# TOWN OF HARVARD PLANNING BOARD AGENDA

#### MONDAY, AUGUST 7, 2023 @ 7:00PM

Pursuant to Chapter 2 of the Acts of 2023, An Act Making Appropriations for the Fiscal Year 2023 to Provide for Supplementing Certain Existing Appropriations and for Certain Other Activities and Projects, and signed into law on March 29, 2023, this meeting will be conducted via remote participation. Interested individuals can listen in and participate by phone and/or online by following the link and phone number below.

Hildreth Pro is inviting you to a scheduled Zoom meeting.

**Topic: Planning Board** 

Time: Aug 7, 2023 07:00 PM Eastern Time (US and Canada)

#### **Join Zoom Meeting**

https://us02web.zoom.us/j/84847974596?pwd=QzRncTNZd2hpV3JVaVZsTmN3Nkhqdz09

Meeting ID: 848 4797 4596

Passcode: 584626--One tap mobile

+16469313860,,84847974596# US

+19294362866,,84847974596# US (New York)---

#### Dial by your location

- +1 646 931 3860 US
- +1 929 436 2866 US (New York)
- +1 301 715 8592 US (Washington DC)
- +1 305 224 1968 US

Meeting ID: 848 4797 4596

Find your local number: <a href="https://us02web.zoom.us/u/kRKUVITcP">https://us02web.zoom.us/u/kRKUVITcP</a>

**Public Comment** 

Old Business: a) Prospective MBTA Multi-family zoned overlay district (potential update) & Draft letter review

b) Comments on potential 40-B development at Old Mill & Ayer roads & dates to convene Design Review Board.

c) Letter sent from Planning Board to Chestnut Tree & Landscape for expired business permit.

d) Updates on Ayer Road visioning phases 2 & 3.

New Business: a) Erosion Control Major Permit (§125-58) & Site Plan Approval (§125-38C) – Michael Dempsey,

at 24 Bolton Road, for single family residence.

b) Erosion Control Major Permit (§125-58) & Site Plan Approval (§125-38C) - R.D. Kanniard

Homes, Inc., at 236 Bolton Road (Lot 1), for single family residence.

c) Master Planning for 2026

d) Town Center Mixed Use District

e) Potential updates to (§133-22)

#### **Public Hearings:**

7:30pm

Continuation of Public Hearing: Open Space Residential Development Bylaw Amendment (§125-35) for adoption.

**Standard Business:** a) Review Metrics

- b) Board Member Reports
  - Representatives & Liaisons Update
  - Community Matters
- c) TIP status update
- d) Planning Board budget update
- e) Approve Minutes
- f) Approve Invoice: Calander purchase (Amazon \$17.97)

The listing of matters are those reasonably anticipated by the chair which may be discussed at the meeting. Not all items listed may in fact be discussed and other items not listed may also be brought up for discussion to the extent permitted by law.

NEXT SCHEDULED MEETINGS: MONDAY, AUGUST 21, 2023 RMM

#### OFFICE OF THE

# **PLANNING BOARD**

13 AYER ROAD HARVARD, MA 01451 PHONE: 978-456-4100 FAX: 978-456-4119



Mr. Grant MacLean, Owner 31 JULY 2023 Chestnut Tree & Landscape, LLC 320 Ayer Road Harvard, MA 01451

RE: Protective Bylaw Violations at 320 Ayer Road

Mr. MacLean,

The Harvard Planning Board is aware of ongoing violations of the Town of Harvard Bylaw as it pertains to the provision of B at 320 Ayer Road by your business, Chestnut Tree & Landscape.

Specifically, the Special Permit issued on 17 August 2020 to Chestnut Tree & Landscape *expired* on 17 August 2022. As a result, your business has been in violation of the bylaw since that date. In addition, there is evidence of a second business operating out of the same location that is not properly permitted.

Further, Chestnut Tree & Landscape has been cited by the Harvard Conservation Commission for violating §125-20A, where no use is permitted which is injurious, offensive, or otherwise detrimental to the neighborhood, the community, or the natural environment, including the groundwater supply, a groundwater absorption area, or other wetland resources.

A special condition was applied as recommended by the Conservation Commission to no activity shall occur within 200' of the pond or 100' of the bordering vegetated wetland (BVW) without the proper permit of the Conservation Commission. This has not been honored.

While we are aware that you have retained the professional services of Goldsmith, Prest & Ringwall, you must be prepared to address the concerns listed above at the Planning Board meeting to be held Monday, 11<sup>th</sup> of September 2023 at 7pm. You are expected to provide detailed information as to how you plan to obtain the required Special Permit needed to legally operate your business. The Planning Board may enforce these provisions of the Protective Bylaw with fines until you are in full compliance or face daily fines. To be clear, §125-49A states: each day any violation continues is a separate offense. Violators shall be subject to a fine not exceeding \$100 for each offense.

You may contact us through the Director of Planning, Mr. Frank O'Connor, Jr., to submit the required documentation and plans.

For the Board,

Richard Cabelus, Chair

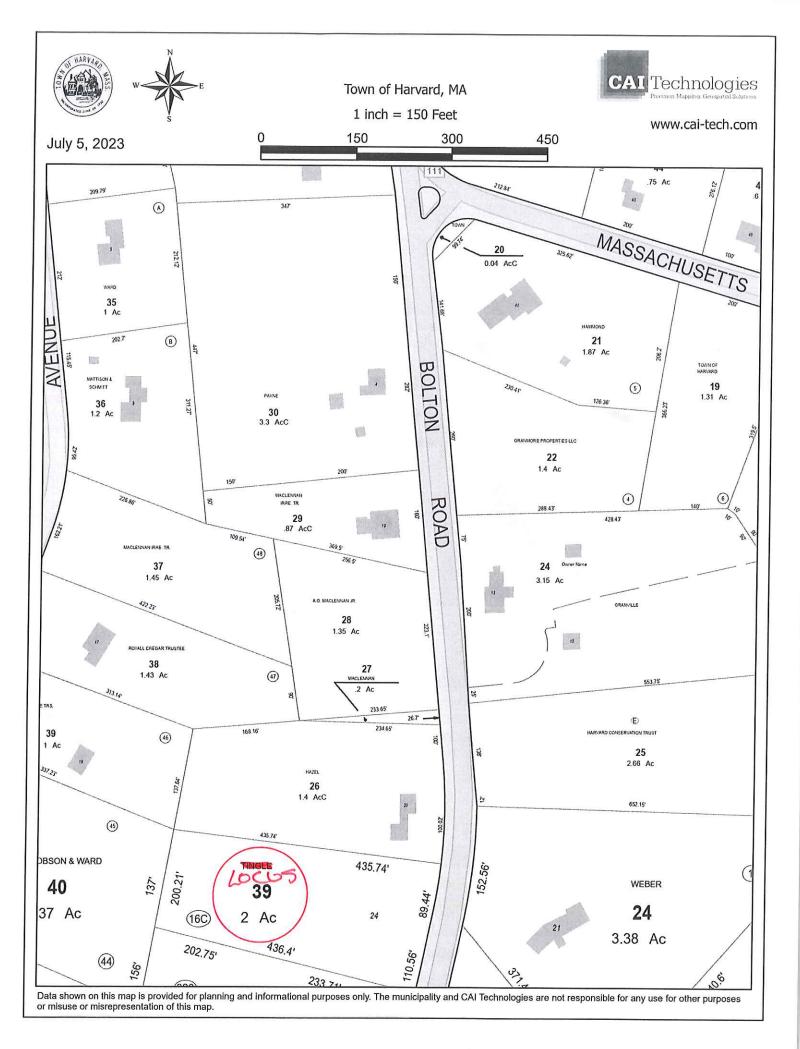
#### **EROSION CONTROL APPLICATION**

Applicants should review the Harvard Protective (Zoning) Bylaw, Chapter 125-58 of the Code of the Town of Harvard, the Planning Board's Rules and Regulations, Chapter 133 of the Code of the Town of Harvard. Copies of the Bylaw may be purchased from the Town Clerk and copies of the Rules and Regulations may be purchased from the Land Use Office. Information is also available online at www.harvard-ma.gov. The Rules and Regulations specify the documents that are required as a part of the application.

Applicant's Name: MICHAEL DEMISSY & JULE (ASAIVAUE	
Address: 40 RICHARDSON RD Phone: 0864 Email: DEMPSEYE MITT, E.	DI
Box Bor Court, MA 91719 Applicant is (check one): Owner Agent Prospective Buyer	
Location of Property: LOT 16C, 24 BOLTON RD Zoning District: RA	
Harvard Assessors' Map 27 Parcel 39	
Owner's Name: SAME AS ABOVE Email:	
Owner's Address:Owner's Phone:	
Signed: Kennike Tlook	_
APPLICATION CHECK LIST	
Minor Permit  ☐ Sketch plan showing limits, scope of work and proposed Best Management Practices (BMPs)	
☐ Project narrative that includes a description of the proposed project and a description of how and where stormwater will be controlled and erosion and sediment controls to be used	ž
☐ \$25.00 filing fee	
Major Permit  Applicants shall file one (1) original completed application packet and seven (7) copies	
Project narrative that includes a description of the proposed project and a description of how and where stormwater will be controlled and erosion and sediment controls to be used, plus a description of any specimen trees within the project area.	; ;
Engineered plan set, signed and stamped by a professional engineer or a professional land surveyor registered in the Commonwealth of Massachusetts, and drawn at a legible scale and including:	

- Existing and proposed conditions plans, which shall identify significant natural features and native trees greater than a diameter of (6) inches within the project area.
- Erosion control plan, which shall include the following related specifically to the disturbance area:
  - > Location of all structural and non-structural erosion and sediment control measures and BMPs;
  - Locations where stabilization practices are expected to occur;
  - Locations for storage of materials, waste, vehicles, equipment, soil, snow, and other potential contaminants;
  - > Operations and Maintenance Plan for BMP's including inspections and maintenance activities as noted in §133-41 below;
  - Areas where previous stabilization has been accomplished and no further construction-phase permit requirements apply; and
  - > Any other information deemed necessary by the Planning Board.

\$200.00 filing fee



#### Project Narrative

1

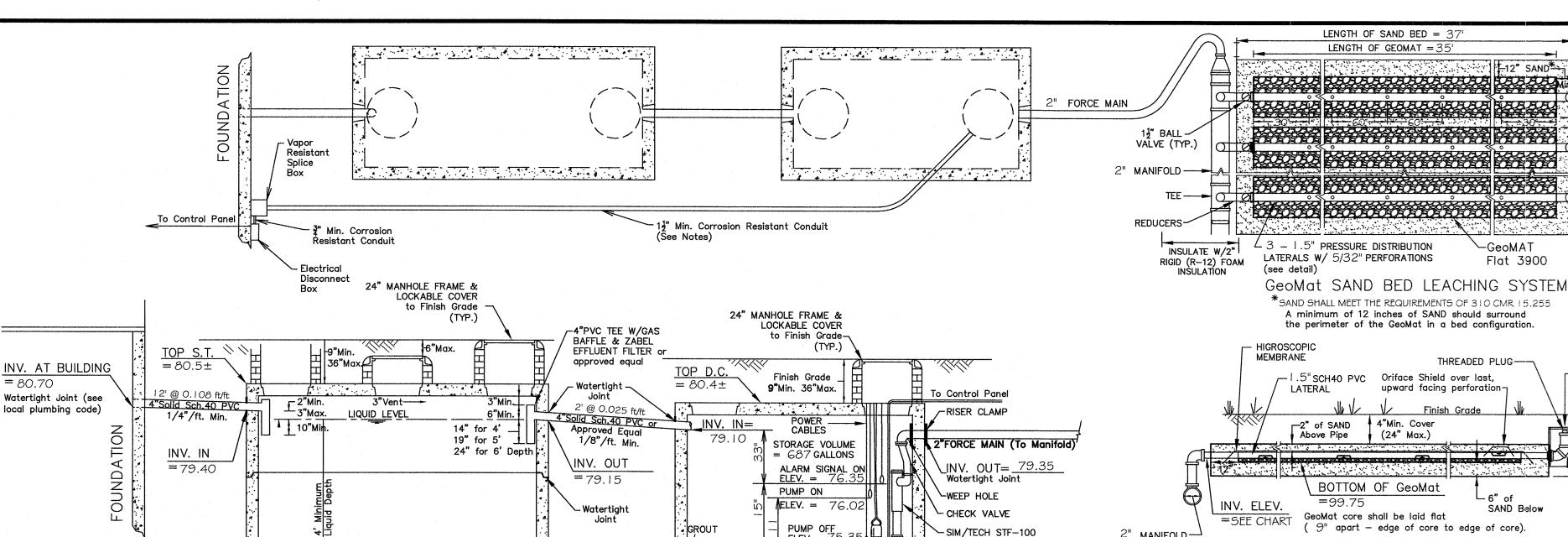
Prepared for Michael Dempsey & Julie Casanave 24 Bolton Road, Harvard Project No. 34047

On behalf of our clients, Mr. Michael Dempsey & Ms. Julie Casanave, we are hereby submitting the following narrative to outline the proposed activities and procedures that are proposed for the property at 24 Bolton Road in Harvard. This information is presented in relation to Section 125-58 (Erosion Control) of the Harvard Protective Bylaw.

The subject property is a 2.01-acre residential property on the west side of Bolton Road, five lots south of the intersection at Mass Ave. (Rt. 111). The property is currently vacant and a 4-bedroom, single-family home is proposed to be constructed. Clearing activities for the site have been previously performed, prior to the enactment of the Erosion Control bylaw. Details of the proposed house, driveway, and septic system layout are shown on the accompanying Site Plan.

As detailed on the site plan, clean fill will be imported to the site for the proper construction of the septic system and for adequate grading around the proposed house and yard features. The grades shown on the plan define two distinct grassed swales that will be formed to capture any overland flow from around the front and sides of the house and to direct these flows to the expansive backyard. The swales will broaden out on the downhill side to facilitate stormwater spreading out into sheet flow that will naturally infiltrate back into the soils further down slope. Due to previous clearing, no significant additional clearing is anticipated. There are no wetland resource areas located on the site nor within 100-feet of any proposed activities and therefore no applications are being made with the Harvard Conservation Commission.

In an effort to control any erosion or sedimentation, the downhill slopes of any disturbed areas will be supplemented by an erosion control barrier, as shown on the site plan, and will be of the type commonly requested by the Harvard Conservation Commission (see detail). These barriers will be placed prior to any continued construction and will remain in place until the disturbed areas are fully restored and stabilized with loam and seeding.



OBSERVATION TEST HOLE DATA BY DAN WOLFE, DER WITNESSED BY IRA GROSSMAN, NABOH 12/20/94

1294-1: ELEV. = 95.6' Ap \$ Bw 0' - 24" FSL CI 24"-66" SL C2 66"- 108" SL W/ SCHIST MOTTLING AT 30" GROUNDWATER AT 72" REFUSAL AT 108" E.S.H.W.T. AT 30" (93.1')

1294-2: ELEV. = 89.2 Ap \$ Bw 0' - 18" FSL CI 18"-96" SL MOTTLING AT 24" **GROUNDWATER AT 90"** REFUSAL AT 96" E.S.H.W.T. AT 24" (87.2')

1294-3: ELEV. = 85.1' Ap \$ Bw 0' - 24" FSI C1 24"-60" SL MOTTLING AT 30" NO GROUNDWATER OBS REFUSAL AT 60" E.S.H.W.T. AT 30" (82.6')

1294-4: ELEV. = 75.1' Ap \$ Bw 0' - 24" FSL C1 24"- 78" SL W/ SCHIST MOTTLING AT 30" NO GROUNDWATER OBS REFUSAL AT 78" E.S.H.W.T. AT 30" (72.6')

1294-5: ELEV. = 73.0' Ap \$ Bw 0' - 24" FSL CI 24"- 60" SL C2 60"- 96" WEATHERED LEDGE MOTTLING AT 30" NO GROUNDWATER OBS REFUSAL AT 60"

E.S.H.W.T. AT 30" (70.5") 1294-6: ELEV. = 58.8' Ap \$ Bw 0' - 18" FSL CI 18"-36" LOAMY FINE SAND C2 36"- 60" SL W/ STONES MOTTLING AT 36" NO GROUNDWATER OBS REFUSAL AT 60"

E.S.H.W.T. AT 36" (55.8')

OBSERVATION TEST HOLE DATA BY JESSE JOHNSON, DER

1108-1: ELEV. = 94.6' Ap 0' - 10" FSL Bw 10"-18" FSL CI 18"- 84" SL MOTTLING AT 19" **GROUNDWATER AT 84"** NO REFUSAL

E.S.H.W.T. AT 19" (93.02')

1108-3: ELEV. = 96.7' Ap 0'-9" FSL Bw 9"-19" FSL CI 19"- 80" SL MOTTLING AT 21" **GROUNDWATER AT 75"** NO REFUSAL

1108-4: ELEV. = 96.9' Ap 0' - 8" FSL Bw 8"-18" FSL CI 18"- 85" SL MOTTLING AT 22" **GROUNDWATER AT 85"** NO REFUSAL E.S.H.W.T. AT 22" (95.07')

OBSERVATION TEST HOLE DATA BY JESSE JOHNSON, DER 11/20/08

1108-5: ELEV. = 92.3' Ap 0' - 9" FSL Bw 9"-18" FSL CI 18"- 78" SL MOTTLING AT 22" NO GROUNDWATER OBS NO REFUSAL

1108-6: ELEV. = 89.7' Ap 0' - 12" FSL Bw 12"-18" FSL CI 18"- 68" SL MOTTLING AT 24" NO GROUNDWATER OBS NO REFUSAL

WITNESSED BY IRA GROSSMAN, NABOH 11/7/08

1108-2: ELEV. = 95.4' Ap 0' - 10" FSL 10"- 22" FSL CI 22"- 74" SL MOTTLING AT 26" **GROUNDWATER AT 74"** NO REFUSAL E.S.H.W.T. AT 26" (93.23')

WITNESSED BY IRA GROSSMAN, NABOH

E.S.H.W.T. AT 22" (90.47')

E.S.H.W.T. AT 24" (87.70')

SEPTIC TANK SHALL BE A PRECAST, REINFORCED CONCRETE TANK MADE WATERTIGHT. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 REQUIREMENTS AND PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE.

1500 GAL. SEPTIC TANK

TANK/ SYSTEM TO BE VENTED THROUGH THE BUILDING PLUMBING SYSTEM AS REQUIRED BY BUILDING CODE. TANK SHOULD BE INSPECTED, MAINTAINED AND BE PUMPED OUT WHEN

SLUDGE DEPTH IN THE BOTTOM EXCEEDS ONE FOURTH OF THE TOTAL LIQUID DEPTH. AT LEAST THREE 20" MAHNOLES SHALL BE PROVIDED AND THE

MANHOLES OVER THE INLET AND OUTLET TEES SHALL BE EQUIPPED WITH RISERS AND LOCKABLE COVERS TO FINISH GRADE.

GEOMAT LEACHING SYSTEM GEOMAT LEACHING SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE SPECIFICATIONS OF THE MASSACHUSETTS GEOMAT LEACHING SYSTEM DESIGN MANUAL FOR PRESSURE AND GRAVITY APPLICATIONS, DATED SEPTEMBER 2017. GEOMAT IS A PRODUCT OF GEOMATRIX, 114 MILL ROCK ROAD EAST, OLD SAYBROOK, CT 06475 (860) 510-0730, WWW.GEOMATRIXSYSTEMS.COM.

ALL LOAM, LARGE BOULDERS OR FOREIGN MATERIAL ENCOUNTERED DURING EXCAVATION ARE TO BE REMOVED FROM THE LEACHING AREA. AVOID WORKING SOILS THAT ARE MOIST OR WET BECAUSE THEY CAN EASILY SMEAR AND COMPACT.

PROPERLY SCARIFY THE DRAIN FIELD BASE BEFORE INSTALLING

A MINIMUM OF SIX (6) INCHES OF SAND MEETING THE REQUIREMENTS OF 310 CMR 15.255(3) MUST BE PLACED BENEATH THE GeoMat AND TWO (2) INCHES OF THIS SPECIFICATION OF SAND SHOULD BE PLACED OVER THE GeoMat FABRIC MEMBRANE.

COVER DEPTH SHALL MAINTAIN A MINIMUM OF SIX (6) INCHES ABOVE THE GeoMat DISTRIBUTION PIPE. USE CLEAN SANDY FILL AND TOPSOIL SUITABLE FOR GROWING GRASS.

GeoMat SHALL BE LAID FLAT (LEVEL).

A MINIMUM OF TWELVE (12) INCHES OF SAND SHOULD SURROUND THE PERIMETER OF THE GeoMat IN A BED CONFIGURATION. IF THE COVER MATERIAL OVER THE GeoMat IS ABOVE THE ORIGINAL GRADE, IT SHALL SLOPE AT A 2% PITCH AWAY FROM THE GeoMat SYSTEM AND FROM A POINT TWO (2) FEET PAST THE GeoMat, PROVIDE A 3:1 SLOPE TO

MAXIMUM DEPTH OF COVER OVER LEACHING SYSTEM IS 24 INCHES. GeoMat MAY BE INSTALLED DIRECTLY ATOP CLASS I NATIVE SOILS. GeoMat IN CLASS II, III, AND IV SOILS REQUIRE A MINIMUM OF TWO (2) INCHES OF SAND MEETING THE REQUIREMENTS OF 310 CMR 15.255(3) BENEATH, TO THE SIDES, AND ABOVE THE GeoMat.

SYSTEMS ARE NOT TO BE INSTALLED BENEATH PAVED SURFACES OR IN AREAS OF ROUTINE TRAFFIC, PARKING OR STORAGE OF HEAVY

SOIL EXCAVATION AND/OR PLANTING WITHIN FIVE (5) FEET OF THE SYSTEM ARE NOT PERMITTED.

AN INSPECTION PORT MEETING THE REQUIREMENTS OF 310 CMR 15.240(13) IS REQUIRED FOR SYSTEMS INSTALLED WITH SIX INCHES OF SAND BENEATH THE GeoMat.

-- FINISH GRADE - HYGROSCOPIC MEMBRANE -1.5" DISTIBUTION PIPE --- SPECIFIED ORIFICE -6"MIN. - GeoGAURD ORIFICE 24"MAX. SHIELD -TRANSMISSIVE CORE 器GeoMat 3900 FLAT - NATIVE SOIL AND/OR

GeoMat 3900 FLAT LEACHING SYSTEM (PRESSURE DOSED-CROSS SECTION) NOT TO SCALE

DOSING CHAMBER GENERAL: ALL WORKMANSHIP, MATERIALS AND CONSTRUCTION SHALL CONFORM TO FEDERAL, STATE AND LOCAL CODES, WHETHER SPECIFIED HEREIN OR NOT. ALL PIPING, CONTROLS AND PUMP ARE SUBJECT TO APPROVAL BY THE DESIGN ENGINEER.

6"Min. 3/4"-1 1/2" Crushed Stone

1000 GAL. DOSING CHAMBER

CHAMBER: THE CHAMBER SHALL BE A PRECAST, REINFORCED CONCRETE SEPTIC TANK WITH PRE-FITTED BOOTS. CONSTRUCTION MATERIALS AND DIMENSIONS SHALL CONFORM TO TITLE 5 AND AASHTO HS 10 LOADING REQUIREMENTS AND SHALL BE PLACED ON A STABLE MECHANICALLY COMPACTED LEVEL BASE. ONE TANK MANHOLE SHALL EXTEND TO FINISHED GRADE AND BE MADE WATERTIGHT. COVER SHALL BE METAL AND WEIGH 60 LBS. (MINIMUM) AND HAVE AN INSIDE DIMENSION 1 1/2 TIMES MAXIMUM PUMP DIMENSION AND HAVE A 24" INSIDE DIAMETER MINIMUM. CHAMBER TO BE VENTED VIA BUILDING PLUMBING SYSTEM TO ROOF. IF THE CHAMBER IS TO BE UNDER PAVED SURFACES OR SUBJECT TO VEHICULAR LOADING, THE CHAMBER, ALL MANHOLES AND EXTENSIONS SHALL BE RATED TO WITHSTAND AASHTO HS-20 DIRECT LOADING (HEAVY DUTY).

PUMPS: PUMP SHALL BE A NON-CLOG SUBMERSIBLE SEWAGE PUMP CAPABLE OF PASSING A 1 1/4" DIAMETER SOLID AND STRINGY MATERIAL. PUMPS SHALL HAVE A 0.5 HP (MINIMUM) MOTOR AND SHALL BE CAPABLE OF PUMPING 25.8 GALLONS PER MINUTE (GPM) AGAINST A TOTAL DYNAMIC HEAD (TDH) OF 30.5 FEET.

ENGINEER SPECIFIED PUMP: MYERS SRM4 OR EQUIVALENT PUMP SIZE AND SPECIFICATIONS ARE BASED UPON THE PROPOSED DOSING CHAMBERS' ELEVATIONS AND LOCATION SHOWN HEREON. ANY

CONTROLS: PUMP AND ALARM SHALL BE ACTIVATED BY MECHANICAL FLOAT SWITCHES AS SHOWN. THREE FLOATS ARE REQUIRED. FLOATS AND PUMP POWER CABLE ARE TO BE SUSPENDED FROM AND TIED TO A 1/2" DIAMETER, STEEL REBAR WITH HOSE CLAMPS. THE REBAR SHALL BE SECURELY AND PERMANENTLY ANCHORED TO THE SIDES AND/OR THE WALL OF THE CHAMBER.

THE INTERIOR OF THE PUMP CHAMBER IS A CORROSIVE ENVIRONMENT AND EXPLOSIVE GASES MAY BE PRESENT. ALL WIRING AND ELECTRICAL EQUIPMENT MUST COMPLY WITH CURRENT ELECTRICAL CODE AND ALL APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS.

NO SPLICES ARE ALLOWED INSIDE THE PUMP CHAMBER. ELECTRIC LINES ARE TO BE CONTINUOUS FROM THE PUMP AND FLOAT SWITCHES TO A VAPOR PROOF. STRAIN RELIEF SPLICE BOX LOCATED OUTSIDE OF THE PUMP CHAMBER. VAPOR PROOF SPLICE BOX MAY BE ATTACHED TO THE EXTERIOR OF THE HOUSE OR LOCATED INSIDE AN ELECTRICAL PULL BOX. AN ELECTRICAL DISCONNECT BOX ATTACHED TO THE OUTSIDE OF HOUSE IS REQUIRED.

MINIMUM SIZE OF CORROSION RESISTANT CONDUIT FROM PUMP CHAMBER TO SPLICE BOX IS 11/2". MINIMUM CONDUIT SIZE FROM SPLICE BOX TO DISCONNECT BOX IS 3. BOTH ENDS OF ALL CONDUITS ARE TO BE SEALED WITH DUCT SEAL TO PREVENT THE TRANSMISSION OF VAPORS

THE DIMENSIONAL SETTINGS OF THE FLOATS (SEE DOSING CHAMBER DETAIL ON THIS SHEET) ARE THE ELEVATIONS AT WHICH THE FLOATS ARE TO ACTIVATE/INACTIVATE THE PUMP AND/OR ALARM. THE FLOAT LEVEL CONTROLS SHALL BE SET TO OPERATE AT THE ELEVATIONS INDICATED. THESE ELEVATIONS SHALL BE ADJUSTED BY THE INSTALLER TO ENSURE FUNCTION ACCORDING TO THESE SPECIFIC ELEVATIONS.

THE CONTROL PANEL SHALL BE HOUSED IN A NEMA-1 CONTROL BOX SUITABLE FOR USE WITH ALL OF THE COMPONENT MANUFACTURERS' STANDARDS FOR THE EQUIPMENT USED AND SHALL HAVE AN AUDIO ALARM AND VISUAL ALARM WITH A MANUAL SILENCER. THE CONTROL PANEL SHALL BE INSTALLED IN A SUITABLE LOCATION INSIDE OF THE BUILDING. ALARM SHALL BE ON A SEPARATE CIRCUIT FROM THE PUMP ALL ELECTRICAL WORK SHALL CONFORM TO ALL FEDERAL, STATE AND LOCAL BUILDING CODE REQUIREMENTS.

PIPING: PIPING FROM PUMP TO 3' OUTSIDE TANK SHALL BE 2" SCHEDULE 40 (SDR-21) SOLVENT-WELDED PVC OR ABS. CHECK VALVE SHALL BE 2" BALL-TYPE WITH 2 HOSE CLAMP CONNECTIONS AT EACH SIDE OF THE JOINT. RISER CLAMPS WITH PVC INSERTS ARE REQUIRED AT PUMP CHAMBER. ALL PIPING SHALL BE SHIELDED FROM ANY ABRASION (INCLUDING FORCE MAIN).

FORCE MAIN: FORCE MAIN SHALL HAVE 4' MINIMUM COVER EXCEPT WITHIN 5' OF THE CHAMBER AND MANIFOLD WHICH SHALL BE INSULATED WITH 2" RIGID PRE-MOLDED POLYSTYRENE INSULATION. FORCE MAIN SHALL BE 2" SDR-21 PVC TIGHT JOINT PIPE. JOINTS SHALL BE SOLVENT-WELDED. TRANSITION BETWEEN DOSING CHAMBER PIPING AND FORCE MAIN SHALL BE WITH A 2" PVC UNION SOCKET. ALL PIPES SHALL BE SET IN 6" OF SAND AND BE SNAKED TO ALLOW FOR CONTRACTION AND BE LAID TO PROVIDE A DOWNWARD GRADIENT FROM THE MANIFOLD TO THE CHAMBER. FORCE MAIN AND ALL JUNCTIONS SHALL BE WATER AND PRESSURE TIGHT WITH NO LEAKAGE ALLOWED.

A PORTION OR ALL OF THE FORCE MAIN MAY BE PROPOSED TO BE INSTALLED ABOVE THE FROST LINE. THOSE PORTIONS, IN ACCORDANCE WITH TITLE 5 310 CMR 15.221(6) SHALL BE INSULATED ADEQUATELY OR BE MADE SELF DRAINING.

PRESSURE FILTER: A SIM/TECH STF-100 PRESSURE FILTER, OR APPROVED EQUAL, SHALL BE INSTALLED BETWEEN THE PUMP AND THE CHECK VALVE. SEE MANUFACTURER'S REQUIREMENTS FOR MORE INSTALLATION INFORMATION.

GENERAL NOTES SYSTEM IS DESIGNED TO ACCOMMODATE SANITARY SEWAGE ASSOCIATED WITH NORMAL DOMESTIC USE AND CONSISTING OF WATER CARRIED PUTRESIBLE WASTE ONLY.

Pressure Filter or

NOTE: Pumps are

rotated 90° for clarity.(See site plan) 2"\_MANIFOLD-

Pitched to drain back to Dosing Chamber

ALL COMPONENTS OF THE SEWAGE DISPOSAL SYSTEM, EXCEPT THE GeoMat LEACHING SYSTEM, SHALL BE COVERED BY A MAXIMUM OF 36" OF CLEAN BACKFILL MATERIAL, FREE OF STONES AND BOULDERS GREATER THAN 6" IN SIZE. THE MAXIMUM COVER OVER THE GeoMat IS

ALL COMPONENTS SHALL BE MARKED WITH MAGNETIC MARKING TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED. OWNER SHALL VERIFY EFFECTIVE ZONING REGULATIONS PRIOR TO

PLAN SHOWS ONLY THOSE FEATURES THAT WERE VISUALLY APPARENT ON DATE OF TOPOGRAPHY, AND THE ABSENCE OF SUBSURFACE STRUCTURES, UTILITIES, ETC. IS NOT INTENDED OR IMPLIED. ALL PIPING SHALL BE LAID TRUE TO LINE, GRADE AND INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

THERE ARE NO EXISTING WELLS WITHIN \_\_\_ | OO'\_ OF THE PROPOSED SEWAGE DISPOSAL SYSTEM. (  $\underline{50}^{\rm i}$  OF THE SEPTIC TANK.) THERE ARE NO EXISTING SEWAGE DISPOSAL SYSTEMS WITHIN N/A OF THE PROPOSED WELL. (TOWN WATER PROVIDED)

ALL KNOWN WELLS WITHIN 200' OF THE PROPOSED PRIMARY AND EXPANSION LEACH AREAS ARE SHOWN. THE DESIGN ENGINEER SHALL BE NOTIFIED PROMPTLY OF ANY PLAN DEFICIENCIES FOUND DUE TO UNFORESEEN SUBSURFACE CONDITIONS OR OTHER REASONS THAT MIGHT AFFECT THE FUNCTION OF THIS DESIGNED

DEVIATIONS IN DESIGN OR CONSTRUCTION FROM THIS PLAN OR ANY OF THE CONDITIONS RELATING TO THE USE OR MAINTENANCE OF THE PROPOSED SYSTEM SHALL BE DEEMED TO VOID ANY CERTIFICATION OR REPRESENTATION MADE RELATIVE TO THIS SUBSURFACE SEWAGE DISPOSAL SYSTEM.

CONTRACTOR SHALL NOTIFY "DIG SAFE" PRIOR TO ANY EXCAVATION. 1-888-DIG-SAFE (344-7233)

PRIOR TO ANY CONSTRUCTION A BENCHMARK SHALL BE SET WITHIN 50-75' OF THE PROPOSED SEWAGE DISPOSAL SYSTEM.

SYSTEM IN FILL REQUIRED NOT REQUIRED IF ANY PORTION OF THE PROPOSED LEACHING AREA IS LOCATED ABOVE EXISTING GRADE OR WITHIN TOPSOIL, PEAT OR OTHER UNSUITABLE OR IMPERVIOUS SOIL LAYER, THEN THE PLACEMENT OF FILL IS REQUIRED. PRIOR TO THE PLACEMENT OF FILL, ALL UNSUITABLE OR IMPERMEABLE SOILS SHALL BE EXCAVATED TO A MINIMUM OF FIVE FEET LATERALLY IN ALL DIRECTIONS BEYOND THE OUTER PERIMETER OF THE SOIL ABSORPTION SYSTEM TO THE DEPTH OF NATURALLY OCCURRING PERVIOUS MATERIAL. FILL MATERIAL SHALL BE SELECT, ON-SITE OR IMPORTED SOIL. CONSISTING OF CLEAN GRANULAR SAND, FREE FROM ORGANIC MATTER AND OTHER DELETERIOUS SUBSTANCES. MIXTURES AND LAYERS OF DIFFERENT SOIL CLASSES SHALL NOT BE USED. THE FILL SHALL NOT CONTAIN ANY MATERIAL LARGER THAN 2 INCHES. A SIEVE ANALYSIS USING A #4 SIEVE, SHALL BE PERFORMED ON A REPRESENTATIVE SAMPLE OF THE FILL. UP TO 45% BY WEIGHT OF THE FILL SAMPLE MAY BE RETAINED IN THE #4 SIEVE. SIEVE ANALYSES SHALL ALSO BE PERFORMED ON THE FRACTION OF FILL SAMPLE PASSING THE #4 SIEVE. SUCH ANALYSES MUST DEMONSTRATE THAT THE MATERIAL MEETS EACH OF THE FOLLOWING SPECIFICATIONS:

SIEVE SIZE	EFFECTIVE PARTIC	LE SIZE	% THAT MUST PASS SIEVE
# 4	4.75 MM		100%
# 50	0.30 MM		10%-100%
#100	0.15 MM		0%-20%
#200	0.075 MM		0%-5%

WETLAND PROTECTION ACT (C131 S40) PRIOR TO INITIATING ANY ALTERATIONS (REMOVAL OF VEGETATION, EXCAVATIONS, GRADING, ETC.) WITHIN 100' OF WETLANDS (PONDS, BROOKS, SWAMPS, ETC.) OR WITHIN 200' OF AN AREA SUBJECT TO THE RIVER'S ACT (PERENNIALLY FLOWING RIVER, BROOK OR STREAM). A REQUEST FOR DETERMINATION OF APPLICABILITY OR A NOTICE OF INTENT UNDER THE WETLANDS PROTECTION ACT (310 CMR 10.00) SHOULD BE FILED WITH THE TOWN'S CONSERVATION COMMISSION. LOCAL BYLAWS MAY ALSO APPLY.

TWO (2) SCH40 PVC 45° FITTINGS SAND Below GeoMat core shall be laid flat SHALL BE USED FOR TURN UPS. ( 9" apart — edge of core to edge of core). LEACHING FIELD  $37.25' \times 37' = 1.378 \text{ s.f.}$ (FUTURE EXPANSION SYSTEM: 8 TRENCHES 37'Lx2'Wx2'D=1,776 S.F.) 1.5" I.D. SCH. 40 PVC DISTRIBUTION PIPE

5' SPACING between Perforations.

99.83

99.75

99.25

41

12" SAND\*\*\*\*\*

~GeoMAT

THREADED PLUG-

Flat 3900

-ACCESS BOX

TOP SAND

= 100.15

BOT. SAND

= 99.25

DIA. PERFORATIONS in a downward direction (6 o'clock) Last perforation of each lateral shall be in the upward direction (12 o'clock SCHEDULE OF ELEVATIONS PROPOSED AS-BUIL TOP CONCRETE FOUNDATION INVERT AT FOUNDATION INVERT TANK INLET 79.40 INVERT TANK OUTLET 79.15 TOP SEPTIC TANK 80.5± INVERT DOSING CHAMBER INLET 79.10 INVERT DOSING CHAMBER OUTLET 79.35 TOP DOSING CHAMBER 80.4± MINIMUM FINAL GRADE 100.5 TOP OF SAND 100.15 INVERT LATERAL @ BEGINNING

DESIGN CRITERIA GARBAGE GRINDERS - NOT PERMITTED

GROUNDWATER OFFSET REQUIRED

GROUNDWATER OFFSET UTILIZED

INVERT LATERAL @ END

IBOTTOM OF GeoMat

IBOTIOM OF SAND

	PERC. TESTS	S: PERFORMED		JOHNSON,	DER
WITNESSED BY IRA GROSSMAN, NABOH					
	PERC. #	RATE (M/I)	ELEVATION	DEPTH	DATE
	1108-A	>60	95.0	50*	11/7/08
	1108-B	13	96.2	45*	11/7/08
	1108-C	25	97.1	45*	11/7/08
	1108-D	44	97.1	42*	11/7/08
	1108-E	27	92.5	52*	11/20/08
	1108-F	>60	90.1	58°	11/20/08

FLOWS: 4 BEDROOMS AT 110 GPD = (330 GPD MIN.) SEPTIC TANK REQUIRED: (\_\_\_\_\_\_GAL. MIN.)  $_{-440}$  GPD X 2.0 =  $_{-880}$  GAL. TANK

LEACHING AREA PROVIDED: A. BASIS 44 MIN./INCH PERCOLATION RATE B. SOIL CLASS \_\_\_\_\_III\_

C. SAND BED GeoMAT PRODUCT: 3900 FLAT

1. LOADING RATE \_\_\_\_O.41 GPD/S.F. INSTALLED IN: S 6" SAND BENEATH NATIVE SOILS 2. GeoMat AREA REQUIRED: 440 GPD/0.41 GPD/.S.F  $= 1,074 \, \text{S.F.}$ 

3. SAND BED PROVIDED: 1,378 S.F. (1,320 S.F. MIN. 4. LENGTH OF GeoMat REQUIRED:

1,074S.F./ 3.42 S.F./L.F. = 315 L.F. 5. LENGTH OF GeoMat PROVIDED:  $9 \text{ ROWS } \times 35 \text{ L.F./ROW} = 315 \text{ L.F.}$ 

PRIOR TO OBTAINING A CERTIFICATE OF COMPLIANCE FOR INSTALLATION OF AN UPGRADED SYSTEM, THE SYSTEM OWNER SHALL RECORD IN THE CHAIN OF TITLE FOR THE PROPERTY SERVED BY THE ALTERNATIVE SYSTEM IN THE REGISTRY OF DEEDS OR LAND REGISTRATION OFFICE, AS APPLICABLE, A NOTICE DISCLOSING THE EXISTENCE OF THE ALTERNATIVE

LOCUS MAP

NOT TO SCALE

GARBAGE DISPOSALS AND WATER SOFTENERS SHALL NOT BE USED WITH

GeoMAT LEACHING SYSTEM DESIGNED IN ACCORDANCE WITH GENERAL

USE APPROVAL ISSUED TO GEOMATRIX SYSTEMS, LLC, OCTOBER 26,

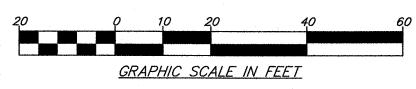
2016 LAST MODIFICATION JUNE 26, 2019, TRANSMITTAL #X267826.

AND THE STANDARD CONDITIONS FOR ALTERNATIVE SOIL ABSORPTION

NOTES:

THE GEOMAT LEACHING SYSTEM.

SYSTEMS, DATED MARCH 5, 2018.



PJT CHECK: DBW 678-4 REVISIONS

WHAT WE WANTED DANIEL B. WOLFE CIVIL

No. 36523

SEWAGE DISPOSAL SYSTEM

MICHAEL DEMPSEY & JULIE CASANAVE

#24 BOLTON ROAD HARVARD, MA

SSESSOR PARCEL 39



**CIVIL ENGINEERS - LAND SURVEYORS ENVIRONMENTAL CONSULTANTS** 6 Lancaster County Road 978-772-6232

P.O. Box 795 Harvard, MA 01451-0795 1"=20'

JOB NO.:

JULY, 2023 L-13406 L-14668 SHEET NO.: 34047 1 of 2

FAX 978-772-6258

www.davideross.com

100 FABRIC OR EQUAL-WRAP ATTACHMENT -CORD AROUND POST TWICE -PROTECTED AREA COMPACTED FILL OVER TOE OF FABRIC BURIED 8" DEEP. 16" MIN. \* STEEL POST MAY BE SUBSTITUTED. DISTANCE BETWEEN POSTS: 8' IF FENCE IS SUPPORTED BY WIRE 6' IF EXTRA-STRENGTH FABRIC SILT FENCE DETAIL

NOT TO SCALE

2' MIN.

NOTE
JOINTS ON WATERLINE SHALL NOT BE WITHIN 3' OF

WATER SERVICE CROSSING

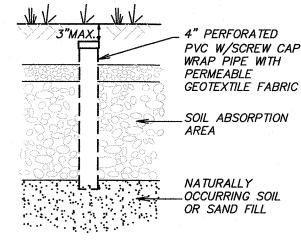
- DISTURBED SURFACE

SEWER CROSSING. ADJUSTMENTS MAY BE REQUIRED IN SEWER LINE/FORCE MAIN ELEVATIONS WHEN WATER SERVICE IS ENCOUNTERED DURING CONSTRUCTION.

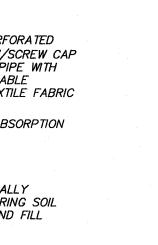
SERVICE

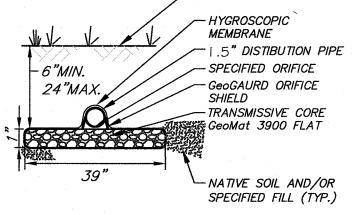
GRAVITY SEWER

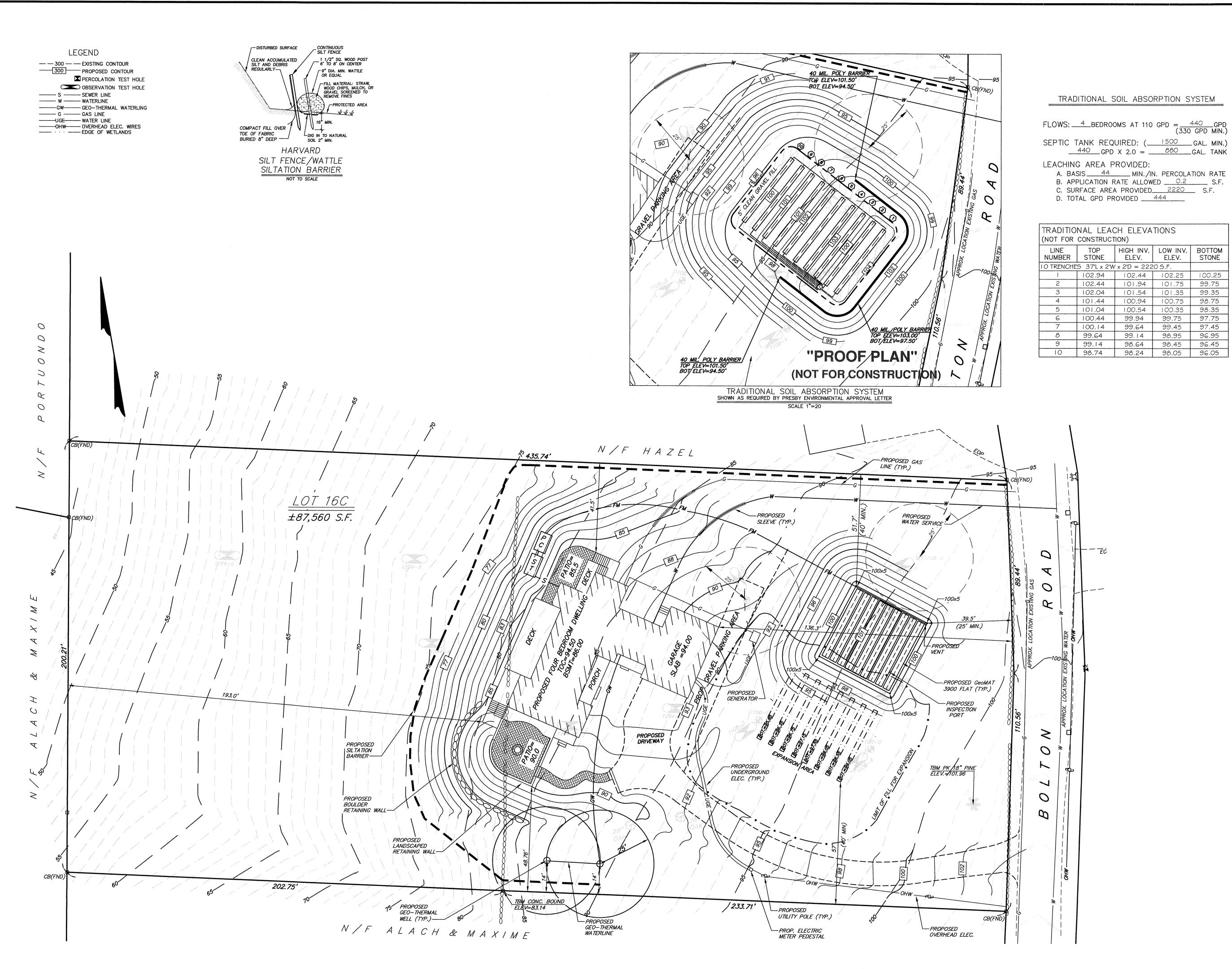
OR FORCE MAIN









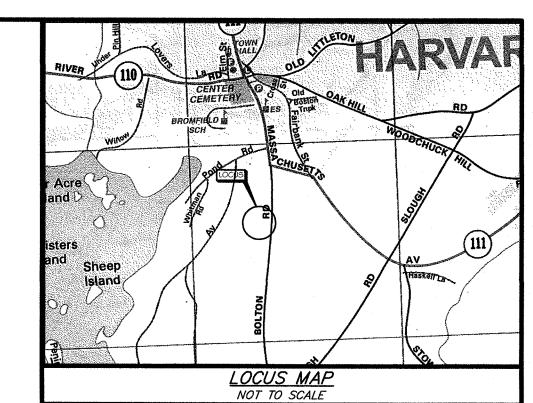


TRADITIONAL SOIL ABSORPTION SYSTEM

FLOWS:  $\frac{4}{330}$  BEDROOMS AT 110 GPD =  $\frac{440}{330}$  GPD MIN.) SEPTIC TANK REQUIRED: (\_\_\_\_\_\_GAL. MIN.) 440 GPD X 2.0 = 880 GAL. TANK

A. BASIS 44 MIN./IN. PERCOLATION RATE B. APPLICATION RATE ALLOWED 0.2 S.F. C. SURFACE AREA PROVIDED 2220 S.F. D. TOTAL GPD PROVIDED \_\_\_\_444\_\_\_\_

RADITIONAL LEACH ELEVATIONS OF FOR CONSTRUCTION)					
LINE UMBER	TOP STONE	HIGH INV. ELEV.	LOW INV. ELEV.	BOTTOM STONE	
TRENCHES 37'L x 2'W x 2'D = 2220 S.F.					
1	102.94	102.44	102.25	100.25	
2	102.44	101.94	101.75	99.75	
3	102.04	101.54	101.35	99.35	
4	101.44	100.94	100.75	98.75	
5	101.04	100.54	100.35	98.35	
6	100.44	99.94	99.75	97.75	
7	100.14	99.64	99.45	97.45	
8	99.64	99.14	98.95	96.95	
9	99.14	98.64	98.45	96.45	
1.0	00 - 4	000	~ ~ ~ ~	000=	



20	ρ	10	20	40	
	<u>GR</u>	4PHIC	SCALE	IN FEET	

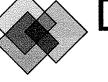
DRAFT: PJT MSB CHECK: DBW 678-4 REVISIONS

SEWAGE DISPOSAL SYSTEM

MICHAEL DEMPSEY & JULIE CASANAVE

#24 BOLTON ROAD HARVARD, MA

22 39



# DAVID E. ROSS ASSOCIATES, INC.

CIVIL ENGINEERS - LAND SURVEYORS ENVIRONMENTAL CONSULTANTS

6 Lancaster County Road P.O. Box 795 Harvard, MA 01451-0795

978-772-6232 FAX 978-772-6258 www.davideross.com

1"=20' JULY, 2023 L-13406 L-14668 JOB NO.: 34047 2 of 2

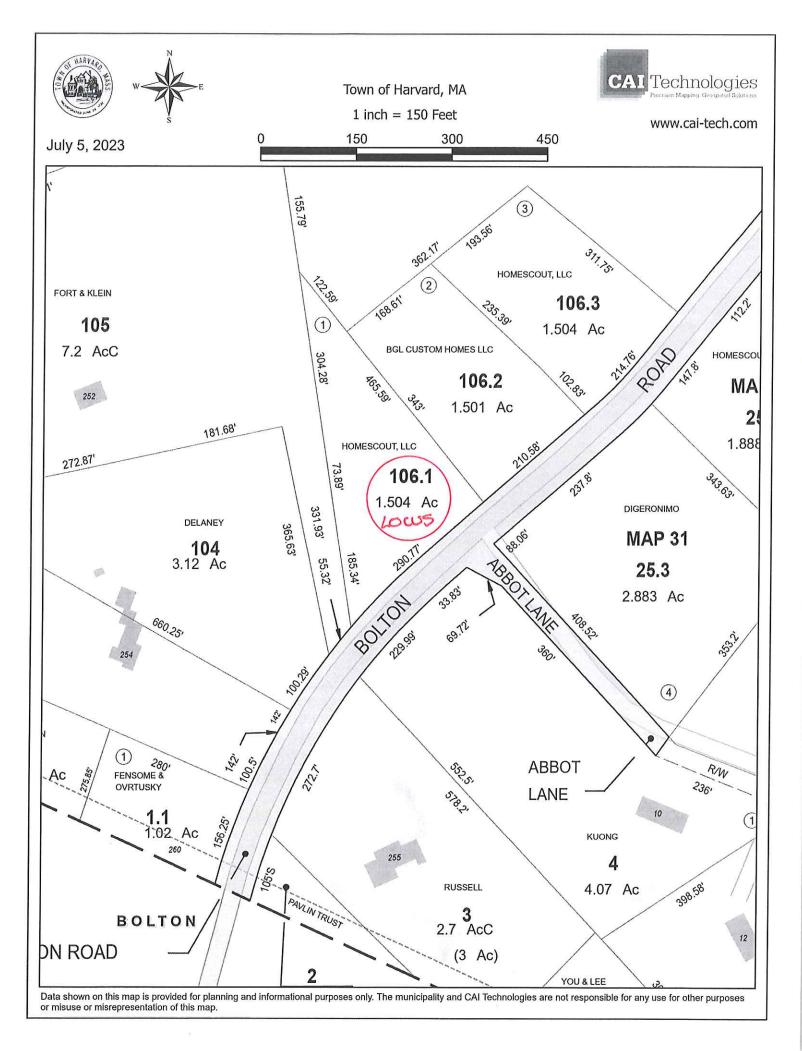
#### **EROSION CONTROL APPLICATION**

Applicants should review the Harvard Protective (Zoning) Bylaw, Chapter 125-58 of the Code of the Town of Harvard, the Planning Board's Rules and Regulations, Chapter 133 of the Code of the Town of Harvard. Copies of the Bylaw may be purchased from the Town Clerk and copies of the Rules and Regulations may be purchased from the Land Use Office. Information is also available online at www.harvard-ma.gov. The Rules and Regulations specify the documents that are required as a part of the application.

Applicant's Name: R.D. KANNIARD HOMES, INC.
Applicant's Name:
Applicant is (check one): Owner Agent Prospective Buyer
Location of Property: 45T 1,236 BOUTON RP Zoning District: RA
Harvard Assessors' Map 30 Parcel 106.1
Owner's Name: SAME AS ABOUE Email:
Owner's Address:Owner's Phone:
Signed: Dueve Blogge,
APPLICATION CHECK LIST  AS ACEUT
Minor Permit  ☐ Sketch plan showing limits, scope of work and proposed Best Management Practices (BMPs)
☐ Project narrative that includes a description of the proposed project and a description of how and where stormwater will be controlled and erosion and sediment controls to be used
□ \$25.00 filing fee
Major Permit Applicants shall file one (1) original completed application packet and seven (7) copies
Project narrative that includes a description of the proposed project and a description of how and where stormwater will be controlled and erosion and sediment controls to be used, plus a description of any specimen trees within the project area.
Engineered plan set, signed and stamped by a professional engineer or a professional land surveyor registered in the Commonwealth of Massachusetts, and drawn at a legible scale and including:

- Existing and proposed conditions plans, which shall identify significant natural features and native trees greater than a diameter of (6) inches within the project area.
- Erosion control plan, which shall include the following related specifically to the disturbance area:
  - > Location of all structural and non-structural erosion and sediment control measures and BMPs;
  - > Locations where stabilization practices are expected to occur;
  - Locations for storage of materials, waste, vehicles, equipment, soil, snow, and other potential contaminants;
  - > Operations and Maintenance Plan for BMP's including inspections and maintenance activities as noted in §133-41 below;
  - Areas where previous stabilization has been accomplished and no further construction-phase permit requirements apply; and
  - > Any other information deemed necessary by the Planning Board.

\$200.00 filing fee



#### Project Narrative

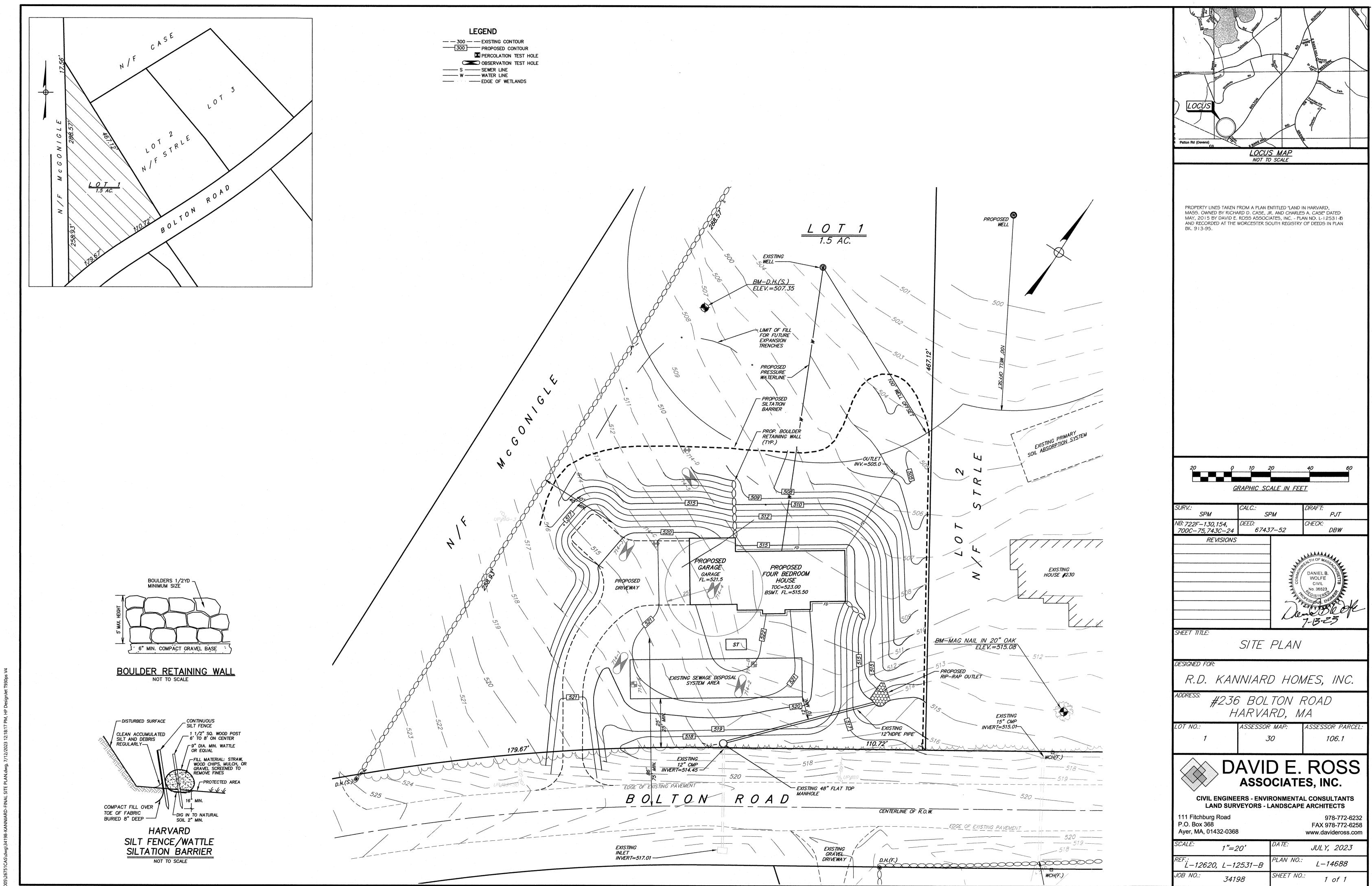
Prepared for R. D. Kanniard Homes, Inc. (Lot 1) 236 Bolton Road, Harvard Project No. 34198

On behalf of our client, Mr. Roger Kanniard of R.D. Kanniard Homes, Inc., we are hereby submitting the following narrative to outline the proposed activities and procedures that are proposed for the property at 236 Bolton Road in Harvard. This information is presented in relation to Section 125-58 (Erosion Control) of the Harvard Protective Bylaw.

The subject property is a 1.5-acre residential property on the northwest side of Bolton Road, just north of the Bolton town line. The property is currently vacant and a 4-bedroom, single family home is proposed to be constructed. Clearing and filling activities of the site have previously been performed, prior to the enactment of the Erosion Control bylaw. Additionally, portions of the proposed sewage disposal leaching area and the drinking water well have also been constructed, and therefore just the house, septic tank, driveway, and related site grading remain. Details of these components are shown on the accompanying Site Plan.

As mentioned above, this project began several years ago by a previous landowner. The bulk of the required fill for the property has already been deposited on the site and will now need to be graded in accordance with the attached plan. As the site is being graded, the previously installed street drainage will also be extended to the rear portion of yard area and other drainage management swales will also be incorporated to manage stormwater runoff from the developed site. Due to previous clearing and disturbance, no significant additional clearing is anticipated. There are no wetland resource areas located on the site or within 100-feet of the property and therefore no applications are being made with the Harvard Conservation Commission.

In an effort to control any erosion or sedimentation, the downhill slopes of any disturbance areas will be supplemented by an erosion control barrier, as shown on the site plan, and will be of the type commonly requested by the Harvard Conservation Commission (see detail). These barriers will be placed prior to any continued construction and will remain in place until the disturbed areas are fully restored and stabilized.



# 125-18.2 – [Proposed] Harvard Center Overlay District for Subordinate Structures

[Drafted by Steve Nigzus – July 2023 – for review]

#### 1.1 Intent

The intent of the Harvard Center Overlay District for Subordinate Structures is to foster well-planned, subordinate structure construction in the center in the Town of Harvard. The purpose is to further develop consistency and continuity within this District in keeping with the existing character of traditional New England villages and the Town of Harvard. By allowing these subordinate structures to be built, the ongoing usefulness and relevance of homes and businesses in the town center will be improved. Historically there were subordinate structures (such as barns, workshops and sheds) located on many of these parcels but they have not survived. The district is defined as any home or business located either in the Harvard Common Historic district or a part of the Harvard Town Sewer district and further limited to parcels that are less than 0.9 acres in size. Follow this link to see a list of properties of the Harvard Town Sewer District

The guidelines for subordinate structures include the following:

- 1.1.1 Visual impact of cars should be minimized where and when possible.
- 1.1.2 This overlay is not intended to allow for the construction of new homes or new businesses on undeveloped parcels as defined in the district above.

# 1.2 Design Standards and Overall appearance & Requirements

- 1.2.1 Construction of garages, workshops and sheds is by right with the following offsets: **2 feet** from any property line.
- 1.2.2 Structures are limited to 1.5 stories and not to exceed 17.5 feet from grade. Lot coverage rules are suspended to accommodate subordinate structures in this district.
- 1.2.3 The exterior appearance of a structure should mimic the primary building on the site. Clapboard, shake or brick are preferred. Vinyl or

- aluminum sidings are not allowed. Composite, cement-based clapboards and shakes are allowed. Roofing may be asphalt, metal or slate.
- 1.2.4 Window placement should mimic the primary building and traditional double hung windows with mullions are mandated. An alternate style that is allowed is an awning style window with mullions akin to barn windows. Street facing walls should have windows or blind windows to harmonize with the district.

#### 1.3 <u>Limitations</u>

- 1.3.1 The structure cannot be used for habitation. Business use of the structure is limited to Section 125-12 Small Scale Commercial Uses only in the <u>Harvard Zoning Bylaws</u>.
- 1.3.2 Total usable square footage of the subordinate structure shall not exceed 25% of the legal, usable square footage of the primary structure.

#### 1.4 Review & Approval

- 1.4.1 Proposed structures must be submitted to the Harvard Historical Commission for approval before submission for a Building Permit regardless of whether they are in or out of the district.
- 1.4.2 Normal application processes are to be followed for submission of a building permit as required.

# § 133-22 **Submission and processing.**

#### A.

A complete application for a special permit shall be submitted on the appropriate application form. This form is available at the office of the Board or on the Town of Harvard website (www.harvard-ma.gov). In the case where the applicant is a person other than the record owner of the property, the applicant shall be required to submit as part of the application written certification executed by the record owner of the property that the application is submitted with the knowledge and consent of the record owner.

#### B.

All information required by the application form as part of an application for a special permit shall be furnished by the applicant in the manner prescribed in this chapter and by such form unless a waiver is requested and granted by the Board. Any petition for a special permit shall include a site plan prepared by a registered engineer and land surveyor drawn at a scale of one inch equals 40 feet or such other as the Board may require to show details clearly and adequately. The site plan must be plainly marked "Site Plan" and shall be clearly and legibly drawn in dark lines on a white background, or a similar medium acceptable for filing with the Registry of Deeds or Land Court to fully detail and explain the intentions of the applicant. The details and contents of a plan, where not otherwise specifically set forth herein, may be provided in accordance with the requirements of the Subdivision Rules and Regulations.

# <u>C.</u>

Application copies shall be of standard size, no larger than 30 inches by 42 inches. Each copy of the application shall be folded so that it will fit neatly into a letter-sized file folder.

# <u>D.</u>

A list of abutters and abutters to abutters within 300 feet that are parties of interest as defined in these Rules, taken from the most recent tax list of the Town and certified by the Assessors' Office, shall be included in the submission of the application. The applicant shall pay any charges required by the Assessors' Office for the list.

#### <u>E.</u>

Seventeen <u>TEN</u> copies of the application shall be submitted to the office of the Harvard Town Clerk during posted business hours. <u>The copies shall be: two full sized copies, eight reduced copies and a complete electronic copy.</u> Submittals must be collated and assembled as <u>17 ten</u> individual and complete "packages." The applicant may request and shall be entitled to a written receipt for the materials submitted. The date of filing shall be considered the date upon which the application has been delivered to or received by the Harvard Town Clerk as required in these Rules.

#### <u>F.</u>

Upon receipt of an application, the Board shall transmit forthwith a copy of the application to the Building Inspector, Board of Selectmen, Fire Department, Board of Health, Police Department, Engineering Consultant, DPW Director, Conservation Commission and Historical Commission.

#### [1]

Editor's Note: Now "Select Board."

#### G.

An affirmative vote of four members of the Board shall be necessary to grant a special permit. Only members who have attended the public hearing, including any continuations thereof, may vote. However, in accordance with MGL Chapter 39, Section 23D, a member of the Board, when holding an adjudicatory hearing, shall not be disqualified from voting in the matter solely due to that member's absence from no more than a single session of the hearing at which testimony or other evidence is received. Before any such vote, the member shall certify in writing that he/she has examined all evidence received at the missed session, which evidence shall include an audio or video recording of the missed session or a transcript thereof. The written certification shall be part of the record of the hearing. This shall change, replace, negate or otherwise supersede applicable quorum requirements. A failure of the Board to achieve the required vote shall be deemed a denial of such application.

# <u>H.</u>

Contents of application.

# <u>(1)</u>

The application shall contain a detailed description of the proposed use. In the case where the applicant cannot commit to a particular use at the time that an application for a special permit is made, the applicant must provide the Board

with a description of the possible uses to which the facility may be put as allowed by the Bylaw.

#### **(2)**

The applicant shall list and provide copies of all variances, permits, and other special permits or site plan approvals previously issued by Town boards or state and federal agencies, and a list of any variances or permits required to complete the proposed work. This list should include but not be limited to any permits from the Board of Health, the Conservation Commission, the Board of Appeals, the Board of Selectmen, the Department of Public Works, the Army Corps of Engineers, Mass Department of Transportation, and the Department of Environmental Protection; and certificates issued by the Secretary of Environmental Affairs under the Massachusetts Environmental Policy Act.

#### [2]

Editor's Note: Now "Select Board."

# **(3)**

If any other permits are required, the applicant is strongly advised to make the applications for such additional permits concurrent with this application.

# **(4)**

A copy of the most recently recorded plan/s for the lot(s) on which the work will take place bearing the book number(s), page number/s, and date/s of recording/s or registration(s) shall be submitted.

# <u>(5)</u>

The development impact statement shall be completed in its entirety and shall be submitted as part of the application.

# <u>(6)</u>

An application for a special permit that lacks information or is incomplete in any manner may be denied or significantly delayed. It is the responsibility of the applicant to assure the accuracy, thoroughness and completeness of all information submitted to the Board as part of an application for a special permit.

# <u>(7)</u>

The applicant shall be responsible for factually supporting all points relied upon in the application concerning the proposal, including without limitation references for methodologies used in design calculations.

# <u>(8)</u>

The Board is empowered to require information in addition to that specifically required by the Bylaw or by this chapter. The Board will require the applicant to supply additional information if it finds that such information is necessary to properly and responsibly act upon the application.

# § 125-35. Open Space and Conservation - Planned Residential Development (OSC-PRD).

# [Added 3-29-2003 ATM by Art. 32<sup>1</sup>]

This section establishes and regulates Open Space and Conservation Planned Residential Development (OSC-PRD). Development under this section is pursuant to a special permit granted by the Planning Board.

- A. Purpose and intent. The purpose and intent of the OSC-PRD provision is to permit high-quality residential development that preserves open space, water resources, wetlands, habitat, prime agricultural land, scenic landscapes and natural features, reduces infrastructure and site development cost, and promotes a diversity of housing opportunities within the Town, while respecting and enhancing neighborhoods, and promoting attractive standards of appearance and aesthetics consistent with Town character.
  - A further purpose of the OSC-PRD provision is to reduce the anticipated negative fiscal impact on the Town associated with conventional residential development.
  - (2) The OSC-PRD provision is designed to encourage the siting of homes in a manner that clusters units together in well-designed village settings, on buildable portions of the site, as a distinct alternative to the more arbitrary siting associated with lot by lot development typically reflected in plans submitted pursuant to Massachusetts General Laws Chapter 41, Sections 81K through 81GG, the Subdivision Control Law.
  - (3) The OSC-PRD will aid the Town in developing sustainable housing and associated infrastructure in harmony, as much as possible, with the Town's Climate Action Plan.
- **B.** Applicability. The Planning Board may grant a special permit for an OSC-PRD on an Agricultural-Residential (AR) zoned tract of land with definite boundaries ascertainable from a recorded or registered deed(s) or recorded or registered plan(s). Existing public and private ways need not constitute boundaries of the tract, but the area within such ways shall not be counted in determining tract size.
  - (1) Permitted uses in Open Space and Conservation Planned Residential Development. Permitted uses include the following:
    - (a) Single-family detached dwellings.

-

<sup>&</sup>lt;sup>1</sup> Editor's Note: This article also repealed former § 125-35. Cluster development for open space conservation, added 3-31-1990 ATM by Art. 18, as amended.

- (b) Multi-family dwellings.
- (c) Agriculture and horticultural uses including but not limited to orchards, vineyards, forestry, farming for fruits and vegetables.
- (d) Open space.
- (e) Trails.
- (f) Passive outdoor recreation, cf. 301 Mass. Reg. 5.02.
- (g) Educational and religious uses and other uses not mentioned above which are exempt from regulation by zoning under Massachusetts General Laws Chapter 40A, Section 3.
- (h) Accessory residential recreational uses (e.g., tennis court, pool, playground).
- (i) Active outdoor recreation, cf. 301 Mass. Reg. 5.02.
- C. Requirements and process for approval. An applicant who is the owner (or with the permission of the owner) of land in the AR District as described above, may submit to the Planning Board a plan and application for a special permit for an OSC-PRD in accordance with the provisions of this section, excepting the building lots or lot shown on such plans from the lot area and other dimensional requirements specified in other sections of this Bylaw. While a subdivision plan is not required to be submitted in conjunction with the provisions of this section, in the event that a subdivision plan is being proposed by the applicant, such plan shall be submitted to the Planning Board in accordance with the Subdivision Rules and Regulations of the Planning Board.
  - (1) Submittal requirements. Prior to the granting of a special permit pursuant to this section, a duly submitted application for said special permit shall be submitted together with a site plan to the Planning Board, in accordance with § 125-38, Site plans, of the Bylaw, and any Site Plan Rules and Regulations adopted by the Planning Board. For purposes of this Bylaw, a landscape architect, architect, land surveyor, and professional engineer must participate in the preparation of such site plan, which shall include the following:
    - (a) The location of the proposed development.
    - (b) The size of the site in acres.
    - (c) The total number of the proposed buildings and/or lots, and the size of each in square feet.
    - (d) The acreage and proposed use of permanent open space.

(e) A statement on the disposition or manner of ownership of the proposed open space.

- (f) The lots or areas which are to be used as building areas or lots, and the lots or areas which are to remain as permanent open space.
- (g) Lines showing yard and setbacks as required by this Bylaw, within which dwellings or structures must lie.
- (h) Sufficient detail of proposed built and natural features as described in § 125-35D and § 125-35E to enable the Planning Board to make the required determinations of § 125-35C(3).
- (i) A landscape preservation plan sheet(s) to be included with the site plan, reflecting the existing, natural features to be preserved and proposed landscape features and details, including snow storage area(s)
- (j) Site Development Climate Mitigation Plan. All features which are sustainable and designed to help mitigate climate impact should be included in this plan. This plan should specifically address, but not be limited to, the following areas.
- [1]. Heating and Cooling. How the development will be heated and cooled. The plans to use heat pumps or a geothermal system to heat and cool the buildings. Electrification of all systems and appliances.
- [2]. Energy Generation. Solar panels should be considered to the maximum extent. Include how much power they will provide both in absolute kilowatt-hours and as a percentage of the total electricity requirements.
- [3]. Energy Use and Resource Use Minimization. Roofing, insulation and windows that minimize heat loss and cooling loss. LED lights should be installed in all common areas. Water-saving fixtures should be installed in units as well as for landscaping.
- [4]. Parking. EV chargers installed with infrastructure to expand capacity based on anticipated growth. Include percentage of the anticipated automobile population that will be served by the chargers and the anticipated expansion readiness. Parking to be pervious to reduce runoff.
- [5]. Landscaping. Any trees removed from the site to be replaced with trees of equal size or compensated by more trees than removed. Shade trees be planted in areas to offset heat from parking areas. Drought-tolerant and native plants to be used in the landscaping.

[6]. Site Infrastructure. Composting and recycling stations available to all residents. Rain water collection site to reduce water usage.

- (2) Submittal of preliminary plan. An applicant must submit a plan of the required form and content standards as a "Preliminary Plan" in accordance with the Massachusetts General Laws Chapter 41, Section 81S and Harvard Planning Board governing laws for Subdivision Plans. Such plan, although not a formal subdivision plan filing, and submitted for conceptual purposes only, shall include a perimeter survey prepared by a registered land surveyor, location of wetlands, and topography based upon the most recent United States Geological Survey map. The applicant shall demonstrate to the satisfaction of the Board that a subdivision plan, if formally filed, would be buildable without reliance on significant waivers of the subdivision regulations.
- (3) **Approval criteria**. After notice and a public hearing in accordance with Massachusetts General Laws Chapter 40A, Section 9, 11, and 15 and after following the procedure outlined in this Bylaw, the Planning Board may grant such a special permit with any conditions, safeguards, and limitations, if it determines:
  - (a) That the application form and content referred to in § 125-35C(1), herein is properly completed.
  - (b) That the site plan referred to in § 125-35C(1) is properly completed.
  - (c) That all the other requirements of this Section and Bylaw are fully met.
  - (d) That the design and layout of the proposed OSC-PRD preserves open space for conservation and recreation; that it preserves natural features of the land; allows more efficient provision of streets, utilities and other public services; and, that it provides a high degree of design quality, based on the criteria and considerations enumerated herein in § 125-35E.
  - (e) That if development of single family homes is being proposed on separate lots, as opposed to a clustered village concept that is a major objective of this Bylaw, exemplary site planning is demonstrated, and other determinations in § 125-35D, are met.
- **D. Design criteria**. In its consideration of an OSC-PRD, the Planning Board shall give particular attention to, and shall use as a basis for its decision, all of the following:

(1) Lots, streets, off-street parking, sidewalks, pathways and buildings which achieve the harmonious integration of the proposed development with surrounding properties.

- (2) Overall layout and design that achieves the relationship between the proposed development and the land under consideration.
- (3) Appropriately sized and configured open spaces for active or passive recreation, and where possible, links to adjoining common open space areas.
- (4) Protection of natural features such as streams, mature trees or clusters of trees, rock outcrops, bluffs, slopes, high points, views, vistas, and historic or archeological features.
- (5) Provision of buffer areas, composed of existing vegetation, to surround building groupings and building envelope areas, to discourage site clearing and encourage preservation of existing land cover and mature vegetation.
- (6) Provision of accessibility to open spaces for all, consistent with Massachusetts Architectural Access Board 521 CMR Accessibility Guidelines.
- (7) Use of open spaces for preserving, enhancing, or providing scenic vistas; preservation and protection of historic resources.
- (8) Adequacy of provisions for public safety, protection from fire and flood, and maintenance of public facilities, streets, utilities, and open space.
- (9) Consistent with the Town of Harvard Climate Action Plan, with sufficient conservation and sustainability in the design of the development.
- E. Design quality. Project design for an OSC-PRD shall be reviewed by the Planning Board with input from Town officials, any review consultant(s), and others as appropriate. This section is to be interpreted as guidelines to be applied flexibly by the Planning Board as appropriate to the situation under review, including factors such as foundation and soil characteristics and other extraordinary site constraints. While these guidelines apply to all site improvements and buildings and structures, it is not the intent of this section to prescribe or proscribe use of materials or methods of construction regulated by the state building code, but rather to enhance the appearance of the built environment within an OSC-PRD.
  - (1) **Building and structure placement**. The placement of buildings and structures in an OSC-PRD should:
    - (a) Provide for maximum buffering of buildings and structures to adjoining properties either within the proposed OSC-PRD or to adjacent land

- uses. Such buffering includes, but is not limited to: landscaping, screening materials, natural barriers, fencing, and related measures.
- (b) Preserve attractive views from major vantage points, especially from major thoroughfares and residential neighborhoods.
- (c) Avoid regular spacings and building placements that will be viewed as continuous walls from important vantage points, which may be identified in an OSC-PRD pre-application conference.
- (d) Avoid the placement of structures, common area facilities, and private space related to individual units in a manner that eclipses views or access to open space areas described in § 125-35K.
- (e) Ensure that an appropriate number of units are designed to be fully accessible consistent with Massachusetts Architectural Access Board 521 CMR Accessibility Guidelines. If greater than 4 but fewer than 10 units, one unit must be accessible. If greater than 10 and fewer than 19, two units must be made accessible. For more than 20 units, 10% must be made accessible.
- (2) **Building massing/articulation**. The massing/articulation of buildings should:
  - (a) Avoid unbroken building facades longer than 50 feet.
  - (b) Provide human-scale features, especially for pedestrians and at lower levels.
  - (c) Avoid unarticulated and monotonous building facades and window placement.
- (3) **Building appearance and treatment**. To the extent not inconsistent with or pre-empted by the state building code, the following should be considered as applicable:
  - (a) Materials and building treatments that reduce the visibility of the buildings from distant vantage points, and that are compatible with backgrounds and surroundings.
  - (b) Materials and colors compatible with other quality buildings of similar scale in the vicinity.
  - (c) Green building technologies and materials, wherever possible, to minimize adverse environmental impacts.
- (4) Roofline articulation. The design of buildings should:

(a) Provide a variety of building heights and varied roofline articulation that stresses New England vernacular architecture.

- (b) Locate taller buildings away from major streets, abutting and off-site single-family residential areas and homes.
- (5) Landscaping. Landscaping criteria are as follows:
  - (a) All open areas, exclusive of areas to remain in an existing natural state within an OSC-PRD, should be landscaped in an appropriate manner, utilizing both natural and man-made materials such as indigenous grasses, trees, shrubs, and other appropriate elements.
  - (b) Deciduous trees should be placed along new and existing streets and ways. Outdoor lighting should be considered in the landscaping plan, and should be designed to complement both man-made and natural elements of the OSC-PRD and adjacent areas.
  - (c) Intensive, high-quality landscaping or preservation of existing vegetation should be provided within the OSC-PRD where it abuts major streets, existing residential areas, and along internal drives.
  - (d) Preservation of existing vegetation or tree-lined areas should be maintained.
  - (e) Parking areas and lots should use landscaping and terracing to break up large areas of pavement and to enhance residential flavor and appearance; trees and shrubs should be used to the maximum extent feasible.
  - (f) Features such as shade trees, forest trees, and expansive planting areas should be preserved and/or introduced along external property boundaries and on the perimeter of the OSC-PRD itself, to buffer the site from adjoining parcels.
  - (g) Any lighting in the proposed development shall comply with Lighting Bylaw §125-40.
  - (h) Area should be designated for storage of plowed snow such that melting snow runoff will not result in undesired contamination or erosion
- **F. Utilities.** To the maximum extent feasible, all utilities should be located underground.
- **G. Signage**. All signs shall comply with Protective Bylaw § 125-41. However, within the development, signs, not to exceed two square-feet each, of a number and

location to be approved as part of the OSC-PRD, may be permitted for the sole purposes of orientation and direction, and of identifying common building spaces.

H. Base development density. The maximum number of dwelling units per acre permitted in an OSC-PRD shall not exceed two units per acre of land area, and in no event exceed the maximum number of lots or dwelling units obtainable under a conventional subdivision plan for the land area under consideration, except as provided in § 125-35I.

#### I. Development incentive.

- (1) The Planning Board may authorize an increase in lots or dwelling units up to a maximum of ten units per acre. Increased permissible density will be allocated as the following conditions are met:
  - (a) Additional Open Space Preservation
  - [1] The applicant proposes a significant increase in open space above 50%, and preserves significant natural resources.
  - [2] There is permanent preservation of land devoted or set aside for agricultural use or other unique preservation strategy, including preservation of historic structures or barns, or other special features of the built environment.

(If (a)[1] or (a)[2] above are found to be satisfied, in the opinion of Planning Board, it may authorize a 2 unit per acre increase over base density.)

- (b) The applicant proposes public improvements or amenities that result in substantial benefit to the Town and the general public, provided:
  - [1] There are significant improvements to the environmental quality or condition of the site and its surrounding areas, including a decrease in stormwater runoff from what would otherwise result from a conventional subdivision plan.
  - [2] There are provisions contributing to off-site public facilities or environmental improvements beyond those necessary to mitigate the impacts of the proposed development.

(If (b)[1] and (b)[2] above are found to be satisfied, in the opinion of Planning Board, it may authorize a 1.5 unit per acre increase over base density.)

(c) Housing units for senior citizens and persons aged 55 years and over housing is provided. Such units should conform to §125-57E, Age Appropriate Design. § 125-35

(If (c) above is found to be satisfied, in the opinion of Planning Board, it may authorize a 1.5 unit per acre increase over base density.)

- (d) The applicant sets aside 15% or more of lots or dwelling units on the site for Affordable Housing for purchase or rental by those with households of low or moderate incomes. Such units must count toward the Town's Subsidized Housing Inventory, and be in accordance with the provisions of 760 CMR 45.00, as may be amended. The Planning Board shall review and approve the actual percentage distribution of qualifying low versus moderate income units.
- (If (d) above is found to be satisfied, in the opinion of Planning Board, it may authorize a 2 unit per acre increase over base density.)
- (e) Units are designed to conform with Passive Haus Design standards.
- (if (e) above is found to be satisfied, in the opinion of the Planning Board, it may authorize a 3 unit per acre increase over base density).
- (f) The development incorporates at least five elements of environmentally conscious design including, but not limited to heat pump/geothermal climate controls, smart windows, solar panels, smart outlets, LED lighting, substantial use of pervious pavement, conservation-minded landscaping, and low-flow water fixtures.
- (If (f) above is found to be satisfied, in the opinion of Planning Board, it may authorize a 1.5 unit per acre increase over base density.)

Condition	Units per acre	Additional Units per acre
Base Density	2	
(a) Additional Open Space Preservation		2
(b) Substantial Benefit to Town		1.5
(c) Senior Housing		1.5
(d) Affordable Housing		2
(e) Passive Haus		3
(f) Environmentally Conscious		1.5
Maximum Density if all conditions met	10	

**J. Dimensional requirements**. The following provisions shall apply:

(1) The Planning Board may waive the minimum requirements for frontage and/or yard requirements that would normally be applicable to land within the AR District in order to achieve maximum open space area, and may permit more than one single or two-family dwelling be located on a lot in an OSC-PRD, as provided below.

- (2) The parcel proposed for development must have a minimum of 50 feet of frontage on a public way or private way which is open to the public.
- (3) The minimum distance between clusters of multiple unit dwellings, shall be 50 feet.
- (4) A minimum width of 150 feet of landscaped area shall be established and maintained between any property adjacent to the OSC-PRD and the nearest dwelling unit or units in the OSC. [Amended 4-2-2005 ATM by Art. 34]
- (5) The minimum setback from internal roads shall be 25 feet.
- (6) The maximum height of proposed buildings shall be 35 feet, and shall not exceed 3 stories.
- (7) Except as provided in this Bylaw, any lot in an OSC-PRD shall comply with any other dimensional requirements of the zoning district in which it is located.
- K. Common open space. A minimum of 50% of the OSC-PRD parcel shall be devoted to contiguous open space, completely devoid of any structure, parking, loading and unloading space, access ways thereto, or as private yards, patios, or gardens for the exclusive or principal use by residents of individual dwelling units. To the greatest extent possible, such open space shall be left in its undisturbed natural condition or shall be appropriate in size, shape, dimension, location, and character to assure its use as a conservation area, and where appropriate, a recreational area, and be a visual and natural amenity for the development and the Town. The common open space described herein is in substitution of and supersedes any other reference to common open space that may be described elsewhere in the Bylaw.
  - (1) Open space criteria. The following criteria define open space, and open space that is considered usable for outdoor recreation within an OSC-PRD parcel:
    - (a) No more than TBD% of common open space in an OSC-PRD shall be wetlands and wetland buffer as defined in MGL c131§40 and Harvard Wetland Protection Bylaw, Chapter 119 of Code of the Town of Harvard.

(b) Unless approved by the Planning Board, common open space shall not be considered usable if the slope of the finished grade exceeds 33%.

(c) No common open space shall be considered usable unless it is compact and contiguous and has no dimension of less than 50 feet.

#### L. Open space conveyance.

- (1) The common open space shall be conveyed in the following ways as approved by the Planning Board:
  - (a) To a corporation or trust comprising a homeowners association whose membership includes the owners of all lots or units contained in the development. The developer shall include in the deed to owners beneficial rights in said open land, and shall grant a perpetual open space restriction to the Town of Harvard or a non-profit corporation or organization over such land to insure that it be kept in an open state and not be built upon for residential use, or developed for accessory uses such as parking or roadways. Such restriction shall be in such form and substance as the Planning Board shall prescribe, and may contain such additional restrictions on development and use of the open space as the Planning Board may deem appropriate.
  - (b) To a non-profit organization, the principal purpose of which is the conservation of open space. The developer or non-profit organization shall grant an open space restriction as set forth above.
  - (c) To the Town for a park or open space use, subject to the approval of the Select Board, for management by the Park and Recreation Commission if a park, otherwise by the Conservation Commission, with a clause insuring that it be maintained as open space. [Amended 10-22-2018 STM by Art. 2]
- (2) **Multiple conveyance.** To provide flexibility, and when deemed in the public interest, the Planning Board may approve more than one organization to accept the open space conveyance, particularly when it is appropriate that a major portion of such land be conveyed to the Town or a non-profit conservation organization, and another portion of such land is more appropriately conveyed to an owners association.
- M. Passageways. Private roadways and common driveways shall be allowed in OSCPRD parcels. While roadway surface widths may be narrower than widths associated with a traditional subdivision, the durability of passageway surfaces

and subsurfaces must be comparable to those in a conventional subdivision. [Amended 4-2-2005 ATM by Art. 34]

- (1) **Criteria for passageways**. The following criteria shall guide the development of these passageways:
  - (a) Cleared widths for traveled ways (excluding on-street parking spaces and passing turnouts) shall not be more than 22 feet or less than 12 feet. A cleared height of not less than 16 feet above the entire passageway shall be established and maintained.
  - (b) Drainage and surface runoff from all passageways must be suitably accommodated by an approved drainage system, using best management practices.
  - (c) All OSC-PRD plans shall specify that such passageways will not be dedicated to the Town, but are to remain private ways; all deeds or other instruments conveying any portion of land or structure in an OSC-PRD containing such a passageway(s), shall specify that such passage way(s) are and shall remain private way(s);
- N. Site improvements. Site improvements specific to an OSC-PRD are listed below. To assist the Planning Board's evaluation of site changes and improvements from any OSC-PRD plan, the applicant shall submit said plan to the Town's Conservation Commission and Board of Health for review and recommendations to the Planning Board.
  - (1) Water supply. The development shall be served by a single water supply system, unless there are site-layout driven mitigating conditions approved by the Planning Board. Any water supply for such a development must be compliant with MassDEP's well guidelines. These guidelines require a public water supply well if the well services more than 24 people. The applicant should be prepared to meet those requirements in the initial plan submittal.
  - (2) **Sewage disposal.** Privately owned and maintained on-site sewage disposal or treatment systems may be approved to serve buildings and lots in an OSCPRD, if owned, maintained, operated, and monitored by a residents association, notwithstanding the provisions of § 125-32D of this Bylaw, provided that the owners provide evidence that a qualified professional has been hired to maintain the treatment system, and provided such treatment facility or system is approved by the Board of Health and in compliance with the requirements of Title 5, 310 CMR 15.00, or approved in accordance with the requirements of 314 CMR 5.00 (the Ground Water Discharge Permit Program). An approved system may be located on land owned in common by the owners of the building lots or residential units within the development.

(3) **Parking**. Unless otherwise approved by the Planning Board, a maximum of 1.5 off-street parking spaces shall be provided for each unit, exclusive of spaces within garages. The Planning Board may also approve, based upon the nature of the development proposed and exclusive of the 1.5 parking space ratio provided, areas for visitor parking.

- (4) **Storm runoff control**. The applicant shall demonstrate that, as compared with the situation that would exist on the site without the development, no phase of the proposed OSC-PRD will result in an increase in the peak rate of storm runoff at the parcel boundary for the OSC-PRD as a whole for the 25-, 50- and 100-year design storms, and that there will be no net loss in flood storage capacity for the 100-year design storm. In making such determinations, any state or local orders or requirements of the Wetlands Protection Act or the Town's Wetlands Protection Bylaw² shall be assumed in the calculations of runoff and flood storage without the OSC-PRD, but alternative forms of development shall not be assumed.
- (5) On-site runoff and erosion control. The applicant shall demonstrate that any adverse existing off-site runoff and erosion conditions or off-site runoff and erosion conditions which would result from the development of the OSC-PRD, are fully identified and that workable and acceptable mitigation measures are proposed as part of the submission of a final plan, consistent with .§ 125-58 herein;
- O. Residents association. In order to ensure that common open space and common facilities within the development will be properly maintained, each OSC-PRD shall have a residents association, which may be in the form of a corporation, non-profit organization, or trust, established in accordance with appropriate State law by a suitable legal instrument or instruments properly recorded with the Worcester County Registry of Deeds or registered in the Worcester County Registry District of the Land Court. As part of the final OSC-PRD site plan submission, the applicant shall supply to the Planning Board copies of such proposed instruments, which shall at a minimum provide the information required by said OSC-PRD submission requirements, § 125-35L of this Bylaw, and Site Plan Rules and Regulations in effect at the time of final submission.
  - (1) Responsibilities of the residents association. Said legal instruments pertaining to the residents association shall specify that the residents association shall be solely responsible for all related improvements, and all costs associated with the operation of the development, including:
    - (a) Roadway maintenance.
    - (b) Snow-plowing.

<sup>&</sup>lt;sup>2</sup> Editor's Note: See Ch. 119, Wetlands Protection.

- (c) Maintenance of street lighting and on-site improvements and utilities.
- P. Amendments without public hearing. Following the granting of a special permit pursuant to this Section, the Planning Board may, upon application and for good cause shown, without public hearing, amend the OSC-PRD plan solely to make changes in lot lines shown on the plan, which lot lines are not part of the perimeter of the site, or other minor engineering changes, provided, however, that no such amendment shall:
  - (1) Grant any reduction in the size or change in location of the open space as provided in the permit;
  - (2) Grant any change in the layout of the ways as provided in the permit;
  - (3) Increase the number of lots or units as provided in the permit; or
  - (4) Decrease other dimensional requirements of any lot below the minima permitted by the approval of the initial site plan and special permit.
- Q. Amendments requiring public hearing. Any proposed change to an existing OSC-PRD special permit considered substantial by the Planning Board, shall require notice and a formal public hearing in accordance with Massachusetts General Laws Chapter 40A, Section 9, 11, and 15 and an amendment to the special permit decision made pursuant to this section.