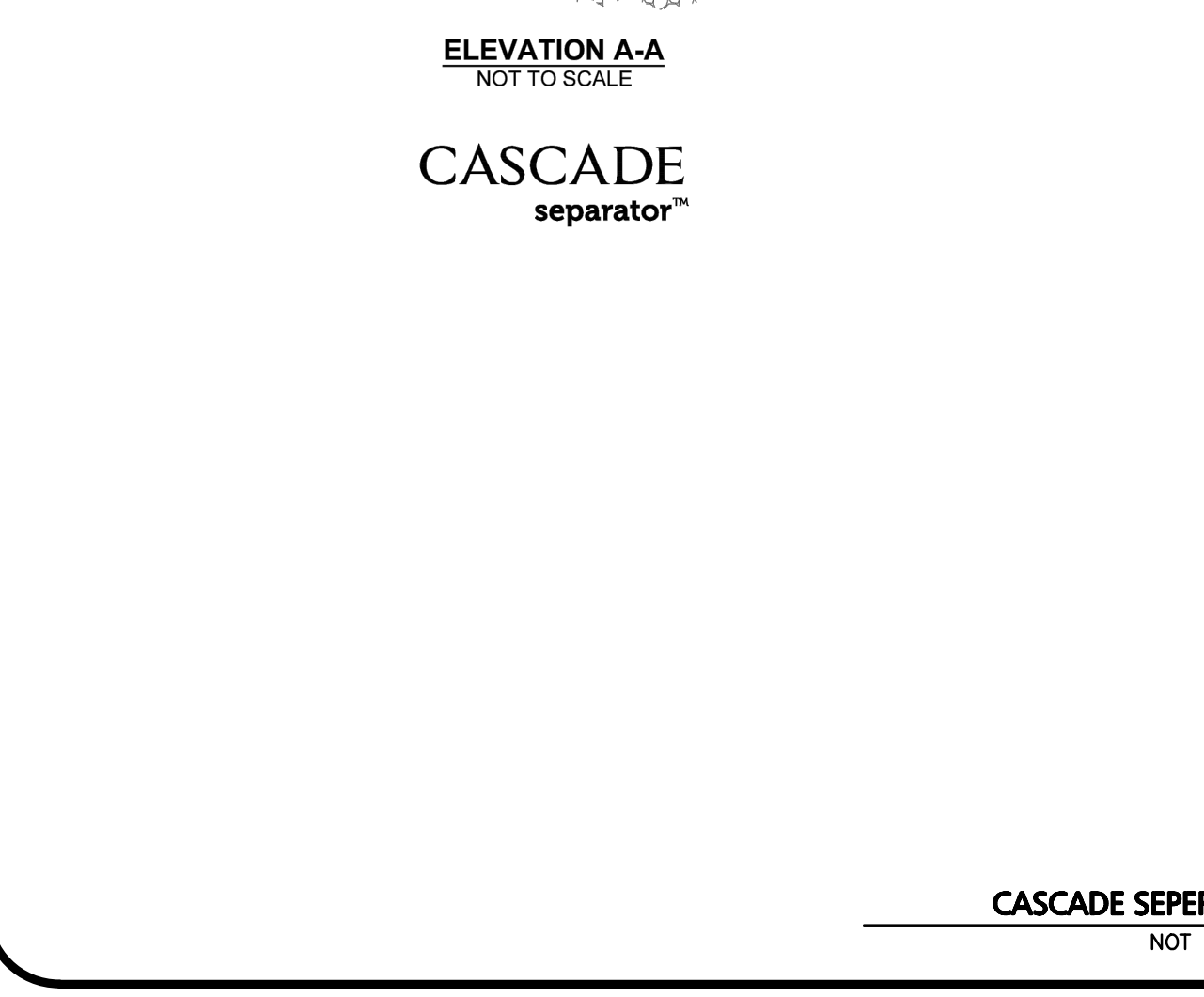
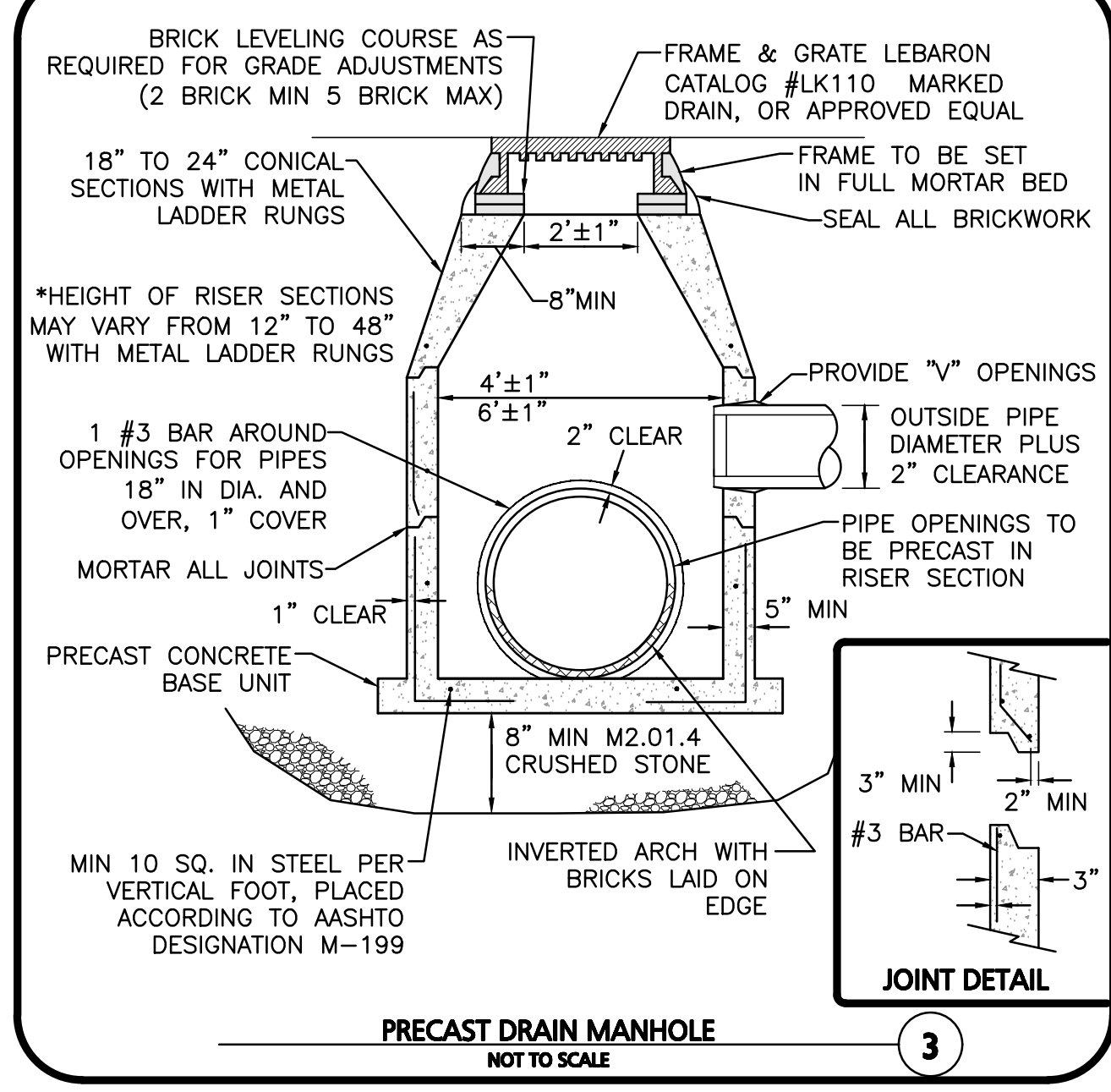
FRAME AND COVER (DIAMETER VARIES) NOT TO SCALE

- GENERAL NOTES:**
- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
 - FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
 - CASCADE SEPARATOR WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
 - CASCADE SEPARATOR STRUCTURE SHALL MEET AASHTO H-20 LOAD RATING, ASSUMING EARTH COVER OF 0' - 2' (610) AND GROUNDWATER ELEVATION AT OR BELOW THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M588 AND BE CAST WITH THE CONTECH LOGO.
 - CASCADE SEPARATOR STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C478 AND AASHTO LOAD FACTOR DESIGN METHOD.
 - ALTERNATE UNITS ARE SHOWN IN MILLIMETERS (mm).
- INSTALLATION NOTES:**
- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
 - CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CASCADE SEPARATOR MANHOLE STRUCTURE.
 - CONTRACTOR TO INSTALL JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS AND ASSEMBLE STRUCTURE.
 - CONTRACTOR TO PROVIDE, INSTALL, AND GROUT INLET AND OUTLET PIPE(S). MATCH PIPE INVERTS WITH ELEVATIONS SHOWN. ALL PIPE CENTERLINES TO MATCH PIPE OPENING CENTERLINES.
 - CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
 9033 Centre Pointe Dr., Suite 400, West Chester, OH 45389
 800-338-1122 513-645-7000 513-645-7993 FAX

CS-4 CASCADE SEPARATOR STANDARD DETAIL

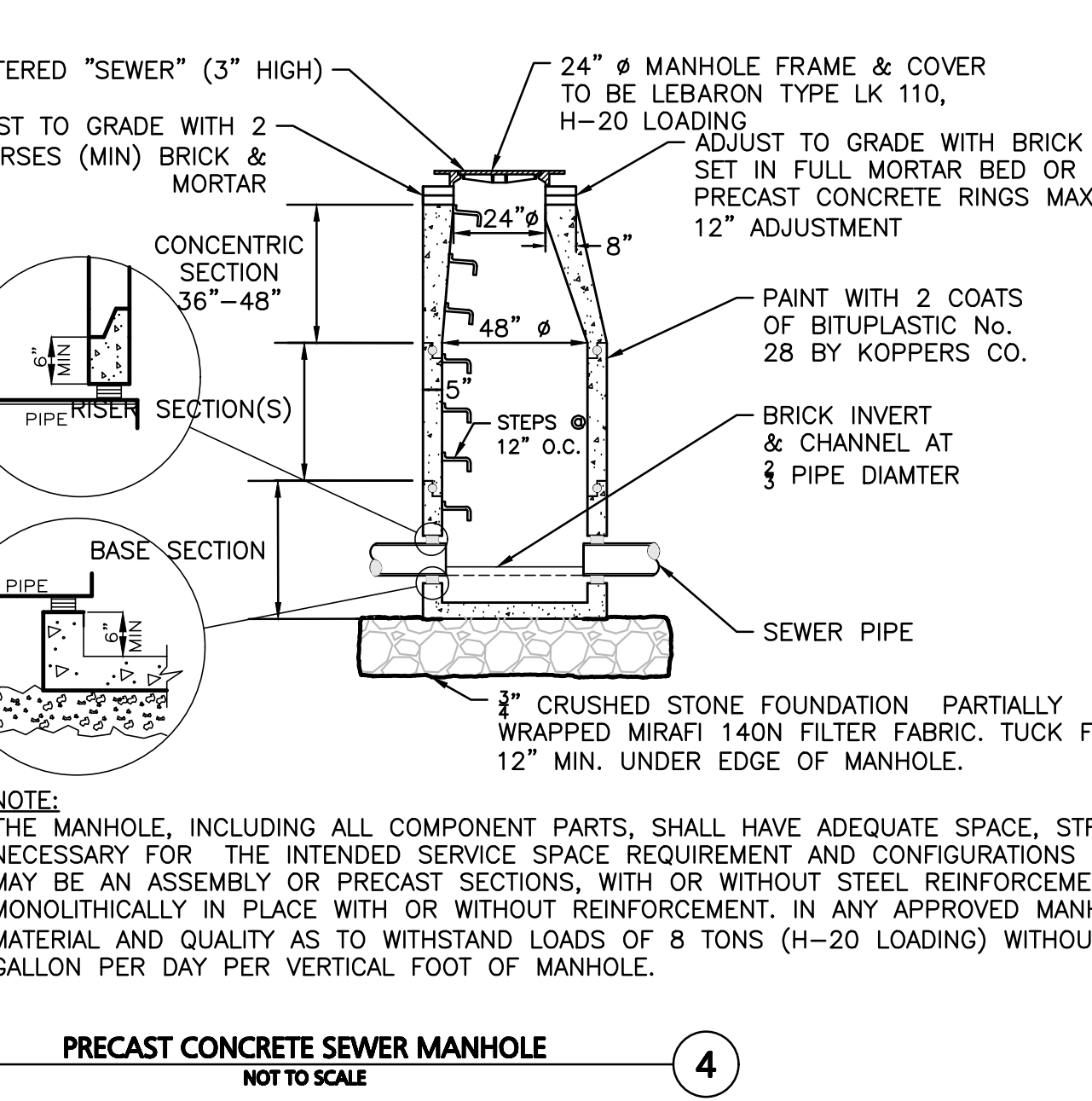
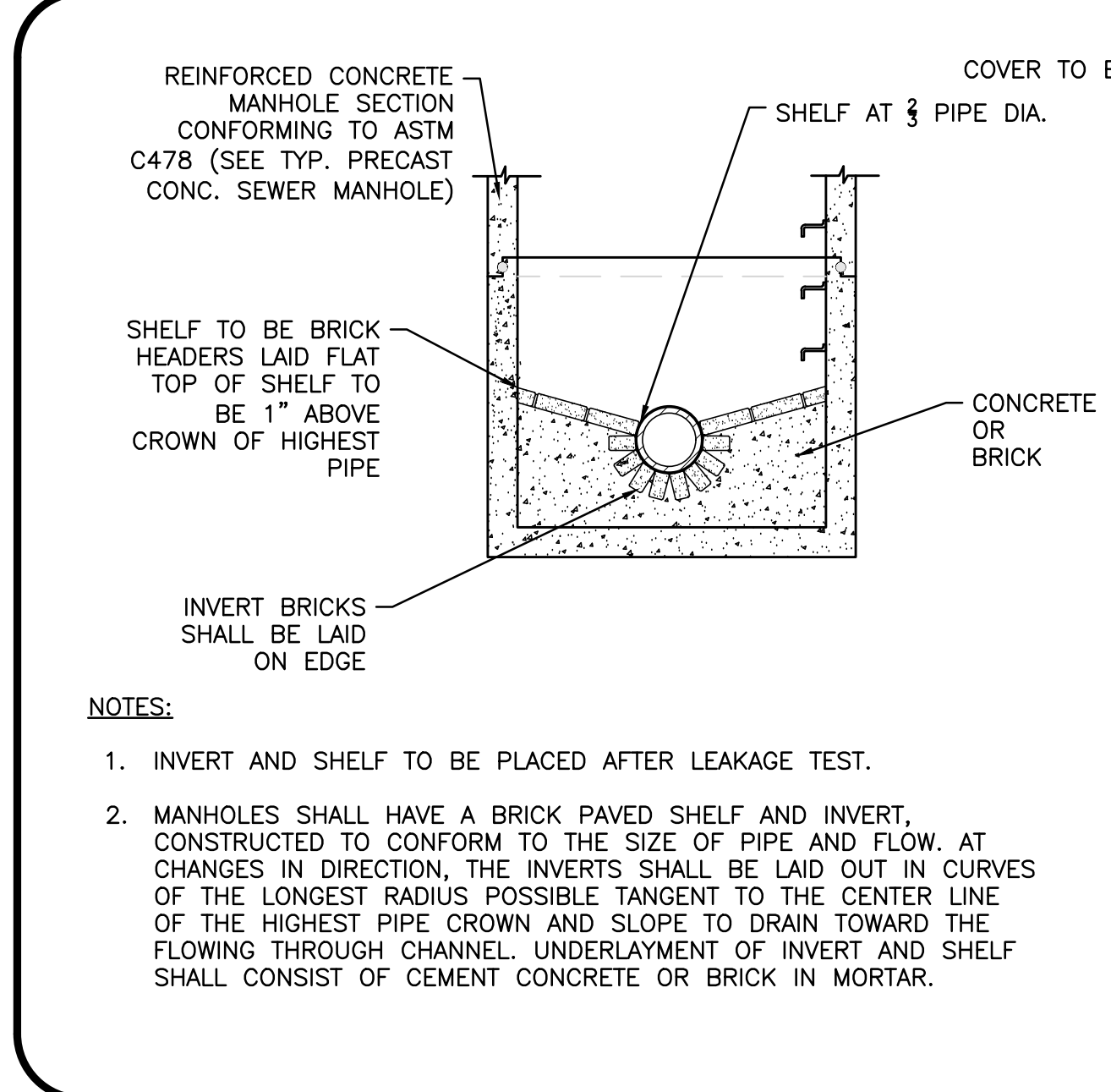
CASCADE SEPARATOR - CS4 - (WQU) NOT TO SCALE



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 800-338-1122 513-645-7000 513-645-7993 FAX

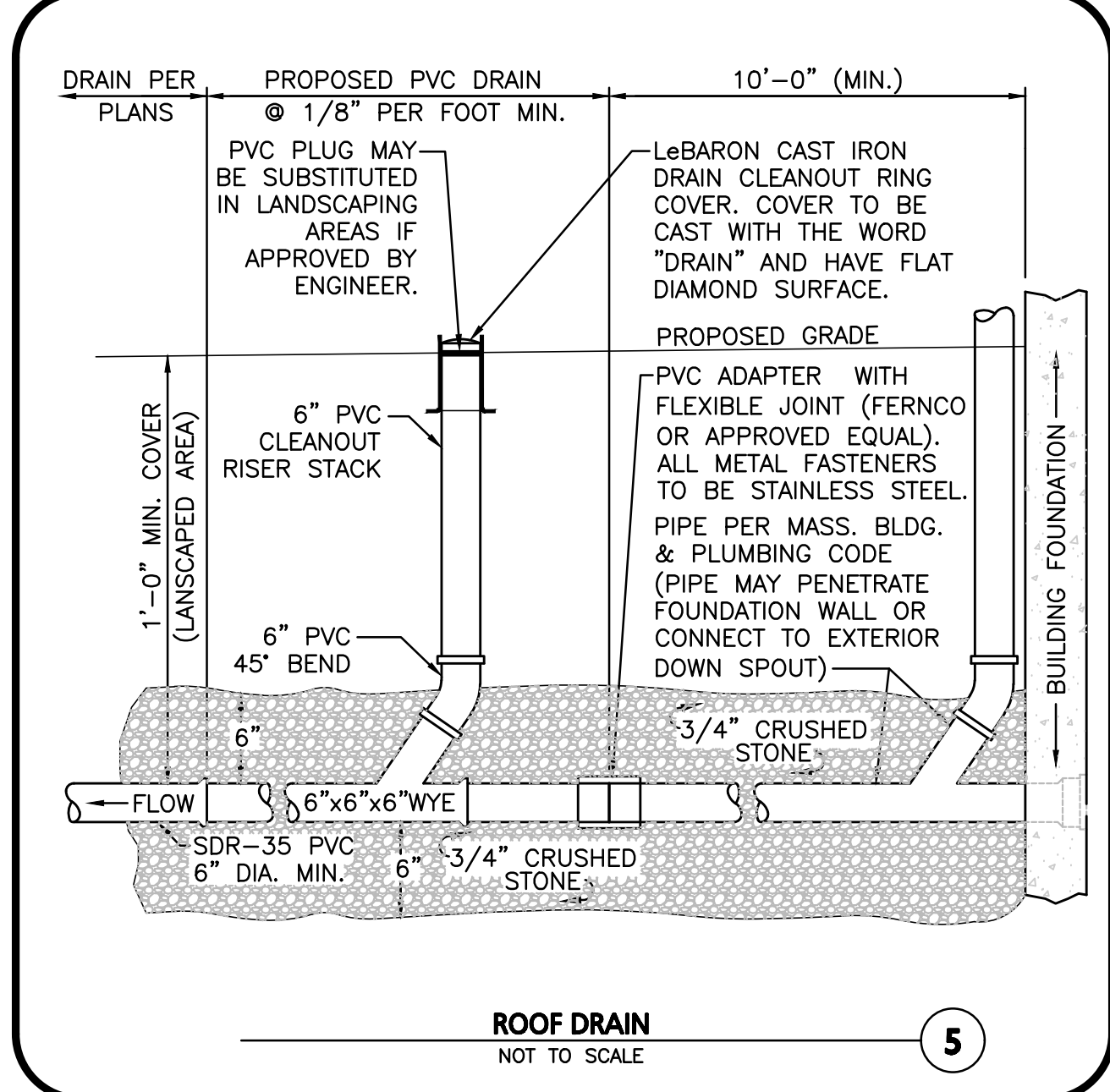
CS-4 CASCADE SEPARATOR STANDARD DETAIL

CASCADE SEPARATOR - CS4 - (WQU) NOT TO SCALE



- NOTES:**
- INVERT AND SHELF TO BE PLACED AFTER LEAKAGE TEST.
 - MANHOLES SHALL HAVE A BRICK PAVED SHELF AND INVERT, CONSTRUCTED TO CONFORM TO THE SIZE OF PIPE AND FLOW. AT CHANGES IN DIRECTION, THE INVERTS SHALL BE LAID OUT IN CURVES OF THE LONGEST RADIUS POSSIBLE TANGENT TO THE CENTER LINE OF THE HIGHEST PIPE CROWN AND SLOPE TO DRAIN TOWARD THE FLOWING THROUGH CHANNEL. UNDERLAYMENT OF INVERT AND SHELF SHALL CONSIST OF CEMENT CONCRETE OR BRICK IN MORTAR.
- NOTE:** THE MANHOLE, INCLUDING ALL COMPONENT PARTS, SHALL HAVE ADEQUATE SPACE, STRENGTH AND LEAK PROOF QUALITIES CONSIDERED NECESSARY FOR THE INTENDED SERVICE SPACE REQUIREMENT AND CONFIGURATIONS SHALL BE AS SHOWN ON THE DRAWING. MANHOLES MAY BE AN ASSEMBLY OR PRECAST SECTIONS, WITH OR WITHOUT STEEL REINFORCEMENT, WITH ADEQUATE JOINTING OR CONCRETE CAST MONOLITHICALLY IN PLACE WITH OR WITHOUT REINFORCEMENT. IN ANY APPROVED MANHOLE, THE COMPLETE STRUCTURE SHALL BE OF SUCH MATERIAL AND QUALITY AS TO WITHSTAND LOADS OF 8 TONS (H-20 LOADING) WITHOUT FAILURE AND PREVENT LEAKAGE IN EXCESS OF ONE GALLON PER DAY PER VERTICAL FOOT OF MANHOLE.

PRECAST CONCRETE SEWER MANHOLE NOT TO SCALE



DRAIN PER PLANS PROPOSED PVC DRAIN @ 1/8" PER FOOT MIN. 10'-0" (MIN.)

1'-0" MIN. COVER (LANDSCAPED AREA)

6" PVC CLEANOUT RISER STACK

6" PVC 45° BEND

LeBaron CAST IRON DRAIN CLEANOUT RING COVER. COVER TO BE CAST WITH THE WORD "DRAIN" AND HAVE FLAT DIAMOND SURFACE.

PVC ADAPTER WITH FLEXIBLE JOINT (FERNCO OR APPROVED EQUAL). ALL METAL FASTENERS TO BE STAINLESS STEEL.

PIPE PER MASS. BLDG. & PLUMBING CODE (PIPE MAY PENETRATE FOUNDATION WALL OR CONNECT TO EXTERIOR DOWN SPOUT)

3/4" CRUSHED STONE

SDR-35 PVC 6" DIA. MIN.

6" 3/4" CRUSHED STONE

BUILDING FOUNDATION

ROOF DRAIN NOT TO SCALE

DETAILS SHEET No. C-504



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
 281 READING, LLC
 281 MAIN STREET
 READING, MA 01867

PROJECT:
 MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
 281 MAIN STREET
 READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

SCALE: AS SHOWN DWG. NAME: C-2389-08

DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
 civil engineering • land surveying
 environmental consulting • landscape architecture
www.allenmajor.com
 100 COMMERCE WAY, SUITE 5
 WOBURN MA 01801
 TEL: (781) 935-6889
 FAX: (781) 935-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: SHEET No. C-504



SC-800 STORMTECH CHAMBER SPECIFICATIONS

- CHAMBERS SHALL BE ARCH-SHAPED AND SHALL BE MANUFACTURED FROM VIRGIN, IMPACT-MODIFIED POLYPROPYLENE COPOLYMERS.
- CHAMBERS SHALL MEET THE REQUIREMENTS OF ASTM F2418, "STANDARD SPECIFICATION FOR POLYPROPYLENE (PP) CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
- CHAMBER ROWS SHALL PROVIDE CONTINUOUS, UNOBSTRUCTED INTERNAL SPACE WITH NO INTERNAL SUPPORTS THAT WOULD IMPEDE FLOW OR LIMIT ACCESS FOR INSPECTION.
- THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS SHALL ENSURE THAT THE LOAD FACTORS SPECIFIED IN THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, SECTION 12.12 ARE MET FOR: 1) LONG DURATION DEAD LOADS AND 2) SHORT DURATION LIVE LOADS, BASED ON THE AASHTO DESIGN TRUCK WITH CONSIDERATION FOR IMPACT AND MULTIPLE VEHICLE PRESENCES.
- CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOAD CONFIGURATIONS DETERMINED IN ACCORDANCE WITH ASTM F2787, "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS". LOAD CONFIGURATIONS SHALL INCLUDE: 1) INSTANTANEOUS (4-MIN) AASHTO DESIGN TRUCK LIVE LOAD ON MINIMUM COVER 2) MAXIMUM PERMANENT (75-YR) COVER LOAD AND 3) ALLOWABLE COVER WITH PARKED (1-WEEK) AASHTO DESIGN TRUCK.
- REQUIREMENTS FOR HANDLING AND INSTALLATION:
 - TO MAINTAIN THE WIDTH OF CHAMBERS DURING SHIPPING AND HANDLING, CHAMBERS SHALL HAVE INTEGRAL, INTERLOCKING STACKING LUGS.
 - TO ENSURE A SECURE JOINT DURING INSTALLATION AND BACKFILL, THE HEIGHT OF THE CHAMBER JOINT SHALL NOT BE LESS THAN 2".
 - TO ENSURE THE INTEGRITY OF THE ARCH SHAPE DURING INSTALLATION, THE ARCH STIFFNESS CONSTANT SHALL BE GREATER THAN OR EQUAL TO 700 LBS/FT². THE ASG IS DEFINED IN SECTION 6.2.8 OF ASTM F2418. AND B) TO RESIST CHAMBER DEFORMATION DURING INSTALLATION AT ELEVATED TEMPERATURES (ABOVE 73° F / 23° C), CHAMBERS SHALL BE PRODUCED FROM REFLECTIVE GOLD OR YELLOW COLORS.
- ONLY CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. UPON REQUEST BY THE SITE DESIGN ENGINEER OR OWNER, THE CHAMBER MANUFACTURER SHALL SUBMIT A STRUCTURAL EVALUATION FOR APPROVAL BEFORE DELIVERING CHAMBERS TO THE PROJECT SITE AS FOLLOWS:
 - THE STRUCTURAL EVALUATION SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER.
 - THE STRUCTURAL EVALUATION SHALL DEMONSTRATE THAT THE SAFETY FACTORS ARE GREATER THAN OR EQUAL TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD. THE MINIMUM REQUIRED BY ASTM F2787 AND BY SECTIONS 3 AND 12.12 OF THE AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS FOR THERMOPLASTIC PIPE.
 - THE TEST DERIVED CREEP MODULUS AS SPECIFIED IN ASTM F2418 SHALL BE USED FOR PERMANENT DEAD LOAD DESIGN EXCEPT THAT IT SHALL BE THE 75-YEAR MODULUS USED FOR DESIGN.
- CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.
- MANIFOLD SIZE TO BE DETERMINED BY SITE DESIGN ENGINEER. SEE TECHNICAL NOTE 6.32 FOR MANIFOLD SIZING GUIDANCE. DUE TO THE ADAPTATION OF THIS CHAMBER SYSTEM TO SPECIFIC SITE AND DESIGN CONSTRAINTS, IT MAY BE NECESSARY TO CUT AND COUPLE ADDITIONAL PIPE TO STANDARD MANIFOLD COMPONENTS IN THE FIELD.
- ADS DOES NOT DESIGN OR PROVIDE MEMBRANE LINER SYSTEMS. TO MINIMIZE THE LEAKAGE POTENTIAL OF LINER SYSTEMS, THE MEMBRANE LINER SYSTEM SHOULD BE DESIGNED BY A KNOWLEDGEABLE GEOTEXTILE PROFESSIONAL AND INSTALLED BY A QUALIFIED CONTRACTOR.

IMPORTANT - NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-800 SYSTEM

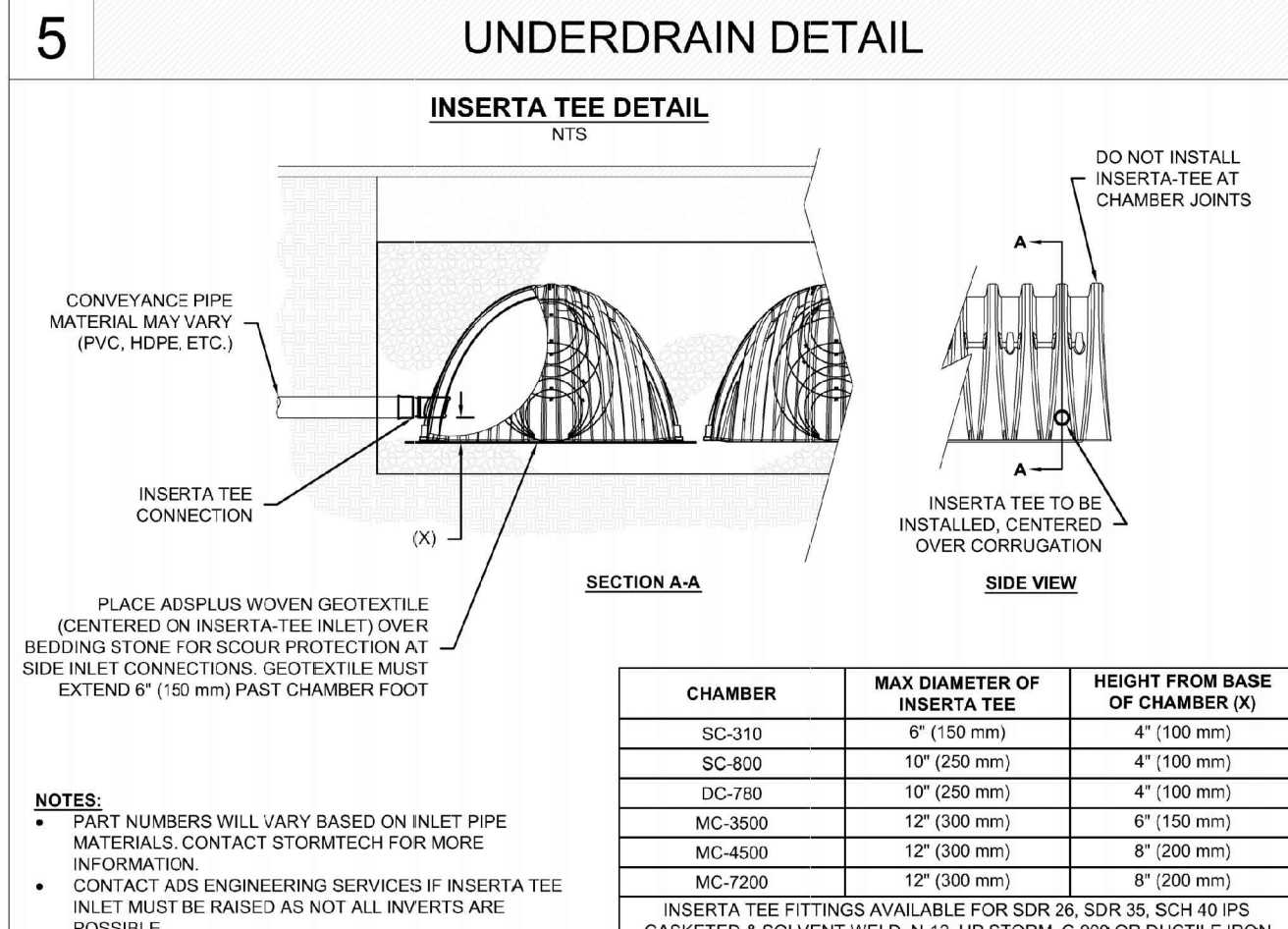
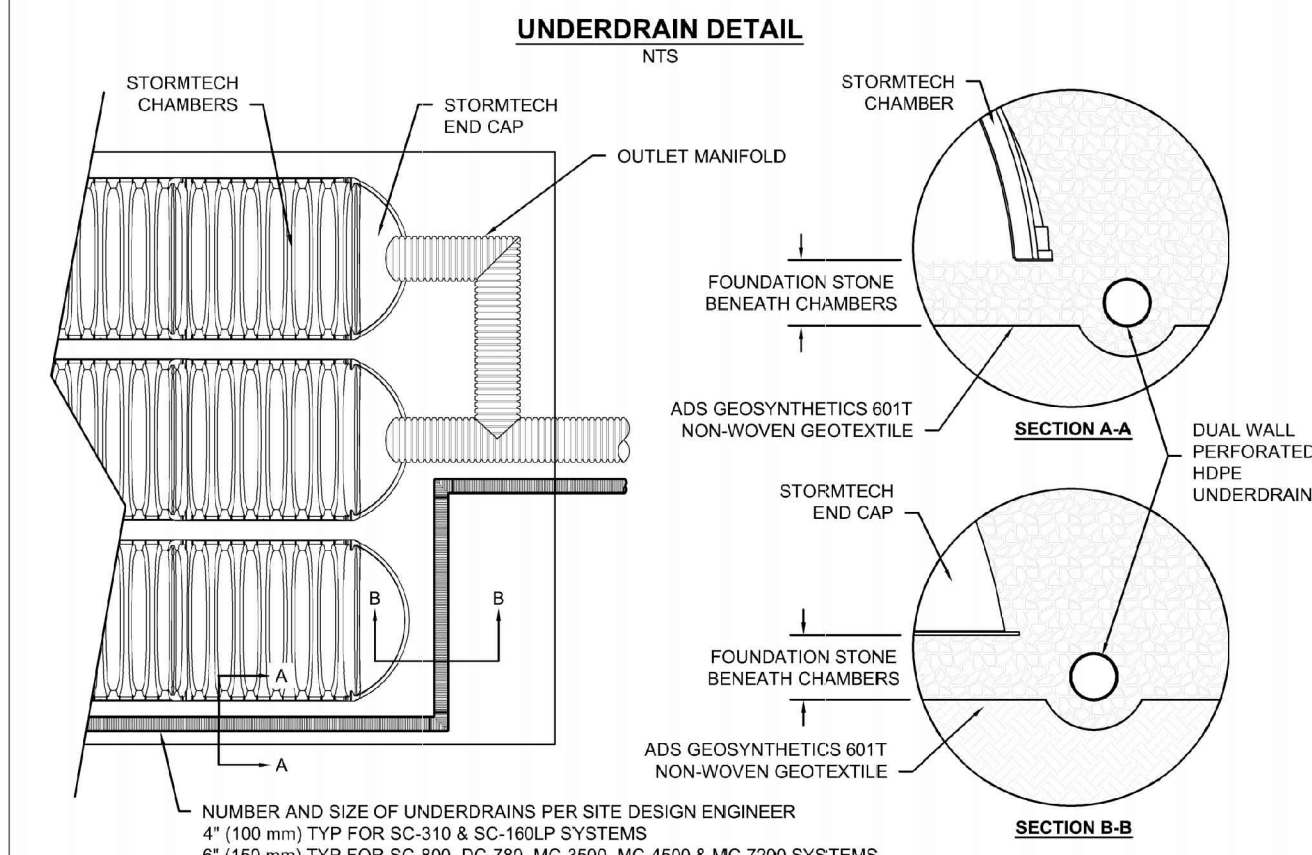
- STORMTECH SC-800 CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.
- STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310DC-780/SC-800".
- CHAMBERS ARE NOT TO BE BACKFILLED WITH A DOZER OR AN EXCAVATOR SITUATED OVER THE CHAMBERS. STORMTECH RECOMMENDS 3 BACKFILL METHODS:
 - STONESHOOTER LOCATED OFF THE CHAMBER BED.
 - BACKFILL AS ROWS ARE BUILT USING AN EXCAVATOR ON THE FOUNDATION STONE OR SUBGRADE.
 - BACKFILL FROM OUTSIDE THE EXCAVATION USING A LONG BOOM HOSE OR EXCAVATOR.
- THE FOUNDATION STONE SHALL BE LEVELLED AND COMPACTED PRIOR TO PLACING CHAMBERS.
- JOINTS BETWEEN CHAMBERS SHALL BE PROPERLY SEATED PRIOR TO PLACING STONE.
- MAINTAIN MINIMUM - 3" (75 mm) SPACING BETWEEN THE CHAMBER ROWS.
- EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANGULAR STONE OR RECYCLED CONCRETE: AASHTO M43 #3, 357, 4, 467, 5, 56, OR 57.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.
- ADS RECOMMENDS THE USE OF "FLEXSTORM CATCH IT" INSERTS DURING CONSTRUCTION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMWATER MANAGEMENT SYSTEM FROM CONSTRUCTION SITE RUNOFF.

NOTES FOR CONSTRUCTION EQUIPMENT

- STORMTECH SC-800 CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310DC-780/SC-800".
- THE USE OF CONSTRUCTION EQUIPMENT OVER SC-800 CHAMBERS IS LIMITED:
 - NO EQUIPMENT IS ALLOWED ON BARE CHAMBERS.
 - NO RUBBER Tired LOADERS, DUMP TRUCKS, OR EXCAVATORS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE REACHED IN ACCORDANCE WITH THE "STORMTECH INSTALLATION GUIDE SC-310DC-780/SC-800".
 - WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT CAN BE FOUND IN THE "STORMTECH INSTALLATION GUIDE SC-310DC-780/SC-800".
- FULL 30" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR DUMPING.

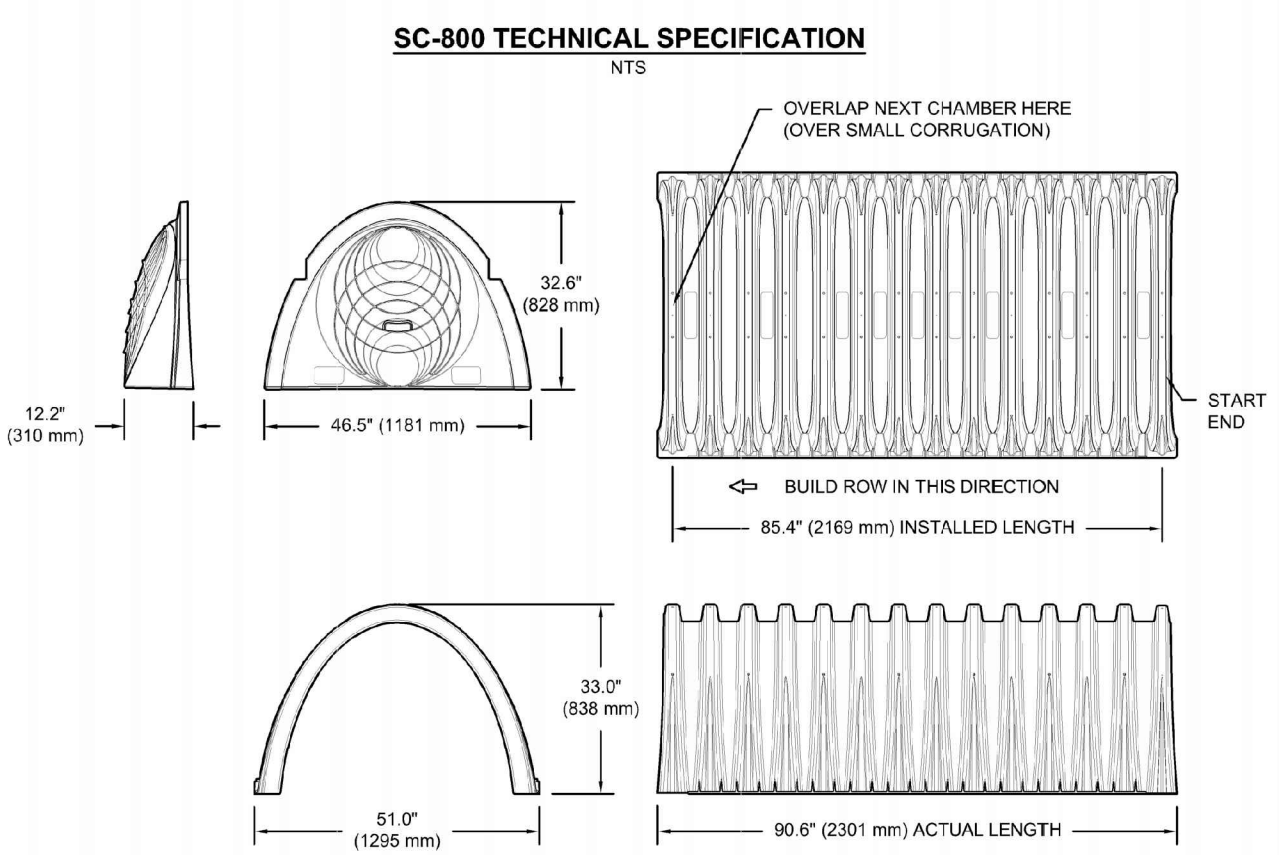
USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBERS AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "PUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMTECH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-800-821-6710 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION EQUIPMENT.



5 UNDERDRAIN DETAIL

6 INSERTA-TEE SIDE INLET DETAIL



NOMINAL CHAMBER SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	51.0" X 33.0" X 85.4"	(1296 mm X 838 mm X 2169 mm)
CHAMBER STORAGE	59.6 CUBIC FEET	(1.63 m ³)
MINIMUM INSTALLED STORAGE*	78.4 CUBIC FEET	(2.22 m ³)
WEIGHT	81.5 lbs.	(37.1 kg)

NOMINAL END CAP SPECIFICATIONS

SIZE (W X H X INSTALLED LENGTH)	46.5" X 32.6" X 10.5"	(1181 mm X 828 mm X 267 mm)
END CAP STORAGE	3.4 CUBIC FEET	(0.09 m ³)
MINIMUM INSTALLED STORAGE*	14.4 CUBIC FEET	(0.42 m ³)
WEIGHT	15.7 lbs.	(7.1 kg)

* ASSUMES 6" (150 mm) STONE ABOVE AND BELOW CHAMBER, 3" (75 mm) BETWEEN CHAMBERS
** ASSUMES 6" (150 mm) STONE ABOVE AND BELOW END CAPS, 3" (75 mm) BETWEEN ROWS, 12" (300 mm) BEYOND END CAPS

PRE-CORED HOLES AT BOTTOM OF END CAP FOR PART NUMBERS ENDING WITH "BPC"
PRE-CORED HOLES AT TOP OF END CAP FOR PART NUMBERS ENDING WITH "TPC"

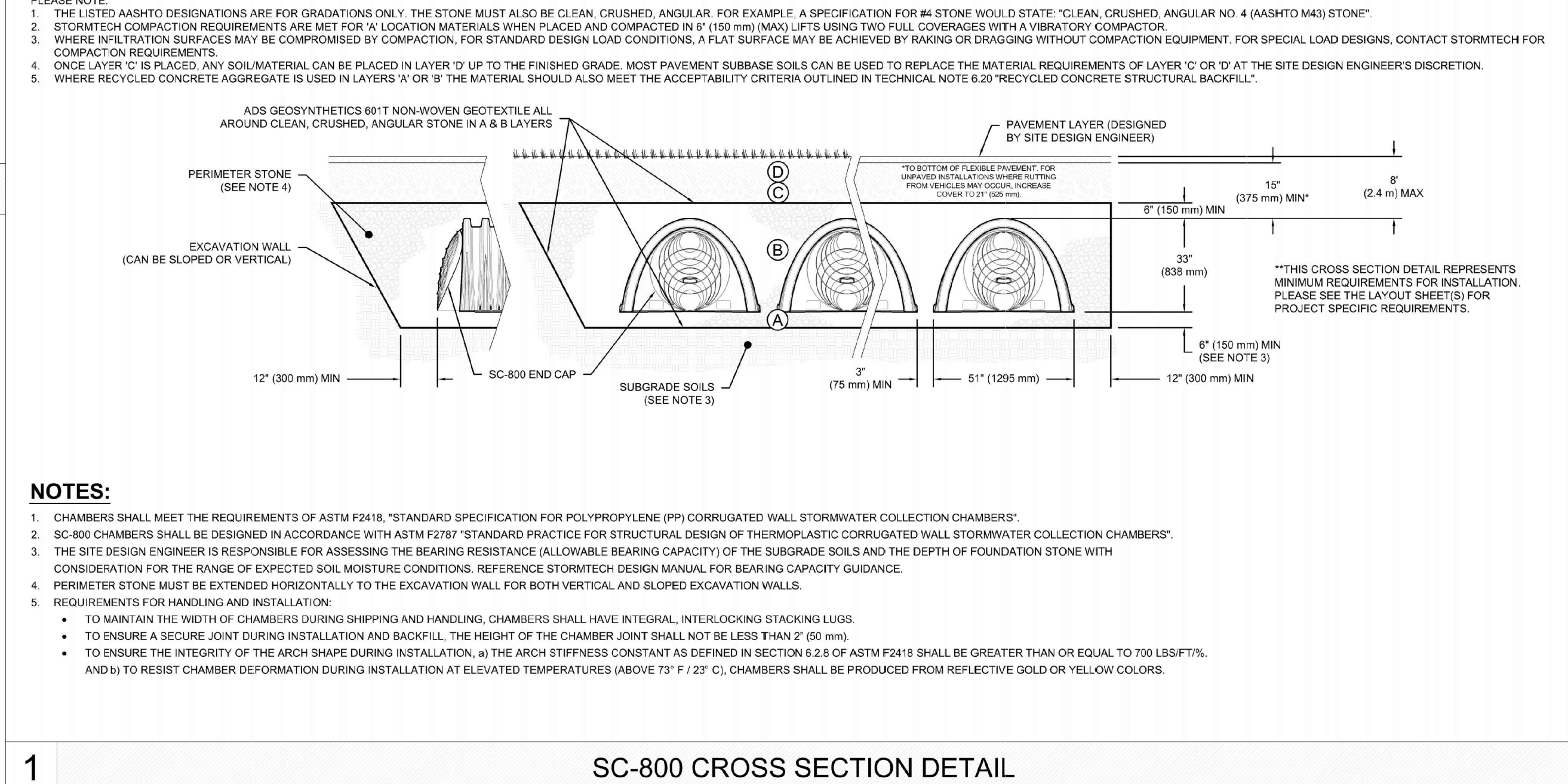
PART #	STUB	B	C
SC800PE06TPC	6" (150 mm)	21.4" (544 mm)	0.9" (23 mm)
SC800PE08BPC	8" (200 mm)	19.2" (488 mm)	—
SC800PE08BPC	8" (200 mm)	17.0" (432 mm)	1.0" (25 mm)
SC800PE10BPC	10" (250 mm)	—	1.2" (30 mm)
SC800PE12BPC	12" (300 mm)	14.4" (366 mm)	—
SC800PE12BPC	12" (300 mm)	11.3" (287 mm)	1.6" (41 mm)
SC800PE15BPC	15" (375 mm)	—	1.7" (43 mm)
SC800PE18BPC	18" (450 mm)	8.0" (203 mm)	—
SC800PE18BPC	18" (450 mm)	—	2.0" (51 mm)
SC800CEZ	24" (600 mm)	—	2.3" (58 mm)

NOTE: ALL DIMENSIONS ARE NOMINAL

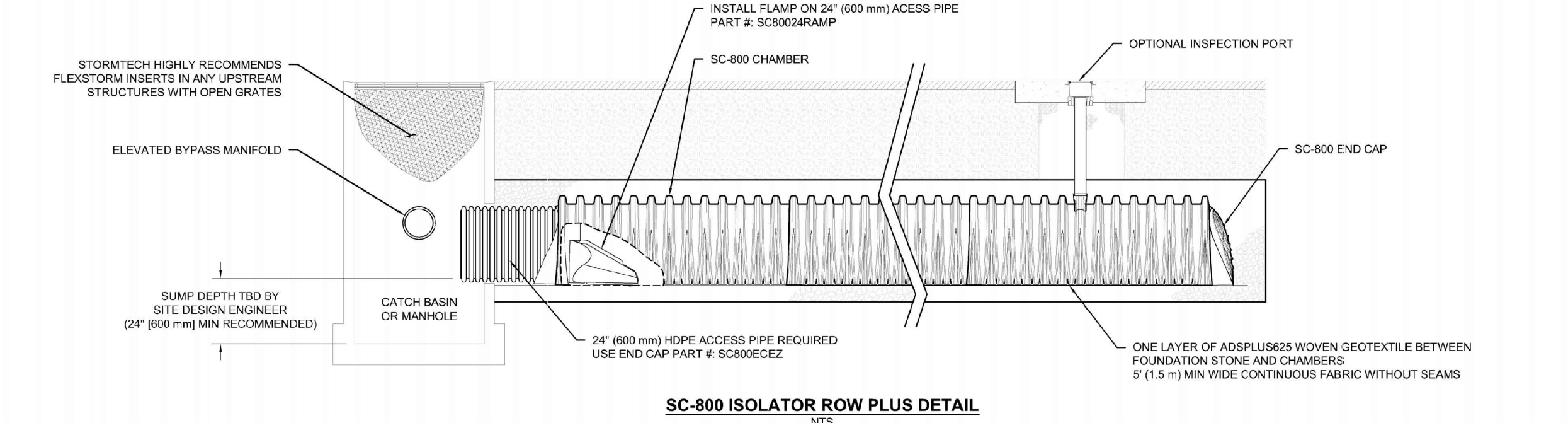
2 SC-800 TECHNICAL SPECIFICATIONS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-800 CHAMBER SYSTEMS

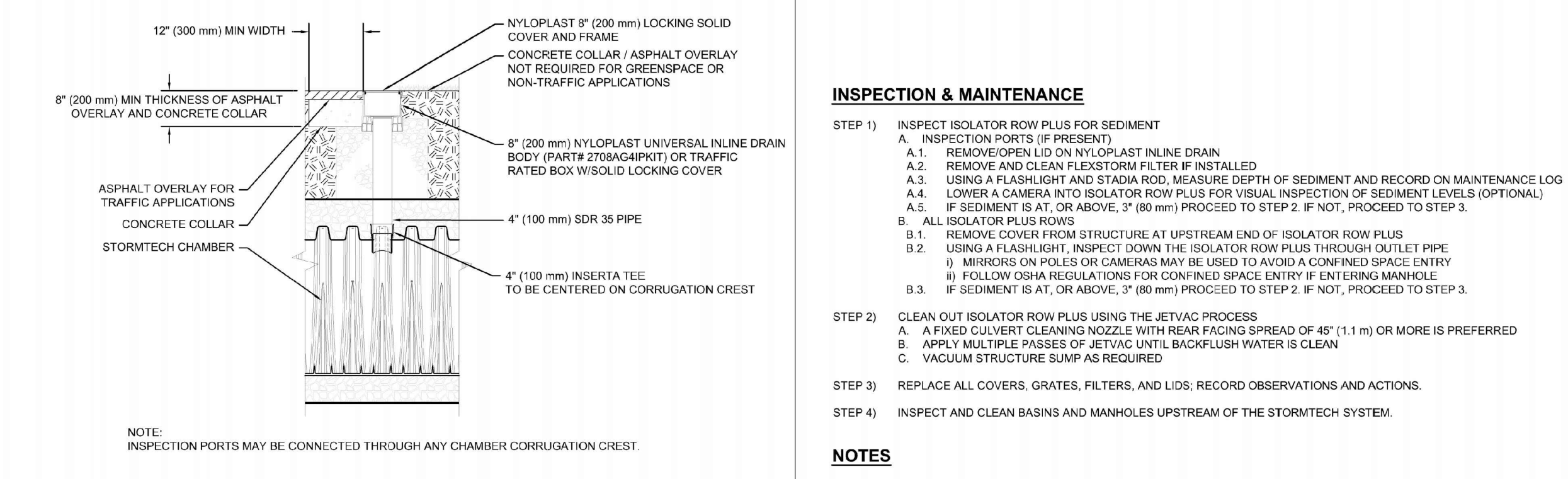
MATERIAL LOCATION	DESCRIPTION	AASHTO MATERIAL CLASSIFICATIONS	COMPACTION / DENSITY REQUIREMENT
D	FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER.	N/A	PREPARE PER SITE DESIGN ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
C	INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE ('B' LAYER) TO 15" (375 mm) ABOVE THE TOP OF THE CHAMBER. NOTE THAT PAVEMENT SUBBASE MAY BE A PART OF THE 'C' LAYER.	AASHTO M145 ¹ A-1, A-2.4, A-4.3 OR AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 80, 9, 10	BEGIN COMPACTIONS AFTER 12" (300 mm) OF MATERIAL OVER THE CHAMBERS IS REACHED. COMPACT ADDITIONAL LAYERS IN 6" (150 mm) MAX LIFTS TO A MIN. 95% PROCTOR DENSITY FOR WELL GRADED MATERIAL AND 95% RELATIVE DENSITY FOR PROCESSED SUBBASE MATERIALS. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 lbs (53 kN). DYNAMIC FORCE NOT TO EXCEED 20,000 lbs (89 kN).
B	EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE ('A' LAYER) TO THE 'C' LAYER ABOVE.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	NO COMPACTION REQUIRED.
A	FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER.	AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57	PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. ^{2,3}



1 SC-800 CROSS SECTION DETAIL



3 SC-800 ISOLATOR ROW PLUS DETAIL



4 4\"/>

INSPECTION & MAINTENANCE

- INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
 - INSPECTION PORTS (IF PRESENT)
 - REMOVE COVER LIDS ON UPSTREAM INLINE DRAIN
 - REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
 - USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
 - LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
 - IF SEDIMENT IS AT OR ABOVE 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- ALL ISOLATOR ROW PLUS ROWS
 - REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
 - USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
 - MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
 - FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
 - IF SEDIMENT IS AT OR ABOVE 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
 - A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 40" (1.1 m) OR MORE IS PREFERRED
 - APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
 - VACUUM STRUCTURE PUMP AS REQUIRED
- REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS. RECORD OBSERVATIONS AND ACTIONS.
- INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

- INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
- CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.

DRAWN: SMW DATE: 08/05/2025
REVIEWED: JLM PROJECT NO: 721-880
REV: NOT TO SCALE

STANDARD DETAILS
SC-800

StormTech Chamber System
4640 TRUEMAN BLVD
HILLIARD, OH 43026

ADS Advanced Drainage Systems, Inc.

SHEET 1



PROFESSIONAL ENGINEER FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24
SCALE: DWG. NAME: C-2389-08
DESIGNED BY: DMR/MB/BDP CHECKED BY: CMQ

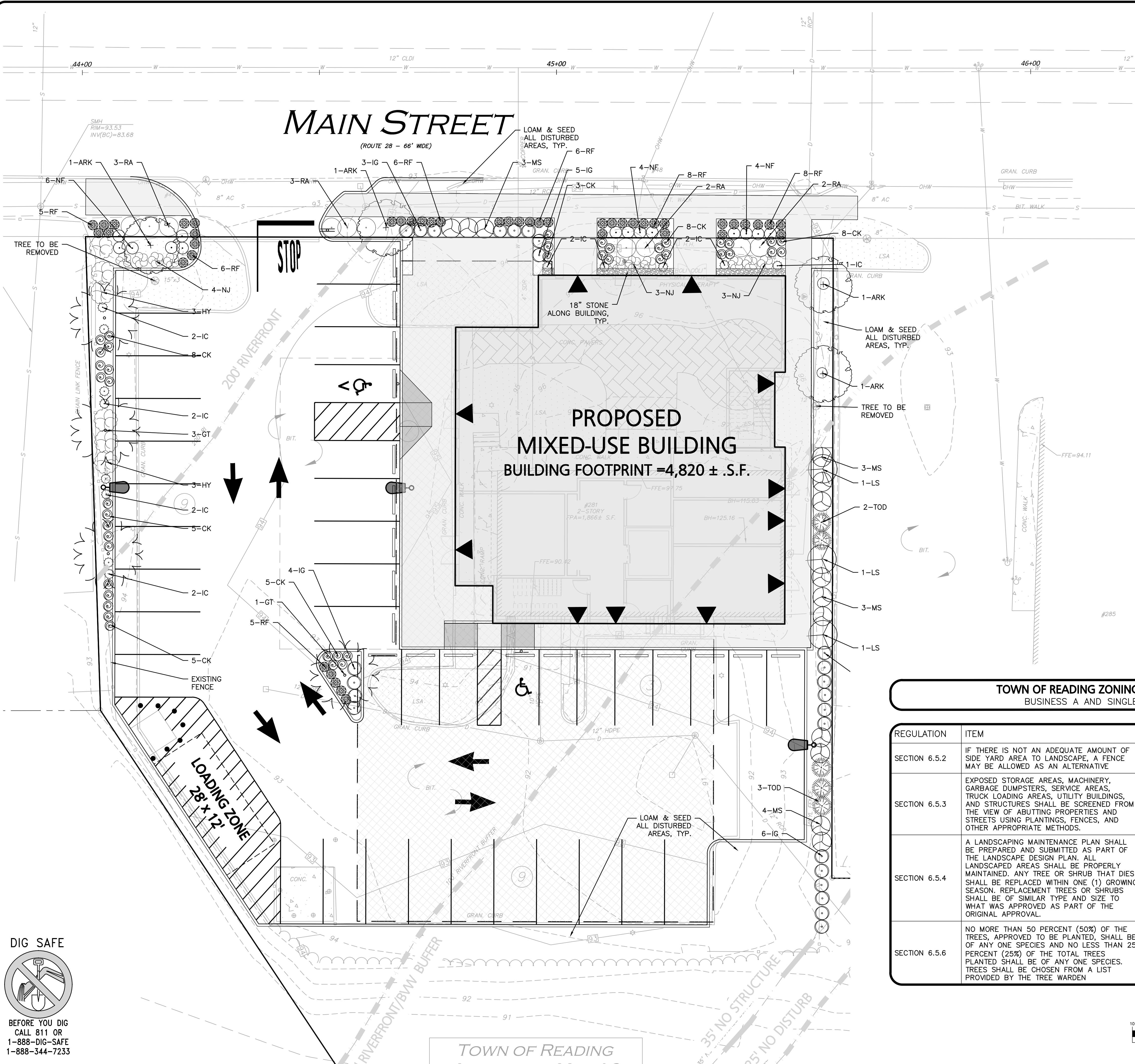


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DRAWING TITLE: DETAILS SHEET No. C-505

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LEGEND

- DECIDUOUS TREE
- EVERGREEN TREE
- SHRUBS
- MULCH BED
- PERENNIALS/GROUNDCOVER

- NOTES:**
- THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY AND HAVE NOT BEEN INDEPENDENTLY VERIFIED BY THE OWNER OR IT'S REPRESENTATIVE. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MIGHT BE OCCASIONED BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.
 - THE INFORMATION SHOWN ON THIS PLAN IS THE SOLE PROPERTY OF ALLEN & MAJOR ASSOCIATES, INC. IT'S INTENDED USE IS TO PROVIDE INFORMATION. ANY ALTERATION, MISUSE, OR RECALCULATION OF INFORMATION OR DATA WITHOUT THE EXPRESSED, WRITTEN CONSENT OF ALLEN & MAJOR ASSOCIATES, INC. IS STRICTLY PROHIBITED.

MASSACHUSETTS REGISTERED PROFESSIONAL LANDSCAPE ARCHITECT
 No. 4071
 11-24-25
Beth C. De...

PROFESSIONAL LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:
 281 READING, LLC
 281 MAIN STREET
 READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
 281 MAIN STREET
 READING, MA

PROJECT NO. 2398-08 DATE: 2025-11-24

SCALE: 1" = 10' DWG. NAME: L-2398-08

DESIGNED BY: BCD CHECKED BY: CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
 civil engineering • land surveying
 environmental consulting • landscape architecture
 www.allenmajor.com
 100 COMMERCE WAY, SUITE 5
 WOBURN MA 01801
 TEL: (781) 935-6889
 FAX: (781) 935-2896

WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

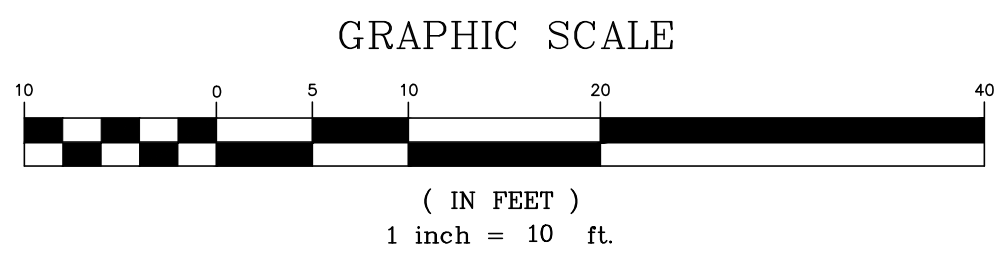
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DRAWING TITLE: LANDSCAPE PLAN SHEET No. L-101

TOWN OF READING ZONING SUMMARY - LANDSCAPE

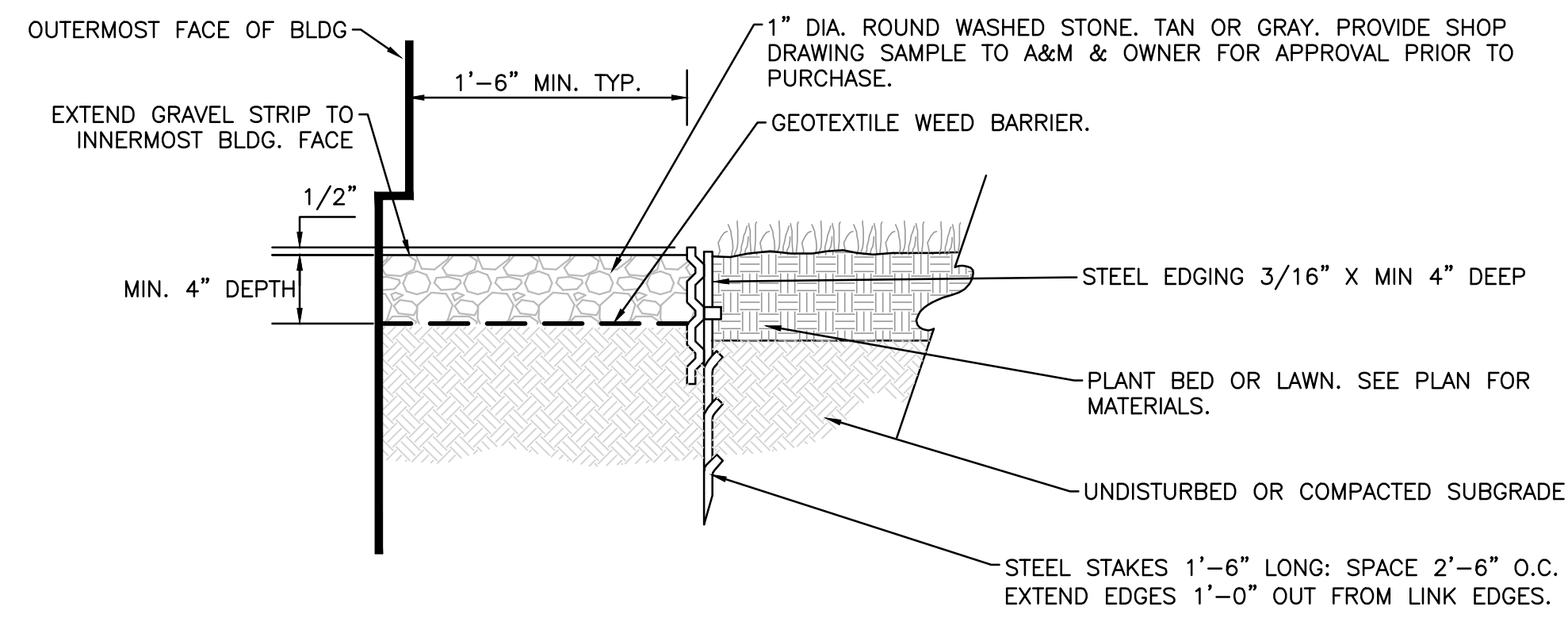
BUSINESS A AND SINGLE FAMILY 15 DISTRICTS

REGULATION	ITEM	REQUIRED / ALLOWED	PROPOSED
SECTION 6.5.2	IF THERE IS NOT AN ADEQUATE AMOUNT OF SIDE YARD AREA TO LANDSCAPE, A FENCE MAY BE ALLOWED AS AN ALTERNATIVE	SIDE YARD SCREENING	PRIVACY FENCE PROVIDED
SECTION 6.5.3	EXPOSED STORAGE AREAS, MACHINERY, GARBAGE DUMPSTERS, SERVICE AREAS, TRUCK LOADING AREAS, UTILITY BUILDINGS, AND STRUCTURES SHALL BE SCREENED FROM THE VIEW OF ADJACENT PROPERTIES AND STREETS USING PLANTINGS, FENCES, AND OTHER APPROPRIATE METHODS.	UTILITY SCREENING	SCREENING PROVIDED
SECTION 6.5.4	A LANDSCAPING MAINTENANCE PLAN SHALL BE PREPARED AND SUBMITTED AS PART OF THE LANDSCAPE DESIGN PLAN. ALL LANDSCAPED AREAS SHALL BE PROPERLY MAINTAINED. ANY TREE OR SHRUB THAT DIES SHALL BE REPLACED WITHIN ONE (1) GROWING SEASON. REPLACEMENT TREES OR SHRUBS SHALL BE OF SIMILAR TYPE AND SIZE TO WHAT WAS APPROVED AS PART OF THE ORIGINAL APPROVAL.	LANDSCAPE MAINTENANCE PLAN	SEE DETAIL SHEET
SECTION 6.5.6	NO MORE THAN 50 PERCENT (50%) OF THE TREES, APPROVED TO BE PLANTED, SHALL BE OF ANY ONE SPECIES AND NO LESS THAN 25 PERCENT (25%) OF THE TOTAL TREES PLANTED SHALL BE OF ANY ONE SPECIES. TREES SHALL BE CHOSEN FROM A LIST PROVIDED BY THE TREE WARDEN	TREE SPECIES	SEE PLANT SCHEDULE



DIG SAFE

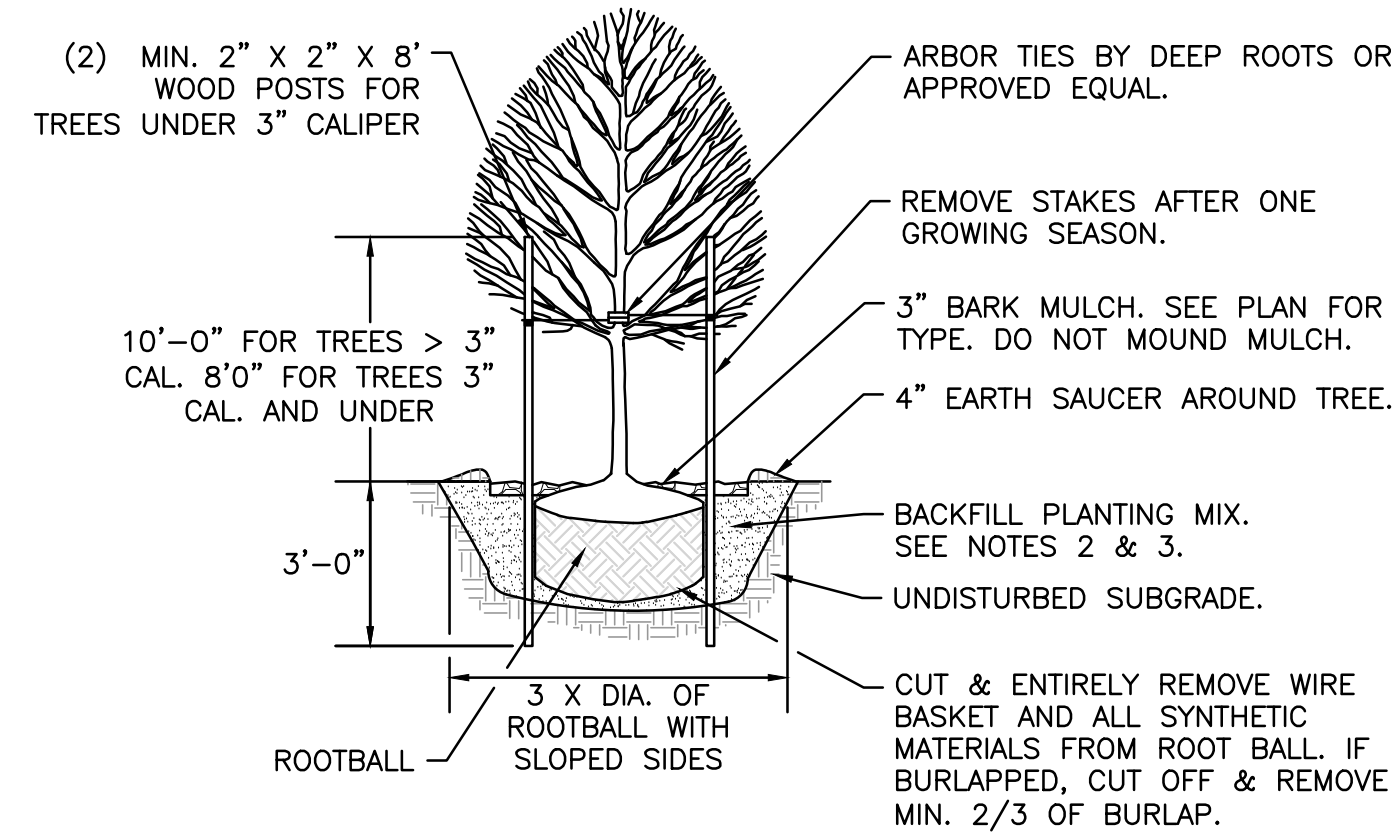
BEFORE YOU DIG
 CALL 811 OR
 1-888-DIG-SAFE
 1-888-344-7233



- NOTES:**
1. STONE STRIP IS TO BE INSTALLED CONTINUOUS ADJACENT TO THE ENTIRE FACE OF BUILDINGS EXCEPT WHERE OTHER HARD SURFACING MATERIALS ARE SPECIFIED OR IF SHOWN OTHERWISE ON PLAN.
 2. STONE STRIP TO BE INSTALLED UNDER ALL BUILDING OVERHANGS.
 3. COORDINATE INSTALLATION OF STONE STRIP WITH INSTALLATION OF FOUNDATION DRAIN & TO BE LOCATED BEYOND ROOF OVERHANG.

STONE DRIP STRIP
NOT TO SCALE

1



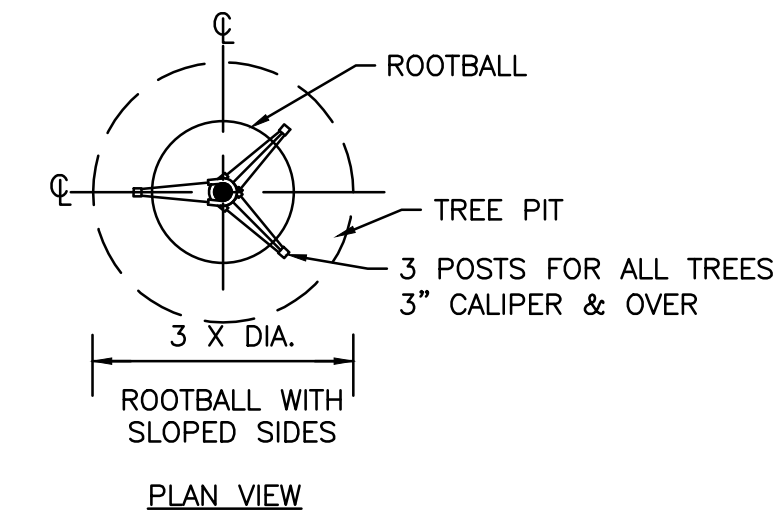
NOTES:

1. ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL ROOTBALL AREA.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

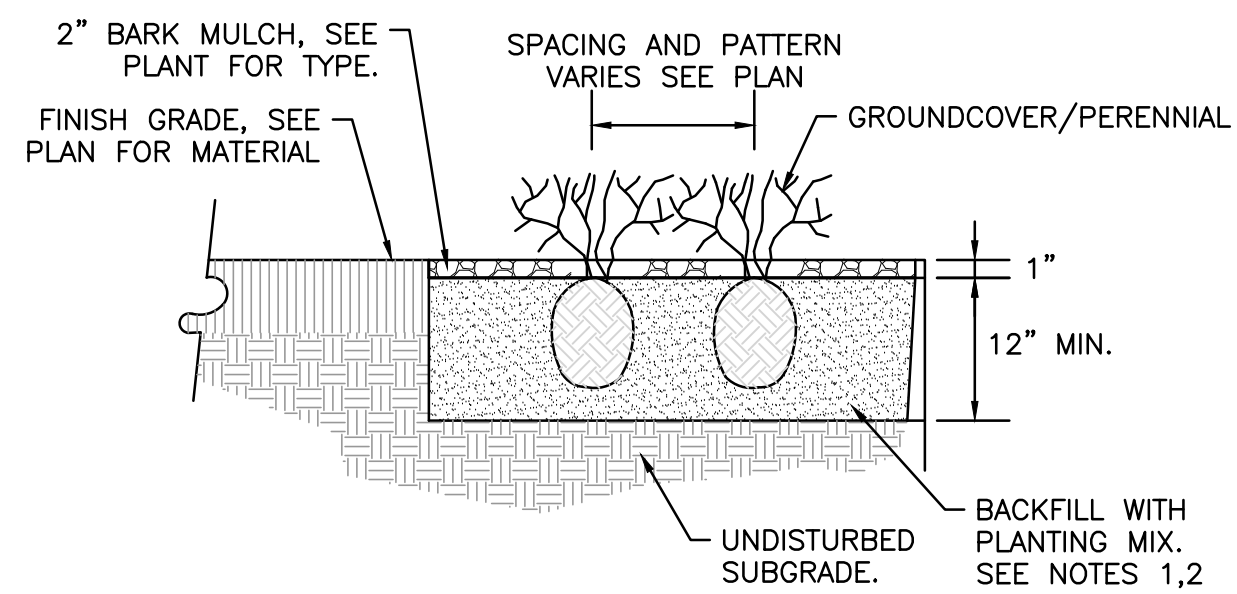
SECTION VIEW

DECIDUOUS TREE
NOT TO SCALE

2



PLAN VIEW

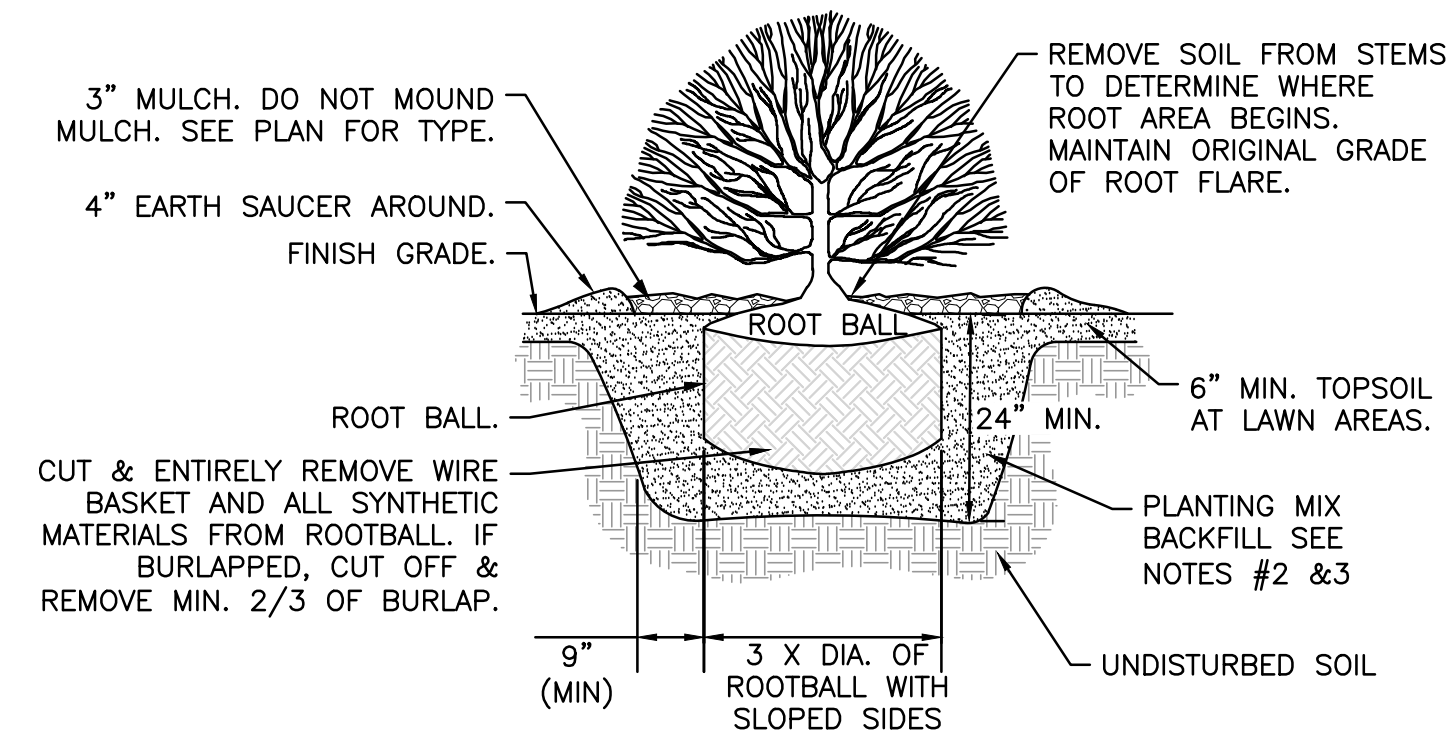


NOTES:

1. ALL GROUNDCOVER/PERENNIALS SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM STEM OF GROUND COVER/ PERENNIAL TO DETERMINE ACTUAL ROOTBALL AREA.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

GROUNDCOVER/PERENNIAL PLANTING
NOT TO SCALE

4

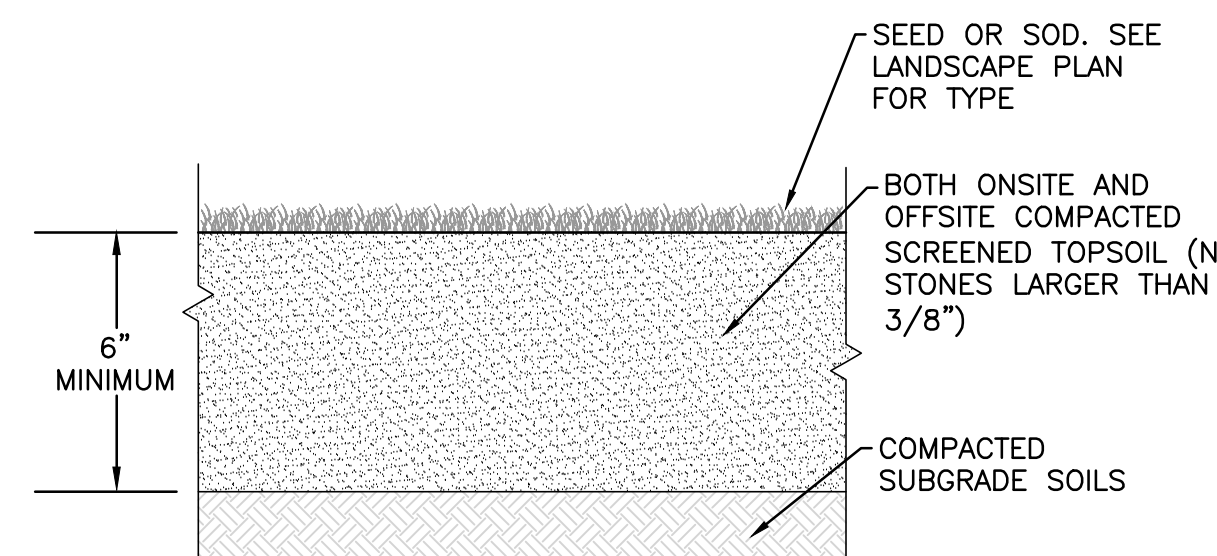


NOTES:

1. ALL SHRUBS ROOT FLARE SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED. WATER THOROUGHLY AT COMPLETION.
4. SHRUB BEDS TO HAVE 24" MIN. OF CONTINUOUS PLANTING SOIL.

SHRUB
NOT TO SCALE

5



TEXTURE CLASS	% OF TOTAL WEIGHT
SAND	45% - 65%
SILT	15% - 35%
CLAY	5% - 20%

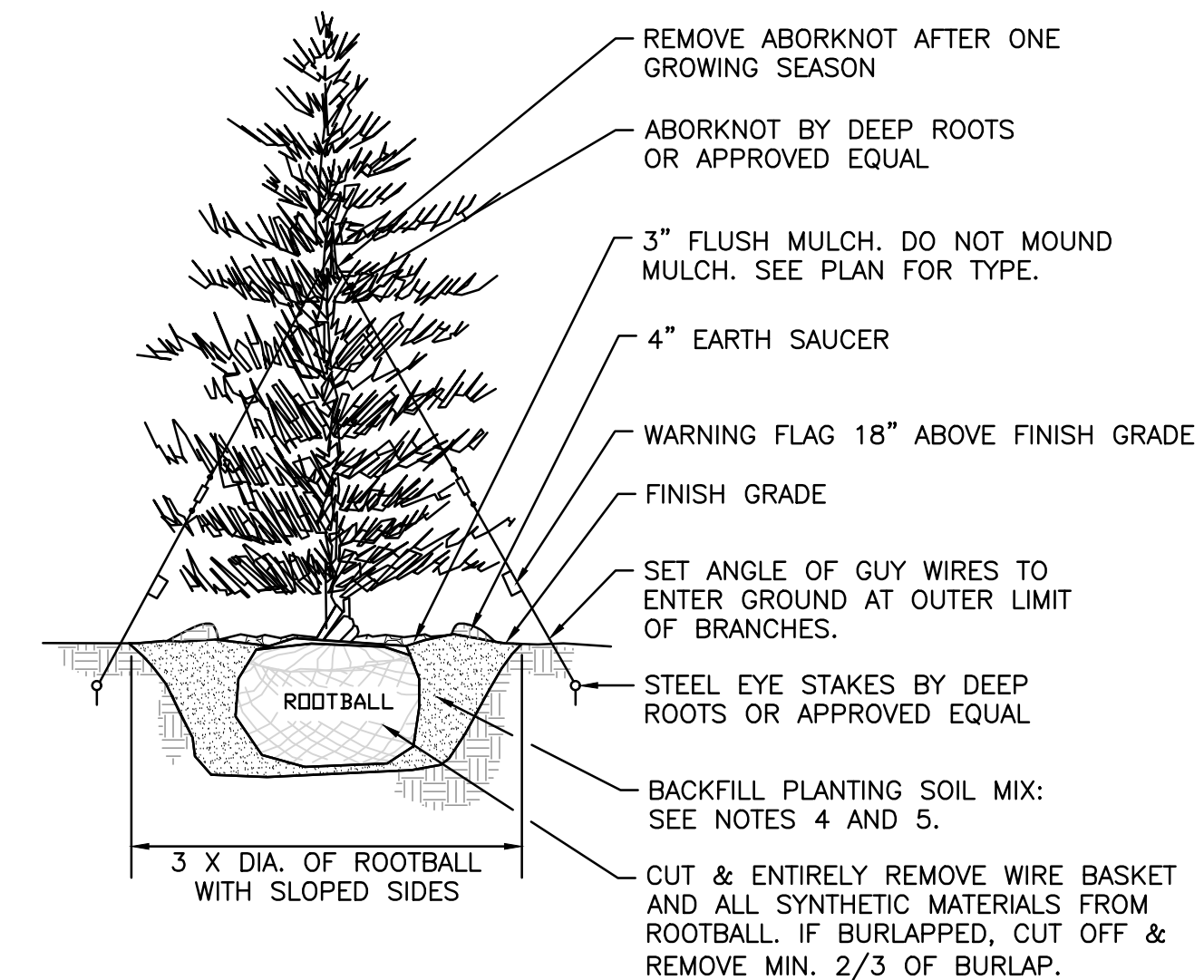
SIEVE	% PASSING
3/8"	100
No. 4	85-100
No. 40	60-85
No. 100	38-60
No. 200	28-40

NOTES:

1. TOP OF LOAM (TOPSOIL) IS FINISH GRADE.
2. ALL TOPSOIL (BOTH ONSITE AND OFFSITE SOURCES) SHALL BE COMPOSED OF A NATURAL, FERTILE, FRIABLE SOIL TYPICAL OF CULTIVATED TOPSOILS OF THE LOCALITY. SOIL SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH, WITH ADDITIVES, IF REQUIRED, TO ACHIEVE PARTICLE DISTRIBUTION AND ORGANIC CONTENT BELOW. TOPSOIL SHALL BE TAKEN FROM A WELL-DRAINED, ARIABLE SITE, FREE OF SUBSOIL, LARGE STONES, EARTH CLOUDS, STICKS, TRASH, STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEIOUS MATTER OR DEBRIS NOR CONTAIN TOXIC SUBSTANCES.
3. THE CONTRACTOR SHALL PROVIDE THE OWNER / LANDSCAPE ARCHITECT WITH TOPSOIL TEST RESULTS (RECOMMEND UMASS AMHERST SOIL TESTING LAB) FOR APPROVAL PRIOR TO OBTAINING AND PLACING THE SOIL. IF THE PLANTING SOIL (BOTH ONSITE AND OFFSITE SOURCES) DOES NOT FALL WITHIN THE REQUIRED SIEVE ANALYSIS, TEXTURAL CLASS, ORGANIC CONTENT, OR PH RANGE, IT SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS.
4. TOPSOIL SHALL HAVE A PH VALUE BETWEEN 5.5 AND 6.5. TOPSOIL SHALL CONTAIN BETWEEN 4% AND 8% ORGANIC MATTER OF TOTAL DRY WEIGHT AND SHALL CONFORM TO THE FOLLOWING GRADATION AND TEXTURE CLASS ABOVE.

TOPSOIL
NOT TO SCALE

6

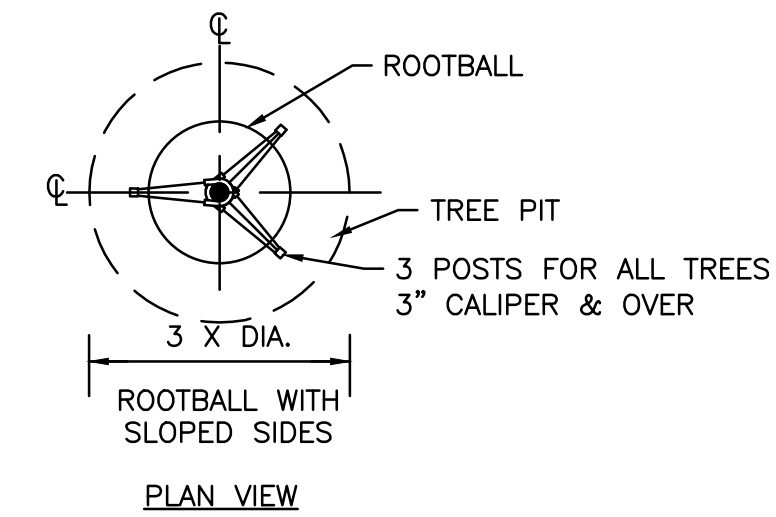


NOTES:

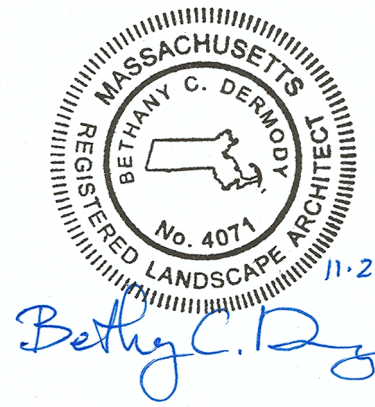
1. TREES SHALL BEAR SAME RELATIONSHIP TO FINISH GRADE AS IT BORE TO NURSERY OR FIELD GRADE. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL TOP OF ROOTBALL AREA.
2. ATTACH GUY WIRES AT 2/3 HEIGHT OF TREE.
3. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% BLENDED AND GROUND COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH OR TOXIC MATERIALS) 20% PEAT MOSS, 10% SAND.
4. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

EVERGREEN TREE
NOT TO SCALE

7



PLAN VIEW



PROFESSIONAL LANDSCAPE ARCHITECT FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT/OWNER:

281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:

MIXED-USE RETAIL AND
RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2389-08 DATE: 2025-11-24

SCALE: AS SHOWN DWG. NAME: L-2398-08

DESIGNED BY: BCD CHECKED BY: CMQ

PREPARED BY:

ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
www.allenmajor.com
100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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DRAWING TITLE: LANDSCAPE NOTES & DETAILS SHEET No. L-501

W:\PROJECTS\2389-08\DWG\DRAWINGS\CONTENT\11-23-25-UG_LANDSCAPE.DWG

N:\PROJECTS\2398-08\CIVIL\DRAWINGS\CURRENT\L-2398-08_LANDSCAPE.DWG

LANDSCAPE NOTES

- ALL WORK SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE TOWN OF READING, MA.
- PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING ALL UTILITY COMPANIES, ANY PERMITTING AGENCIES, AND "DIG-SAFE" (1-888-344-7233) AT LEAST 72 HOURS IN ADVANCE OF ANY WORK THAT WILL REQUIRE EXCAVATION. CONTRACTOR SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS IN WRITING.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- ANY TREES NOTED AS "SEAL OR SELECTED SPECIMEN" SHALL BE TAGGED AND SEALED BY THE LANDSCAPE ARCHITECT.
- ALL TREES SHALL BE BALLED AND BURLAPPED (B&B) UNLESS OTHERWISE NOTED OR APPROVED BY THE OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- CONTRACTOR SHALL VERIFY QUANTITIES SHOWN ON PLANT LIST. QUANTITIES SHOWN ON PLANS SHALL GOVERN OVER PLANT LIST.
- ANY PROPOSED PLANT SUBSTITUTIONS MUST BE APPROVED IN WRITING BY OWNER'S REPRESENTATIVE AND LANDSCAPE ARCHITECT.
- ALL PLANT MATERIALS INSTALLED SHALL MEET THE GUIDELINES ESTABLISHED BY THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY AMERICANHORT (LATEST EDITION).
- ALL PLANT MATERIALS SHALL BE GUARANTEED FOR ONE YEAR FOLLOWING DATE OF ACCEPTANCE. ANY PLANT MATERIALS WHICH DIE WITHIN THE ONE YEAR PLANT GUARANTEE PERIOD WILL BE REPLACED BY THE LANDSCAPE CONTRACTOR. OWNERS TO COORDINATE DIRECTLY WITH THE LANDSCAPE CONTRACTOR FOR REPLACEMENT PLANTINGS.
- ALL DISTURBED AREAS NOT OTHERWISE NOTED SHALL RECEIVE 6" OF SUITABLE LOAM & SEED.
- LAWNS WITH 3:1 OR GREATER SLOPES SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.
- ANY FALL TRANSPLANTING HAZARD PLANTS SHALL BE DUG IN THE SPRING AND STORED FOR FALL PLANTING.
- TREES SHALL HAVE A MINIMUM CALIPER AS INDICATED ON THE PLANTING SCHEDULE TAKEN ONE FOOT ABOVE THE ROOT CROWN.
- ALL PLANT BEDS AND TREE SAUCERS TO RECEIVE 3" OF PINE BARK MULCH. GROUND COVER AREAS SHALL RECEIVE 1" OF PINE BARK MULCH.
- ALL DECIDUOUS TREES ADJACENT TO WALKWAYS AND ROADWAYS SHALL HAVE A BRANCHING PATTERN TO ALLOW FOR A MINIMUM OF 7' OF CLEARANCE BETWEEN THE GROUND AND THE LOWEST BRANCH.
- ALL TREE STAKES SHALL BE STAINED DARK BROWN.
- CONTRACTOR RESPONSIBLE FOR WATERING AND RESEEDING OF BARE SPOTS UNTIL A UNIFORM STAND OF VEGETATION IS ESTABLISHED AND ACCEPTED.
- ALL PARKING ISLANDS PLANTED WITH SHRUBS SHALL HAVE 24" OF TOP SOIL. FINISH GRADE SHALL BE SLOPED TO SIX INCHES (6") ABOVE THE TOP OF CURB.
- SOIL SAMPLES, TESTS, AND SHOP DRAWINGS SHALL BE PROVIDED TO THE LANDSCAPE ARCHITECT OR THE OWNER FOR APPROVAL PRIOR TO CONSTRUCTION.
- MULCH SHALL NOT BE NEWLY APPLIED WITHIN 18" OF ANY COMBUSTIBLE PORTION OF ANY BUILDING PER THE LATEST BOARD OF FIRE PREVENTION REGULATIONS (527 CMR 17.05).
- SLOPES AT 2:1 SHOULD HAVE 6" LOAM & SEED. SEEDING OF 2:1 SLOPES SHALL OCCUR IN THE DRY & AFTER SLOPES ARE COMPACTED.
- ALL LANDSCAPED AREAS WITH SHRUBS, TREES, AND PERENNIALS TO HAVE 2 FEET MINIMUM DEPTH OF TOPSOIL. TWO FEET OF TOPSOIL AROUND TREES AND SHRUBS DOES NOT INCLUDE AMENDED PLANTING SOIL WITHIN TREE / SHRUB PIT FOR FULL DEPTH OF ROOTBALLS. SEE PLANTING DETAILS FOR PLANTING DEPTH AT SHRUBS AND TREES. ALL AREAS OF LOAM AND SEED TO HAVE 6" MINIMUM DEPTH OF TOPSOIL. TOPSOIL TO BE TESTED BY CONTRACTOR, AND APPROVED BY A&M PRIOR TO PURCHASE AND OR PLACEMENT. GENERAL, DEMOLITION, AND LANDSCAPE CONTRACTORS TO COORDINATE PROPER DEPTH OF EXISTING MATERIAL REMOVAL ACROSS SITE SO THAT 2 FEET MINIMUM AND 6" MINIMUM DEPTHS OF PROPOSED TOPSOIL NOTED ABOVE ARE MET. SEE TOPSOIL DETAIL.
- PRIOR TO LAYING TOPSOIL, ALL SUBSOIL (BELOW PROPOSED TOPSOIL) TO BE TILLED TO A DEPTH OF AT LEAST 18" TO REMOVE CONSTRUCTION COMPACTION AND ALLOW FOR PROPER DRAINAGE OF TOPSOILS.
- ALL SEEDING TO BE COMPLETED "IN SEASON" BETWEEN APRIL 1 TO JUNE 15 OR AUGUST 15 TO OCTOBER 1, EXCEPT FOR RE-SEEDING OF BARE SPOTS. AT ALL SLOPED AREAS CONTRACTOR TO INSTALL COCONUT FIBER JUTE MESH NETTING ON ALL SLOPES 3:1 AND GREATER, HYDROSEED ALL EXPOSED AREAS, ADD SOIL STABILIZER "FLEXITERRA HP-FGM" AS MANUFACTURED BY "PROFILE" TO HYDROSEED (AT RATE OF 3,000 LBS PER ACRE). CONTRACTOR TO ALSO BE RESPONSIBLE FOR RE-GRADING AND RE-SEEDING ALL DISTURBED, ERODED, OR BARE SPOTS & UNTIL SLOPES ARE FULLY STABLE. CONTRACTOR RESPONSIBLE FOR ALL MAINTENANCE UNTIL FINAL ACCEPTANCE OF LAWN AREAS INCLUDING: WATERING, ADDING FERTILIZERS AND LIME AND MOWING.
- AFTER SEEDING, ALL AREAS TO BE LIGHTLY MULCHED WITH WEED FREE STRAW & CONTINUALLY WATERED EVERY DAY SO THAT SEED IS KEPT MOIST UNTIL SEED IS ESTABLISHED & APPROVED BY A&M LANDSCAPE ARCHITECT (USE NO HAY).
- IF THERE IS NO PROPOSED IRRIGATION SYSTEM AFTER PLANTINGS & LAWNS & SEEDED AREAS HAVE BEEN INSTALLED, LANDSCAPE CONTRACTOR RESPONSIBLE TO TEMPORARILY WATER ALL INSTALLED PLANTINGS, SEEDED AREAS, & LAWN AREAS MIN 2 TIMES A WEEK DURING INITIAL ESTABLISHMENT PERIOD OF 6 MONTHS AFTER ALL LANDSCAPING IS INSTALLED.
- AFTER PROVISIONAL ACCEPTANCE THE CONTRACTOR WILL WATER THE PLANTINGS AT A MINIMUM ONCE PER WEEK DURING THE MONTHS OF JUNE 30TH TO SEPTEMBER 1ST. PLANTINGS WILL BE WATERED ON A BIWEEKLY SCHEDULE FOR THE TIME PERIOD MARCH 1ST TO JUNE 30TH AND SEPTEMBER 1ST TO THE FIRST FROST, REGARDLESS OF PLANTING DATE. IN LIEU OF WATERING ON A WEEKLY/BI-WEEKLY SCHEDULE THE CONTRACTOR CAN USE A GATOR BAG. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REFILL THE GATOR BAG AS NECESSARY. THE GATOR BAG WILL BE REMOVED BY THE CONTRACTOR AT THE TIME OF THE FIRST FORECASTED FROST.
- PLANTINGS HAVE BEEN SELECTED ASSUMING IRRIGATION. IF IRRIGATION IS NOT PROVIDED, PLANT SPECIES, QUANTITY OR SIZE SUBSTITUTIONS MAY BE REQUIRED FOR INCREASED DROUGHT TOLERANT SPECIES AND SHOULD BE REVIEWED WITH THE LANDSCAPE ARCHITECT.
- ALL PROPOSED LANDSCAPE AREAS INCLUDING MOWED LAWNS, TREES, SHRUB BEDS, AND PERENNIALS SHALL BE PROVIDED WITH WATER EFFICIENT UNDERGROUND IRRIGATION. DESIGN AND INSTALLATION OF IRRIGATION SYSTEM TO BE PERFORMED BY AN APPROVED IRRIGATION DESIGN BUILD CONTRACTOR OR BY AN APPROVED EQUAL TO BE DETERMINED BY THE OWNERS REPRESENTATIVE AND LANDSCAPE ARCHITECT. IRRIGATION SYSTEM IS TO BE DESIGNED FOR EFFICIENT WATER USAGE INCLUDING: USE OF DRIP IRRIGATION FOR SHRUBS AND PERENNIALS; IRRIGATION SYSTEM WITH HEAD-TO-HEAD COVERAGE, A CENTRAL SHUT-OFF VALVE, SEPARATE ZONES FOR EACH TYPE OF BEDDING AREA BASED ON WATERING NEEDS, AND A RAIN SENSOR TO SHUT OFF IRRIGATION DURING RAIN EVENTS.

LANDSCAPE NOTES
NOT TO SCALE

2

LANDSCAPE MANAGEMENT NOTES:

LANDSCAPE MANAGEMENT PLAN
IT SHOULD BE RECOGNIZED THAT THIS IS A GENERAL GUIDELINE TOWARDS ACHIEVING HIGH QUALITY AND WELL GROOMED LANDSCAPED AREAS. THE GROUNDS STAFF / LANDSCAPE CONTRACTOR MUST RECOGNIZE THE SHORTCOMINGS OF A GENERAL MAINTENANCE PROGRAM SUCH AS THIS, AND MODIFY AND/OR AUGMENT IT BASED ON WEEKLY, MONTHLY, AND YEARLY OBSERVATIONS. IN ORDER TO ASSURE THE HIGHEST QUALITY CONDITIONS, THE STAFF MUST ALSO RECOGNIZE AND APPRECIATE THE NEED TO BE AWARE OF THE CONSTANTLY CHANGING CONDITIONS OF THE LANDSCAPING AND BE ABLE TO RESPOND TO THEM ON A PROACTIVE BASIS.

FERTILIZER

- MAINTENANCE PRACTICES SHOULD BE AIMED AT REDUCING ENVIRONMENTAL, MECHANICAL AND PEST STRESSES TO PROMOTE HEALTHY AND VIGOROUS GROWTH. WHEN NECESSARY, PEST OUTBREAKS SHOULD BE TREATED WITH THE MOST SENSITIVE CONTROL MEASURE AVAILABLE. SYNTHETIC CHEMICAL CONTROLS SHOULD BE USED ONLY AS A LAST RESORT TO ORGANIC AND BIOLOGICAL CONTROL METHODS. FERTILIZER, SYNTHETIC CHEMICAL CONTROLS AND PEST MANAGEMENT APPLICATIONS (WHEN NECESSARY) SHOULD BE PERFORMED ONLY BY LICENSED APPLICATORS IN ACCORDANCE WITH THE MANUFACTURER'S LABEL INSTRUCTIONS WHEN ENVIRONMENTAL CONDITIONS ARE CONDUCIVE TO CONTROLLED PRODUCT APPLICATION.
- ONLY SLOW-RELEASE ORGANIC FERTILIZERS SHOULD BE USED IN THE LANDSCAPED AREAS TO LIMIT THE AMOUNT OF NUTRIENTS THAT COULD ENTER DOWNSTREAM RESOURCE AREAS. FERTILIZATION OF DEVELOPED AREAS ON SITE WILL BE PERFORMED WITHIN MANUFACTURERS LABELING INSTRUCTIONS AND SHALL NOT EXCEED AN NPK RATIO OF 1:1:1 (I.E. TRIPLE 10 FERTILIZER MIX), CONSIDERED A LOW NITROGEN MIXTURE. ADDITIONALLY, THE FERTILIZER WILL INCLUDE A SLOW RELEASE ELEMENT.

LANDSCAPE MAINTENANCE PROGRAM PRACTICES:

SHRUBS

- MULCH NOT MORE THAN 3" DEPTH WITH SHREDDED PINE OR FIR BARK.
- HAND PRUNE ANNUALLY, IMMEDIATELY AFTER BLOOMING, TO REMOVE 1/3 OF THE ABOVE-GROUND BIOMASS (OLDER STEMS). STEM REMOVALS TO OCCUR WITHIN 6" OF THE GROUND TO OPEN UP SHRUB AND MAINTAIN TWO-YEAR WOOD (THE BLOOMING WOOD).
- FERTILIZE WITH 1/2 LB. SLOW-RELEASE FERTILIZER (SEE ABOVE SECTION ON FERTILIZER) EVERY SECOND YEAR.
- HAND PRUNE EVERGREEN SHRUBS ONLY AS NEEDED TO REMOVE DEAD AND DAMAGED WOOD AND TO MAINTAIN THE NATURALISTIC FORM OF THE SHRUB. NEVER MECHANICALLY SHEAR EVERGREEN SHRUBS.

TREES

- PROVIDE AFTERCARE FOR NEW TREE PLANTINGS FOR THE FIRST THREE YEARS.
- DO NOT FERTILIZE TREES, IT ARTIFICIALLY STIMULATES THEM (UNLESS TREE HEALTH WARRANTS).
- WATER ONCE A WEEK FOR THE FIRST YEAR; TWICE A MONTH THE SECOND, ONCE A MONTH THE THIRD YEAR.
- PRUNE TREES ON A FOUR-YEAR CYCLE.

ORNAMENTAL GRASSES/PERENNIALS

- APPLY LOW- NITROGEN 10-10-10 FERTILIZER AS GROWTH RESUMES IN THE SPRING.
- WATER THOROUGHLY.
- GRASSES/PERENNIALS DO NOT NEED TO BE CUT DOWN BEFORE WINTER. IN FACT, THEY ARE ATTRACTIVE WHEN LEFT STANDING AND THE FOLIAGE HELPS TO INSULATE THE CROWN OF THE PLANT.
- CUT BACK THE FOLIAGE TO ABOUT 4-6 INCHES IN THE SPRING BEFORE GROWTH RESUMES. WHEN FOLIAGE IS REMOVED, SPRING GROWTH WILL BEGIN EARLIER. OLD FOLIAGE LEFT ON THE PLANT CAN DELAY THE CROWN'S WARMING AND SUBSEQUENT GROWTH BY AS MUCH AS 3 WEEKS.

WATERING

- WATERING TREES, SHRUBS AND PERENNIALS SHOULD BE DONE WEEKLY UPON ESTABLISHMENT FOR 6 MONTHS.

LANDSCAPE MAINTENANCE NOTES
NOT TO SCALE

3

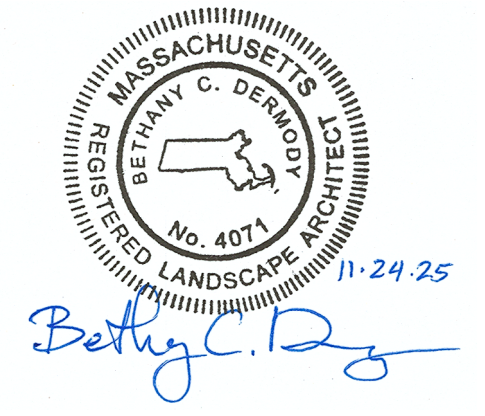
PLANTING SCHEDULE - TREES, SHRUBS, PERENNIALS, & GRASSES

KEY	QTY	BOTANICAL NAME	COMMON NAME	SIZE	SPACING	COMMENTS
DECIDUOUS SHADE AND FLOWERING TREES						
* ARK	4	ACER RUBRUM 'KARPICK'	KARPICK RED MAPLE	3" CAL.	AS SHOWN	B&B
* GT	4	GLEDTISIA TRIACANTHOS F. INERMIS 'SHADEMASTER'	SHADEMASTER HONEY LOCUST	3" CAL.	AS SHOWN	B&B
* LS	3	LIQUIDAMBAR STRACIFLUA 'SLENDER SILHOUETTE'	'SLENDER SILHOUETTE' SWEETGUM	3" CAL.	AS SHOWN	B&B
EVERGREEN TREES						
* TOD	5	THUJA OCCIDENTALIS 'DEGROOT'S SPIRE'	DEGROOT'S SPIRE ARBORVITAE	7-8' HT.	4' O.C.	B&B
SHRUBS						
* NJ	10	CEANOTHUS AMERICANUS	NEW JERSEY TEA	#3	36" O.C.	POT
* HY	6	HYDRANGEA PANICULATA 'LITTLE LIME'	LITTLE LIME PANICLE HYDRANGEA	#5	5' O.C.	POT
* IC	13	ILEX CRENATA 'SKY PENCIL'	SKY PENCIL HOLLY	#15	24" O.C.	POT
* IG	24	ILEX GLABRA 'SHAMROCK'	SHAMROCK INKBERRY	#7	36" O.C.	POT
* RA	10	RHUS AROMATICA 'GRO LOW'	SUMAC	#3	6' O.C.	POT
PERENNIALS/GRASSES						
CK	42	CALAMAGROSTIS 'KARL FOERSTER'	KARL FOERSTER FEATHER REED GRASS	#2	24" O.C.	STAGGERED
MS	13	MISCANTHUS SINESIS 'MORNING LIGHT'	SILVER VARIEGATED MAIDEN GRASS	#2	48" O.C.	STAGGERED
NF	14	NEPETA X FAASSENII 'WALKER'S LOW'	WALKER'S LOW CATMINT	#2	30" O.C.	STAGGERED
* RF	45	RUDBECKIA FULGIDA	BLACK EYED SUSAN	#1	30" O.C.	STAGGERED
ANNUALS						
	XX SF	ASSUMING A SPRING PLANTING, UTILIZE "PROVEN WINNERS" ANNUALS - "CALYPSO MIX" OR EQUAL #1 POTS, PETUNIA - (SUPERTUNIA@ROYAL MAGENTA & SUPERTUNIA@MINI VISTA WHITE), & VERBENA - (SUPERBENA@COBALT) (FOR PLANTERS OR VOIDS IN BEDS BY OWNER)				
* DENOTES NATIVE SPECIES OR NATIVE CULTIVAR						

TOTAL TREES PLANTED= 11 DECIDUOUS TREES
TOTAL TREES REMOVED= 2

PLANT SCHEDULE
NOT TO SCALE

1



PROFESSIONAL LANDSCAPE ARCHITECT FOR ALLEN & MAJOR ASSOCIATES, INC.

APPLICANT/OWNER:
281 READING, LLC
281 MAIN STREET
READING, MA 01867

PROJECT:
MIXED-USE RETAIL AND RESIDENTIAL DEVELOPMENT
281 MAIN STREET
READING, MA

PROJECT NO. 2398-08 DATE: 2025-11-24
SCALE: AS SHOWN DWG. NAME: L-2398-08
DESIGNED BY: BCD CHECKED BY: CMQ



ALLEN & MAJOR ASSOCIATES, INC.
civil engineering • land surveying
environmental consulting • landscape architecture
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100 COMMERCE WAY, SUITE 5
WOBURN MA 01801
TEL: (781) 935-6889
FAX: (781) 935-2896
WOBURN, MA • LAKEVILLE, MA • MANCHESTER, NH

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