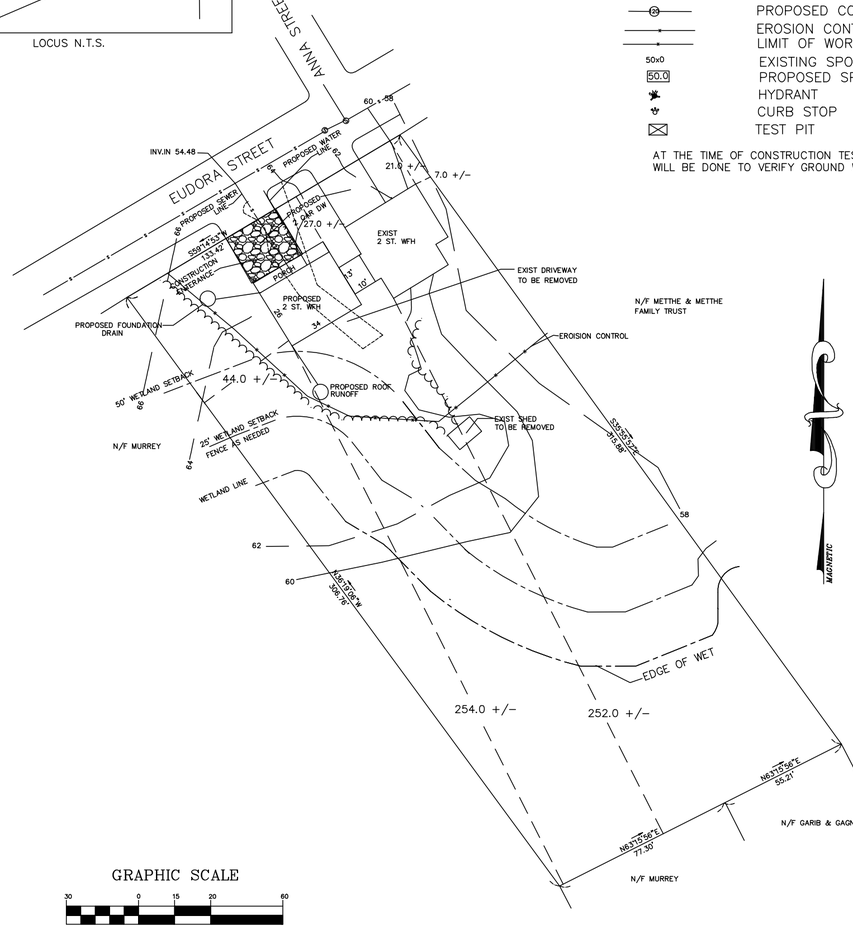


LOCUS N.T.S.

LEGEND:

	UTILITY POLE
	STONE BOUND
	IRON PIN OR PIPE
□ C.B.	CATCH BASIN
Ⓢ SMH	SEWER MANHOLE
BIT. CONC.	
N.T.S	NOT TO SCALE
W	WATER LINE
S	SEWER LINE
D	DRAIN LINE
	EXISTING CONTOUR
20	PROPOSED CONTOUR
	EROSION CONTROL
	LIMIT OF WORK
50x0	EXISTING SPOT EL.
50.0	PROPOSED SPOT EL.
	HYDRANT
	CURB STOP
	TEST PIT

AT THE TIME OF CONSTRUCTION TEST PIT WILL BE DONE TO VERIFY GROUND WATER

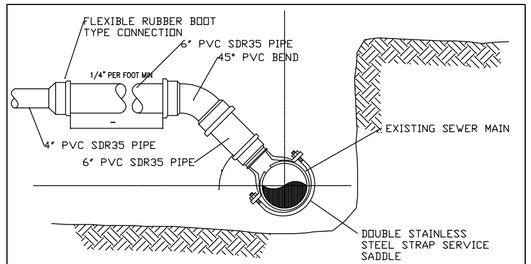


GRAPHIC SCALE

30 0 15 20 60

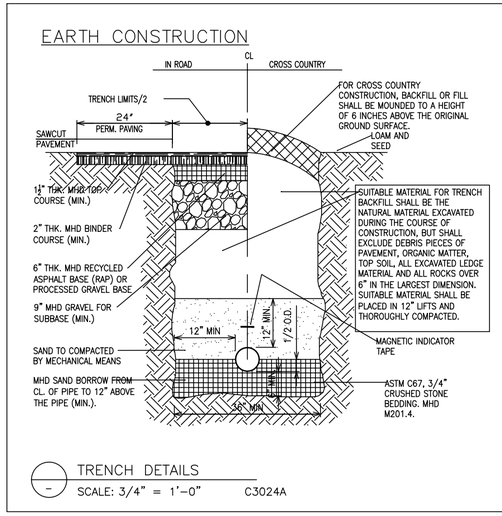
(IN FEET)

1 inch = 30 ft.



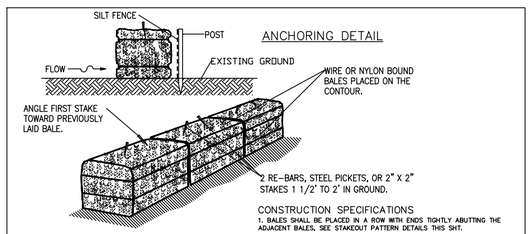
TYPICAL SADDLE TYPE CONNECTION

SCALE: NONE



TRENCH DETAILS

SCALE: 3/4" = 1'-0" C3024A



CONTRACTORS OPTION

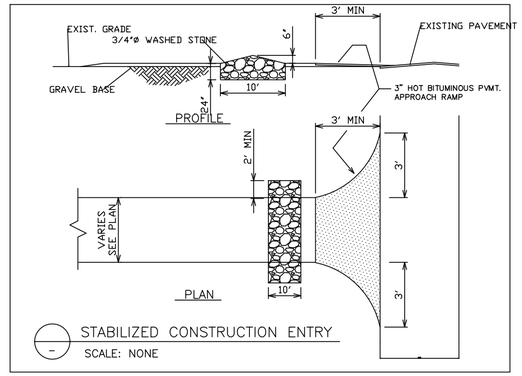
USE 1' DIAM. "SILT SOCK" OR EQUAL

CONSTRUCTION SPECIFICATIONS

1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES, SEE STAKEOUT PATTERN DETAILS THIS SHT.
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4".
3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR RE-BARS DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVOUSLY LAID BALE TO FORCE BALES TOGETHER.
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

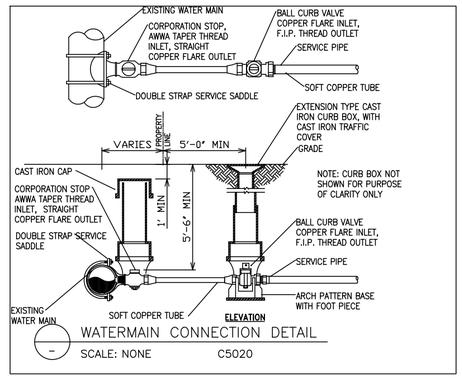
HAYBALE BARRIER

SCALE: NONE C1006



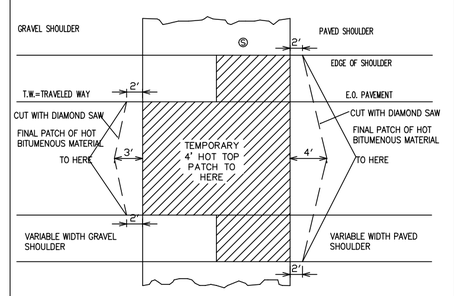
STABILIZED CONSTRUCTION ENTRY

SCALE: NONE



WATERMAIN CONNECTION DETAIL

SCALE: NONE C5020



PERMANENT PAVEMENT REPAIR

SCALE: NONE

PROPOSED SITE PLAN OF PROPERTY AT 59 EUDORA STREET HAVERHILL, MA 01830 OCTOBER 15, 2026

OWNER/APPLICANT:

STEPHEN DEFEO
71 HIGH STREET
NEWBURYPORT, MA 01950

ASSESSORS PLAN		528
BLOCK		17
LOT		11
AREA	41,513	S.F.
DEED BOOK	21931 **PAGE**	252
ZONE		RH

GENERAL NOTES:

1. Boundary information based upon deeds, abutting surveys and monumentation found on the ground. Topographic and additional information was compiled from onsite survey performed by RAM Engineering, Haverhill, MA.

2. The Contractor shall be responsible for verify and determining the location, size and elevation of all existing utilities, shown or not shown on these plans prior to the start of any construction. The engineer shall be notified in writing of any utilities found interfering with the proposed construction and appropriate remedial action shall be agreed to by the Engineer before proceeding with the work. The Contractor shall be responsible to contact "DIGSAFE" (888) 344-7233 at least 72 hours before digging.

3. The contractor shall contact all utility companies owning utilities, either overhead or underground, within the construction area and shall coordinate with the utility companies. The protection or relocation of utilities is the responsibility of the contractor.

4. The contractor is responsible for the means and methods of construction and for conditions of the site. These plans prepared by RAM Engineering, do not extend to or include systems pertaining to the safety of the Construction Contractor or the Employees, Agents of Representatives in performance of the work. The seal of the architect or engineer hereon does not extend to any such safety systems that may now or hereafter be incorporated into these plans. The Construction Contractor shall prepare of obtain the appropriate safety systems that may be required by the US Occupational Safety and Heath Administration (OSHA) and/of local regulations.

5. This project is to be constructed to the typical sections and details shown on the plans, and shall meet the standards of the City of Haverhill and the requirements of the latest Massachusetts Standard Specification for Highway and Bridges unless otherwise noted.

6. The Contractor is responsible of all permits, fees, temporary utilities and coordination with all agencies in obtaining access to the site and performing all work required for this project.

7. All disturbed areas not otherwise shown to be treated shall be loamed and seeded to a depth of six inches.

8. The contractor shall coordinate any necessary frontage tree removal with the City of Haverhill Highway Department and Tree Warden prior to driveway and utility service construction.

9. Contractor shall protect and maintain existing benchmarks and bounds. All benchmarks and bounds disturbed by the Contractor shall be re-established by a Massachusetts registered land surveyor at no expense to the Owner.

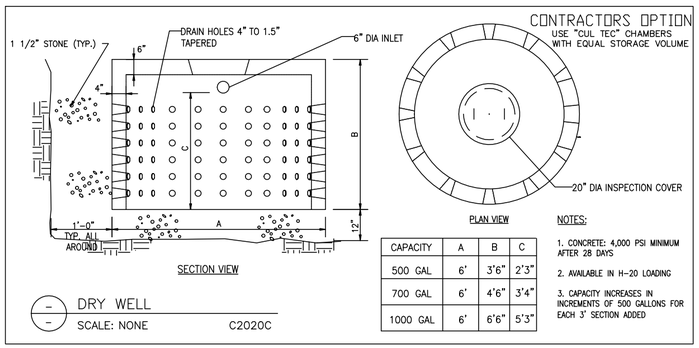
10. Water mains shall have a minimum of 5.5 feet cover. Where water mains cross sewer lines a minimum of 18" vertical separation between the outside pipe walls shall be observed. Horizontal separation between water and sewer lines shall be 10 feet minimum.

11. All proposed grades shall be less than 2 to 1.

12. Vertical datum based upon NVD 88.

13. Disturbed sidewalks shall be replaced in kind.

14. The iron pipes found on lots 14 and 15 shown on plan 806 1960 and plan 355 34, ECSRD, were used to determine lot lines on eudora street.



SECTION VIEW

CONTRACTORS OPTION

USE "CUL TEC" CHAMBERS WITH EQUAL STORAGE VOLUME

PLAN VIEW

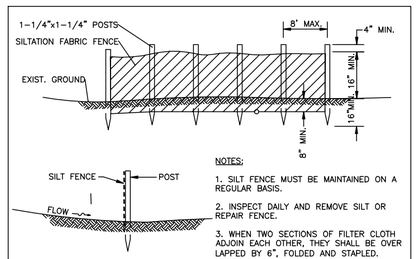
CAPACITY	A	B	C
500 GAL	6'	3'6"	2'3"
700 GAL	6'	4'6"	3'4"
1000 GAL	6'	6'6"	5'3"

NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS
2. AVAILABLE IN H-20 LOADING
3. CAPACITY INCREASES IN INCREMENTS OF 500 GALLONS FOR EACH 3' SECTION ADDED

DRY WELL

SCALE: NONE C2020C

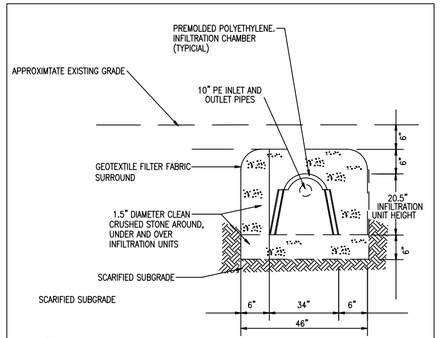


NOTES:

1. SILT FENCE MUST BE MAINTAINED ON A REGULAR BASIS.
2. INSPECT DAILY AND REMOVE SILT OR REPAIR FENCE.
3. WHEN TWO SECTIONS OF FILTER CLOTH ADJOIN EACH OTHER, THEY SHALL BE OVER LAPPED BY 6", FOLDED AND STAPLED.
4. REMOVE FENCE WHEN VEGETATION HAS ESTABLISHED ITSELF.

TYPICAL SILT FENCE DETAIL

SCALE: NONE C1008



INFILTRATION CHAMBER SYSTEM, SECTION

SCALE: NONE RECHARGER 180 OR EQUAL

ROOF RUNOFF CALCULATIONS

ROOF AREA = 1,392 S.F.
1,392 X 1/2" RAIN = 58 0 C.F.
58.0 C.F. X 7.48 GAL/C.F. = 433.8 GAL.
USE 500 GAL. DRYWELL OR APPROVED EQUAL
10' CHAMBER = 21.8 CU.FT.
58.0 CU.FT./21.8 CU.FT. = 2.69 CHAMBER
USE 3 CHAMBERS

SEWAGE LOADING

3 BR. @110 GPD. = 330 GPD.

ROBERT A. MASYS, PE

TYPICAL SECTIONS OF SURFACE TREATMENTS

SECTION REFERENCE	DESCRIPTION	SECTION
1 / 1	NEW BITUMINOUS PAVEMENT	3 1/2" BIT. CONC. PAVEMENT; 1-1/2" MHD WEARING COURSE; 2" MHD BINDER COURSE; 6" GRAVEL BASE; 9" PROCESSED GRAVEL SUBBASE; COMPACTED SUBGRADE
2 / 1	LOAMING AND SEEDING	6" PREPARED LOAM WITH SEED; COMPACTED SUBGRADE

R.A.M. ENGINEERING
160 Main Street
Haverhill, Massachusetts 01830
TEL: (978) 372-0449 FAX: (978) 372-7183