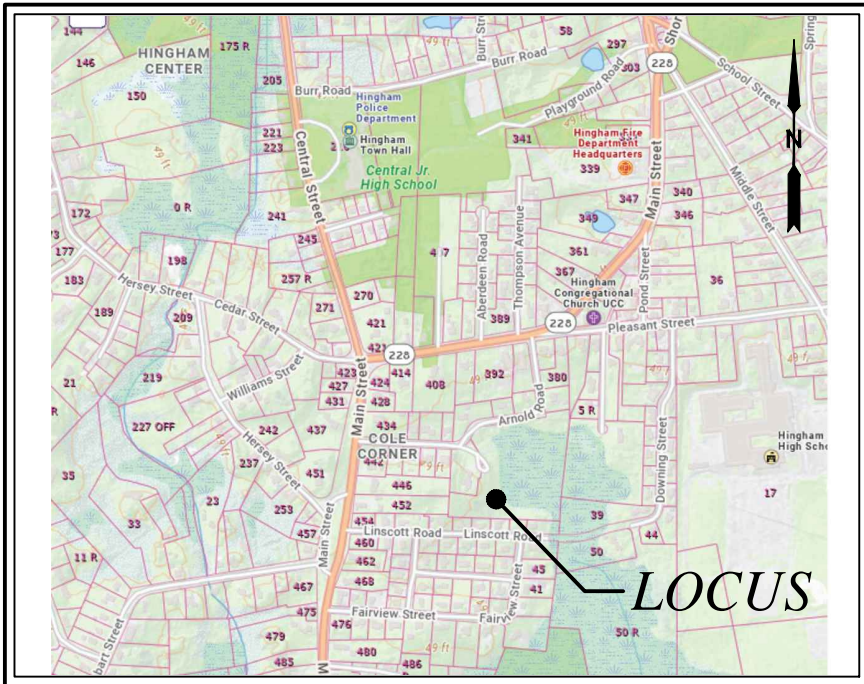




LOCATION MAP SCALE: 1" = 1000'±

RECORD OWNER:

ASSESSORS MAP 100 BLOCK 0 LOT 65
0 ARNOLD ROAD

30 ARNOLD RD LLC
41 BREWSTER RD
HINGHAM, MA 02043
DEED BOOK 57925 PAGE 110

NOTES:

- PLAN REFERENCES:
 - PLAN NO. 871 OF 2003
 - PLAN RECORDED IN PLAN BOOK 5, PAGE 165.
- TOPOGRAPHIC AND DETAIL INFORMATION SHOWN HEREON IS BASED UPON AN ON THE GROUND SURVEY PERFORMED BY CAVANARO CONSULTING DURING JUNE OF 2019.
- WETLAND RESOURCE AREAS SHOWN ON THIS PLAN WERE DELINEATED BY INDEPENDENT ENVIRONMENTAL CONSULTANTS, INC. PLYMOUTH MA DURING MAY OF 2023 AND FIELD LOCATED BY MERRILL ENGINEERS AND LAND SURVEYORS.
- SUBJECT SITE IS IN THE "RESIDENCE A" DISTRICT AS DEPICTED ON THE TOWN OF HINGHAM ZONING MAP.
- EXISTING UTILITIES, WHERE SHOWN, HAVE BEEN COMPILED BASED ON OBSERVED ABOVE GROUND EVIDENCE AND AVAILABLE RECORD PLANS AND ARE TO BE CONSIDERED APPROXIMATE. MERRILL ENGINEERS AND LAND SURVEYORS DOES NOT GUARANTEE THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN OR THAT ALL EXISTING UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN.
- EXISTING SEPTIC SYSTEM COMPONENTS SHOWN HEREON TAKEN FROM RECORD AS-BUILT PLAN ON FILE WITH THE TOWN OF HINGHAM BOARD OF HEALTH AND ARE SHOWN AS APPROXIMATE ONLY.

DATUM NOTE:

ELEVATIONS SHOWN ON THE PLAN ARE ON AN ASSUMED DATUM. TO CONVERT THE EXISTING ELEVATIONS TO NAVD83, SUBTRACT 64.06 FROM ASSUMED ELEVATION.

FLOOD NOTE:

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE X OF THE FLOOD INSURANCE RATE MAP, AS SHOWN ON COMMUNITY MAP No. 25023000821, WHICH BEARS AN EFFECTIVE DATE OF JULY 17, 2012, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONING REQUIREMENTS RESIDENCE DISTRICT "A"

AREA	REQUIRED	EXISTING	PROPOSED LOT 1
FRONTAGE	20,000 SF	261,360 SF	138,661 SF
BUILDING HEIGHT	125 FEET	456.39 FEET	126.00 FEET
	35 FEET	0 FEET	33.9± FEET

MINIMUM YARDS:

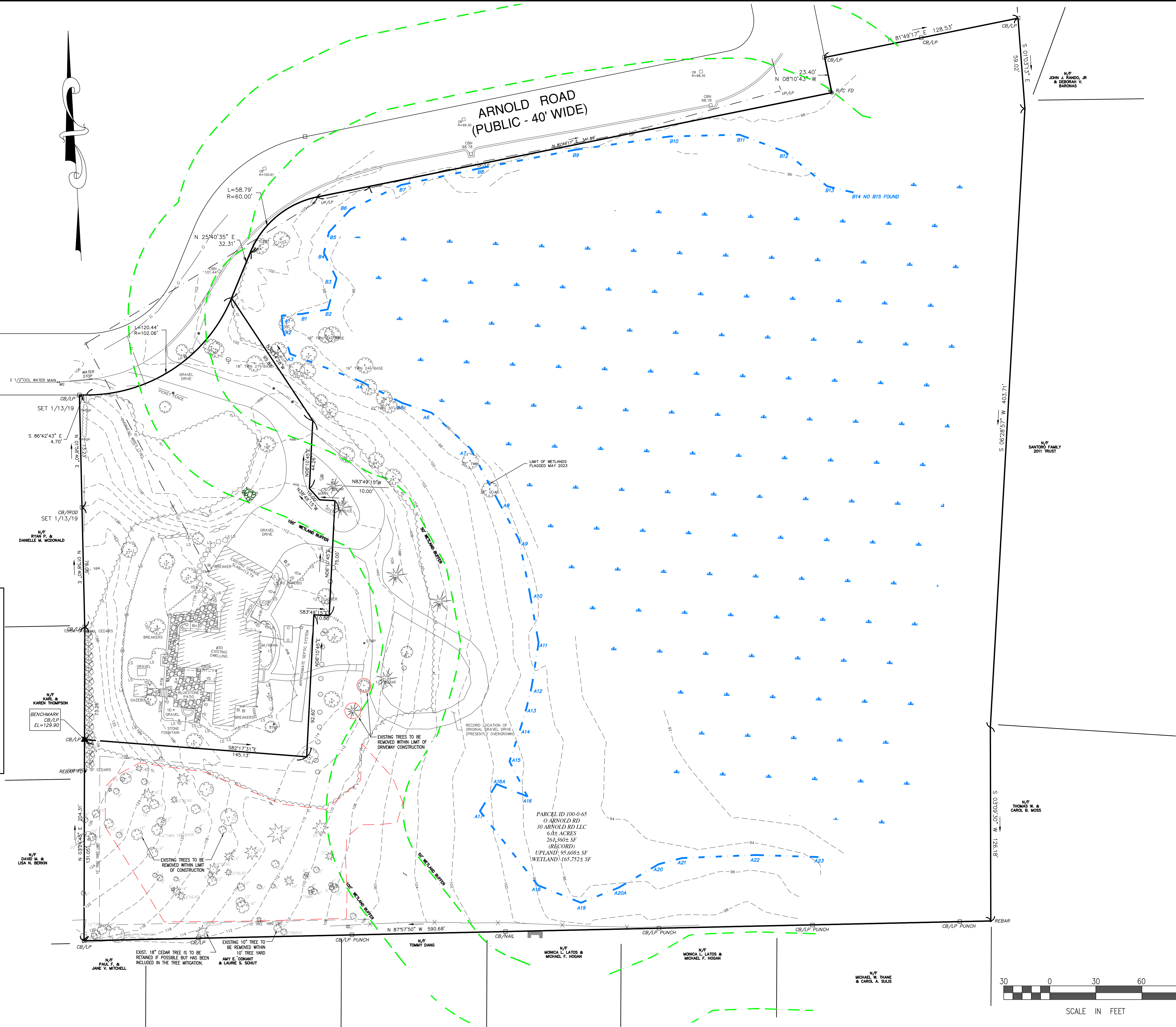
FRONT	25 FEET*	0 FEET	272.8 FEET
SIDE	15 FEET	0 FEET	36.0 FEET
REAR	15 FEET	0 FEET	17.5 FEET

PARKING SPACES	2/UNIT	0 SPACES	3 SPACES
----------------	--------	----------	----------

* IN ALL RESIDENCE DISTRICTS, THE FRONT SETBACK MAY BE AS NEAR THE STREET AS THE AVERAGE OF THE BUILDINGS OR STRUCTURES IN THE ADJOINING LOTS.
BUILDING INSPECTOR TO CONFIRM ALL SETBACKS.

LEGEND

DMH	○	DRAIN MANHOLE
AC	□	HVAC UNIT
LAMP	*	LAMP POST (PRIVATE)
MH	○	MANHOLE (UNKNOWN)
RHT	◇	ROOF HEIGHT
ROCK	◆	LARGE ROCK (BOULDER)
SIGN	+	SIGN
SLAB	×	SLAB ELEVATION
SMH	○	SEWER MANHOLE
TH	+	THRESHOLD
TOP	+	TOP OF FOUNDATION
○	○	DECIDUOUS TREE
★	★	CONIFEROUS TREE
U	U	UTILITY POLE
WELL	●	WATER WELL
○	○	POST AND RAIL FENCE
X	X	CHAIN LINK FENCE
- - -	- - -	CONTOUR LINE
LS	LS	LANDSCAPE AREA
- - -	- - -	BUILDING OVERHANG
- - -	- - -	EDGE OF POND
- - -	- - -	GUARD RAIL
- - -	- - -	OVERHEAD WIRES
GTD	GTD	GRADE TO DRAIN
TW	TW	TOP OF WALL
BW	BW	BOTTOM OF WALL



merrillinc.com

REVISIONS:

COMMON DRIVEWAY UPDATE	6/17/24
BLDG FOOTPRINT UPDATE	5/14/24
MITIGATION UPDATE	5/8/24
MITIGATION	3/15/24
BLDG. LAYOUT	3/15/24
REVIEW COMMENTS	2/16/23
SP & SITE PLAN REVIEW	12/8/23
BOH REVIEW COMMENTS	8/31/23
SAS CHAMBER LAYOUT	8/3/23

DRAWN BY:

PAL

DESIGNED BY:

DK/PAL/DA

CHECKED BY:

DK/DA

SCALE:

AS NOTED

STAMP:



Merrill
Engineers and Land Surveyors

427 Columbia Road
Hanover, MA 02339
781-826-9200

40 Court Street, Ste 2A
Plymouth, MA 02360
508-746-6060

Marine Division:
26 Union Street
Plymouth, MA 02360
508-746-6060

448 N. Falmouth Hwy. Unit A
North Falmouth, MA 02556
508-563-2183

PROJECT #:

22-083.1

PROJECT:

SITE PLAN

0 ARNOLD ROAD
ASSESSOR'S
MAP 100 BLOCK 0 LOT 65
HINGHAM MASSACHUSETTS

CLIENT:

GERRY RANKIN
30 ARNOLD ROAD, LLC
41 BREWSTER ROAD
HINGHAM, MA 02043
(617)-799-0588

DRAWING PATH:

H:\22-083.1\DESIGN\22-083.1 SP

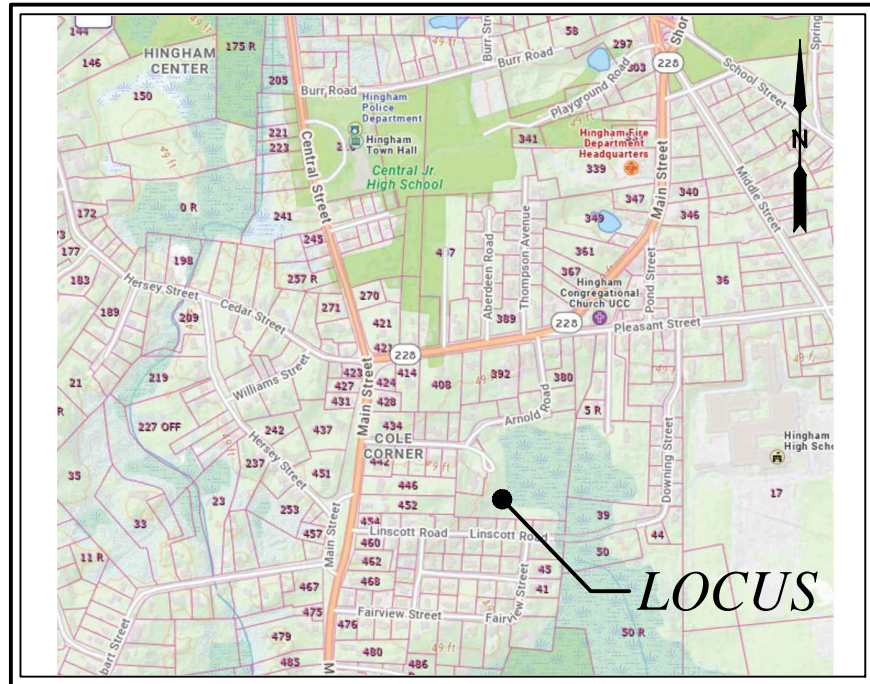
DATE:

JULY 31, 2023

EXISTING CONDITIONS PLAN

SHEET 1 of 6

© Merrill Corporation



LOCATION MAP SCALE: 1" = 1000'±

RECORD OWNER:

ASSESSORS MAP 100 BLOCK 0 LOT 65
0 ARNOLD ROAD

30 ARNOLD RD LLC
41 BREWSTER RD
HINGHAM, MA 02043
DEED BOOK 57925 PAGE 110

NOTES:

1. PLAN REFERENCES:
 - 1.1. PLAN NO. 871 OF 2003
 2. PLAN RECORDED IN PLAN BOOK 5, PAGE 165.
2. TOPOGRAPHIC AND DETAIL INFORMATION SHOWN HEREON IS BASED UPON AN ON THE GROUND SURVEY PERFORMED BY CAVANARO CONSULTING DURING JUNE OF 2019.
3. WETLAND RESOURCE AREAS SHOWN ON THIS PLAN WERE DELINEATED BY INDEPENDENT ENVIRONMENTAL CONSULTANTS, INC. PLYMOUTH MA DURING MAY OF 2023 AND FIELD LOCATED BY MERRILL ENGINEERS AND LAND SURVEYORS.
4. SUBJECT SITE IS IN THE "RESIDENCE A" DISTRICT AS DEPICTED ON THE TOWN OF HINGHAM ZONING MAP.
5. EXISTING UTILITIES, WHERE SHOWN, HAVE BEEN COMPILED BASED ON OBSERVED ABOVE GROUND EVIDENCE AND AVAILABLE RECORD PLANS AND ARE TO BE CONSIDERED APPROXIMATE. MERRILL ENGINEERS AND LAND SURVEYORS DOES NOT GUARANTEE THE LOCATION OF THE UNDERGROUND UTILITIES SHOWN OR THAT ALL EXISTING UTILITIES AND/OR SUBSURFACE STRUCTURES ARE SHOWN.
6. EXISTING SEPTIC SYSTEM COMPONENTS SHOWN HEREON TAKEN FROM RECORD AS-BUILT PLAN ON FILE WITH THE TOWN OF HINGHAM BOARD OF HEALTH AND ARE SHOWN AS APPROXIMATE ONLY.

DATUM NOTE:

ELEVATIONS SHOWN ON THE PLAN ARE ON AN ASSUMED DATUM. TO CONVERT THE EXISTING ELEVATIONS TO NAVD83, SUBTRACT 64.06 FROM ASSUMED ELEVATION.

FLOOD NOTE:

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS LOCATED IN ZONE X OF THE FLOOD INSURANCE RATE MAP, AS SHOWN ON COMMUNITY MAP NO. 25023000821, WHICH BEARS AN EFFECTIVE DATE OF JULY 17, 2012, AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONING REQUIREMENTS RESIDENCE DISTRICT "A"			
	REQUIRED	EXISTING	PROPOSED
AREA	20,000 SF	261,360 SF	138,661 SF
FRONTAGE	125 FEET	456.39 FEET	126.00 FEET
BUILDING HEIGHT	35 FEET	0 FEET	33.9± FEET

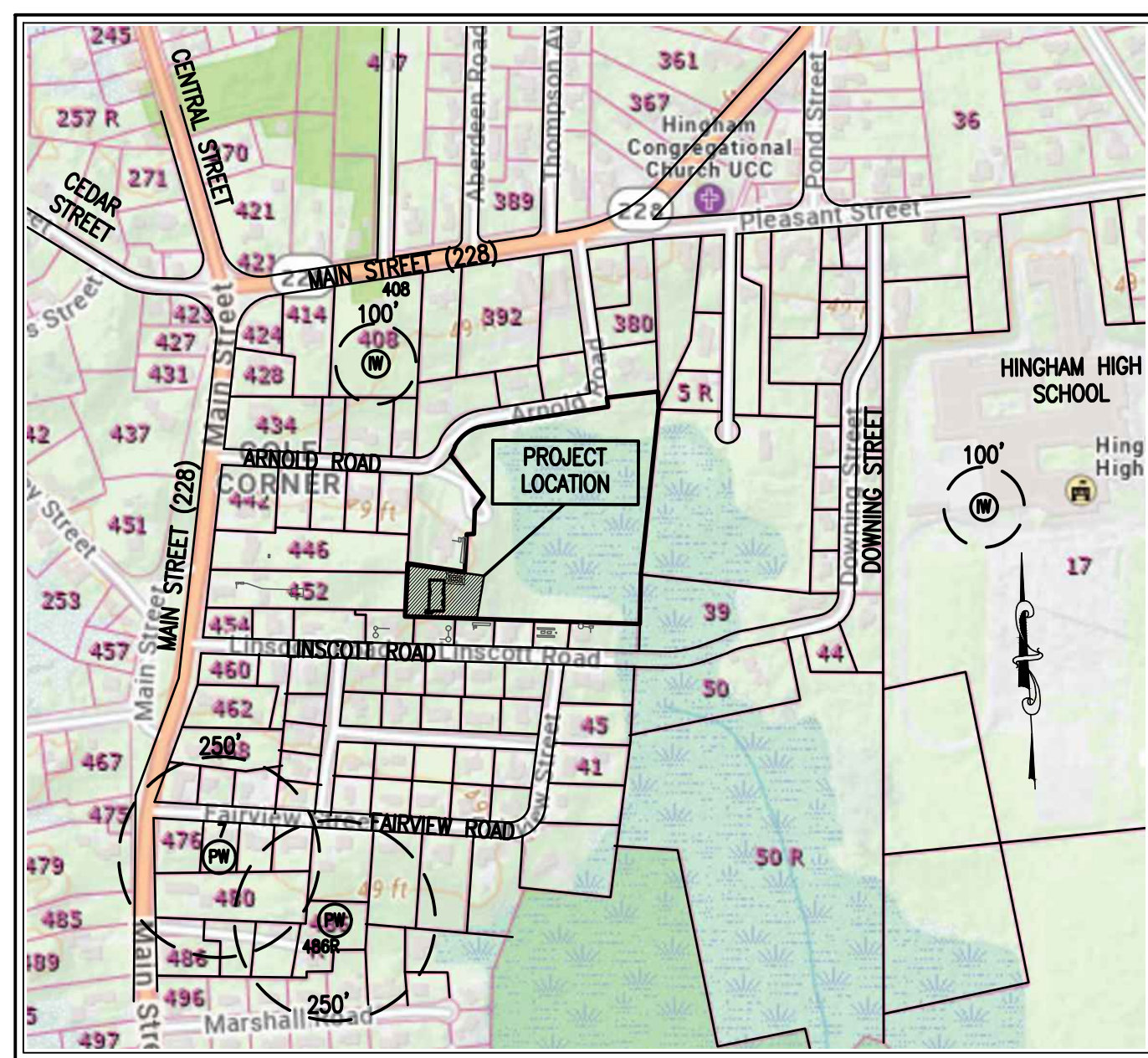
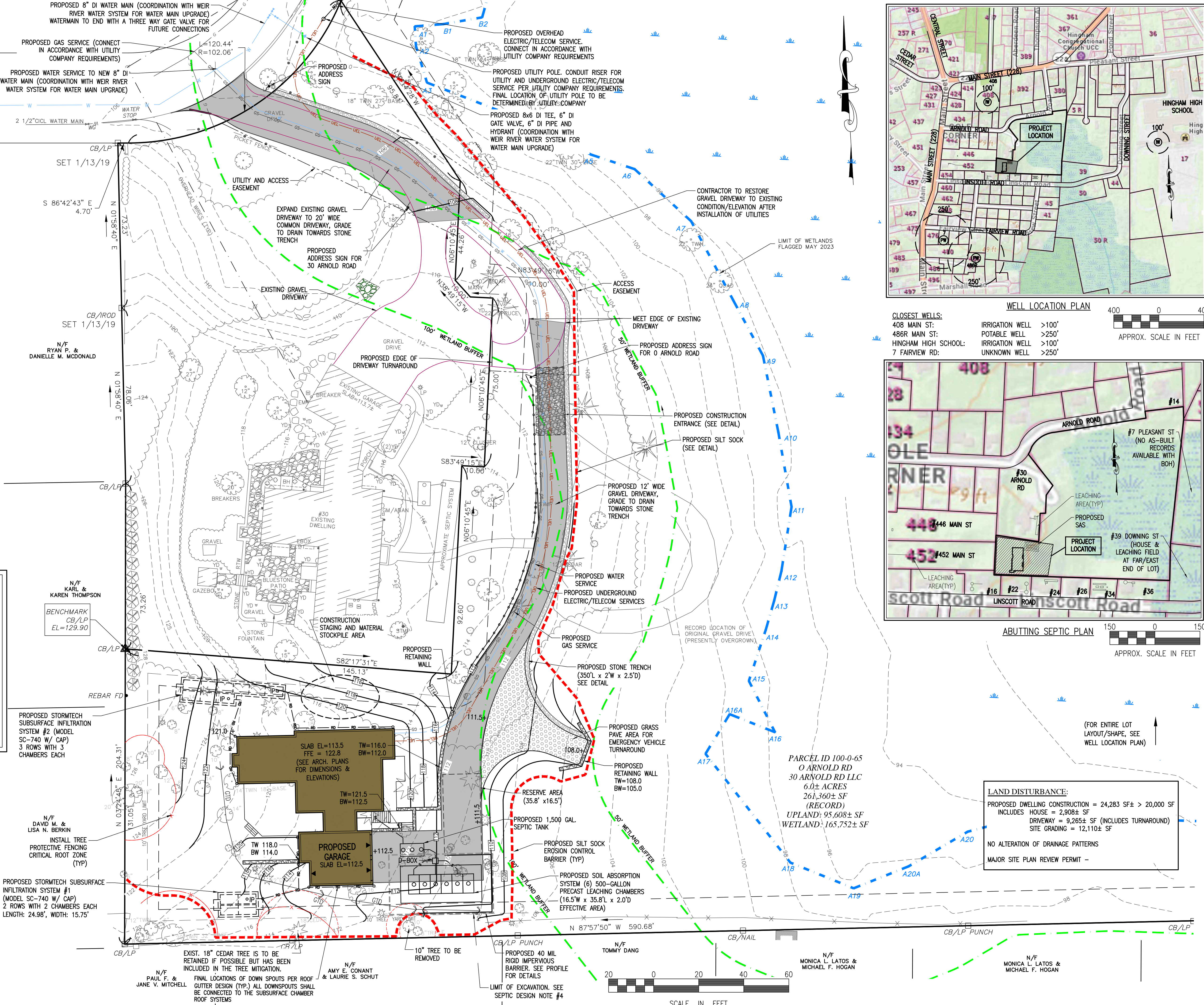
MINIMUM YARDS:			
FRONT	25 FEET*	0 FEET	272.8 FEET
SIDE	15 FEET	0 FEET	29.2 FEET
REAR	15 FEET	0 FEET	16.0 FEET

PARKING SPACES	2/UNIT	0 SPACES	3 SPACES
----------------	--------	----------	----------

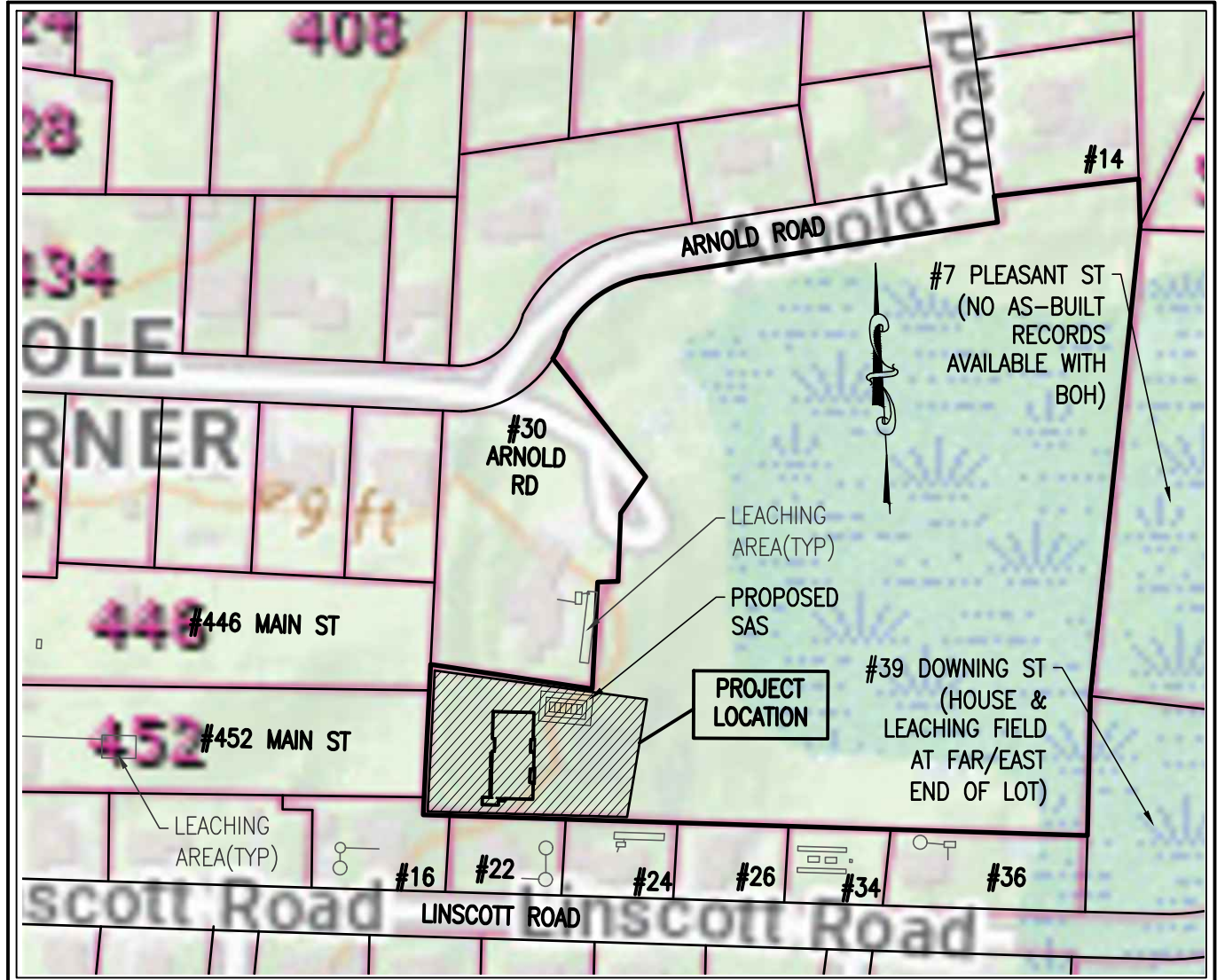
* IN ALL RESIDENCE DISTRICTS, THE FRONT SETBACK MAY BE AS NEAR THE STREET AS THE AVERAGE OF THE BUILDINGS OR STRUCTURES IN THE ADJOINING LOTS.
BUILDING INSPECTOR TO CONFIRM ALL SETBACKS.

LEGEND

DMH	○	DRAIN MANHOLE
AC	■	HVAC UNIT
LAMP	■	LAMP POST (PRIVATE)
MH	○	MANHOLE (UNKNOWN)
RHT	◇	ROOF HEIGHT
ROCK	■	LARGE ROCK (BOULDER)
SIGN	→	SIGN
SLAB	×	SLAB ELEVATION
SMH	○	SEWER MANHOLE
TH	+	THRESHOLD
TOP	+	TOP OF FOUNDATION
CD	○	DECIDUOUS TREE
CF	○	CONIFEROUS TREE
UP	○	UTILITY POLE
WELL	●	WATER WELL
POST AND RAIL FENCE	—	
CHAIN LINK FENCE	—	
CONTOUR LINE	—	
LANDSCAPE AREA	—	
BUILDING OVERHANG	—	
EDGE OF POND	—	
GUARD RAIL	—	
OVERHEAD WIRS	—	
GRADE TO DRAIN	—	
TOP OF WALL	—	
BOTTOM OF WALL	—	



CLOSEST WELLS:		
408 MAIN ST:	IRRIGATION WELL	>100'
486R MAIN ST:	POTABLE WELL	>250'
HINGHAM HIGH SCHOOL:	IRRIGATION WELL	>100'
7 FAIRVIEW RD:	UNKNOWN WELL	>250'



ABUTTING SEPTIC PLAN		
150	0	150
APPROX. SCALE IN FEET		

(FOR ENTIRE LOT LAYOUT/SHAPE, SEE WELL LOCATION PLAN)

PARCEL ID 100-0-65
0 ARNOLD RD
30 ARNOLD RD LLC
6.0± ACRES
261,360± SF (RECORD)
UPLAND: 95,608± SF
WETLAND: 165,752± SF

PROPOSED DWELLING CONSTRUCTION = 24,283 SF ± > 20,000 SF
INCLUDES HOUSE = 2,908± SF
DRIVEWAY = 9,265± SF (INCLUDES TURNAROUND)
SITE GRADING = 12,110± SF

NO ALTERATION OF DRAINAGE PATTERNS
MAJOR SITE PLAN REVIEW PERMIT -

LAND DISTURBANCE:
PROPOSED DWELLING CONSTRUCTION = 24,283 SF ± > 20,000 SF
INCLUDES HOUSE = 2,908± SF
DRIVEWAY = 9,265± SF (INCLUDES TURNAROUND)
SITE GRADING = 12,110± SF

merrillinc.com

REVISIONS:

COMMON DRIVEWAY UPDATE	6/17/24
BLDG FOOTPRINT UPDATE	5/14/24
MITIGATION UPDATE	5/8/24
MITIGATION	3/15/24
BLDG. LAYOUT	3/15/24
REVIEW COMMENTS	2/16/23
SP & SITE PLAN REVIEW	12/8/23
BOH REVIEW COMMENTS	8/31/23
SAS CHAMBER LAYOUT	8/3/23

DRAWN BY:

PAL

DESIGNED BY:

DK/PAL/DA

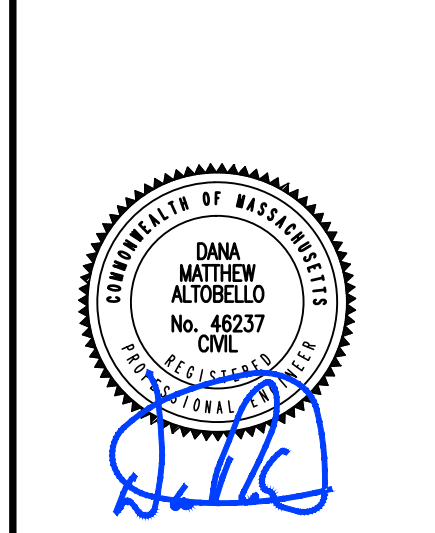
CHECKED BY:

DK/DA

SCALE:

AS NOTED

STAMP:



427 Columbia Road
Hanover, MA 02339
781-826-9200

40 Court Street, Ste 2A
Plymouth, MA 02360
508-746-6060

Marine Division:
26 Union Street
Plymouth, MA 02360
508-746-6060

448 N. Falmouth Hwy. Unit A
North Falmouth, MA 02556
508-563-2183

PROJECT #:

22-083.1

PROJECT:

SITE PLAN

0 ARNOLD ROAD
ASSESSOR'S
MAP 100 BLOCK 0 LOT 65
HINGHAM MASSACHUSETTS

CLIENT:
GERRY RANKIN
30 ARNOLD ROAD, LLC
41 BREWSTER ROAD
HINGHAM, MA 02043
(617)-799-0588

DRAWING PATH:
H:\22-083.1\DESIGN\22-083.1 SP
6-16-24.DWG

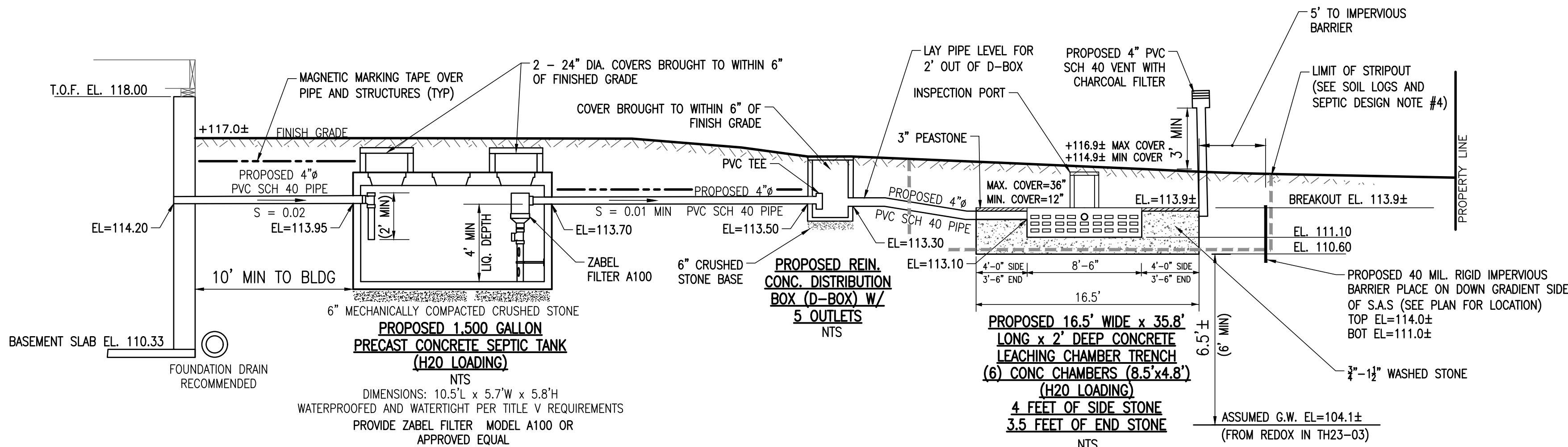
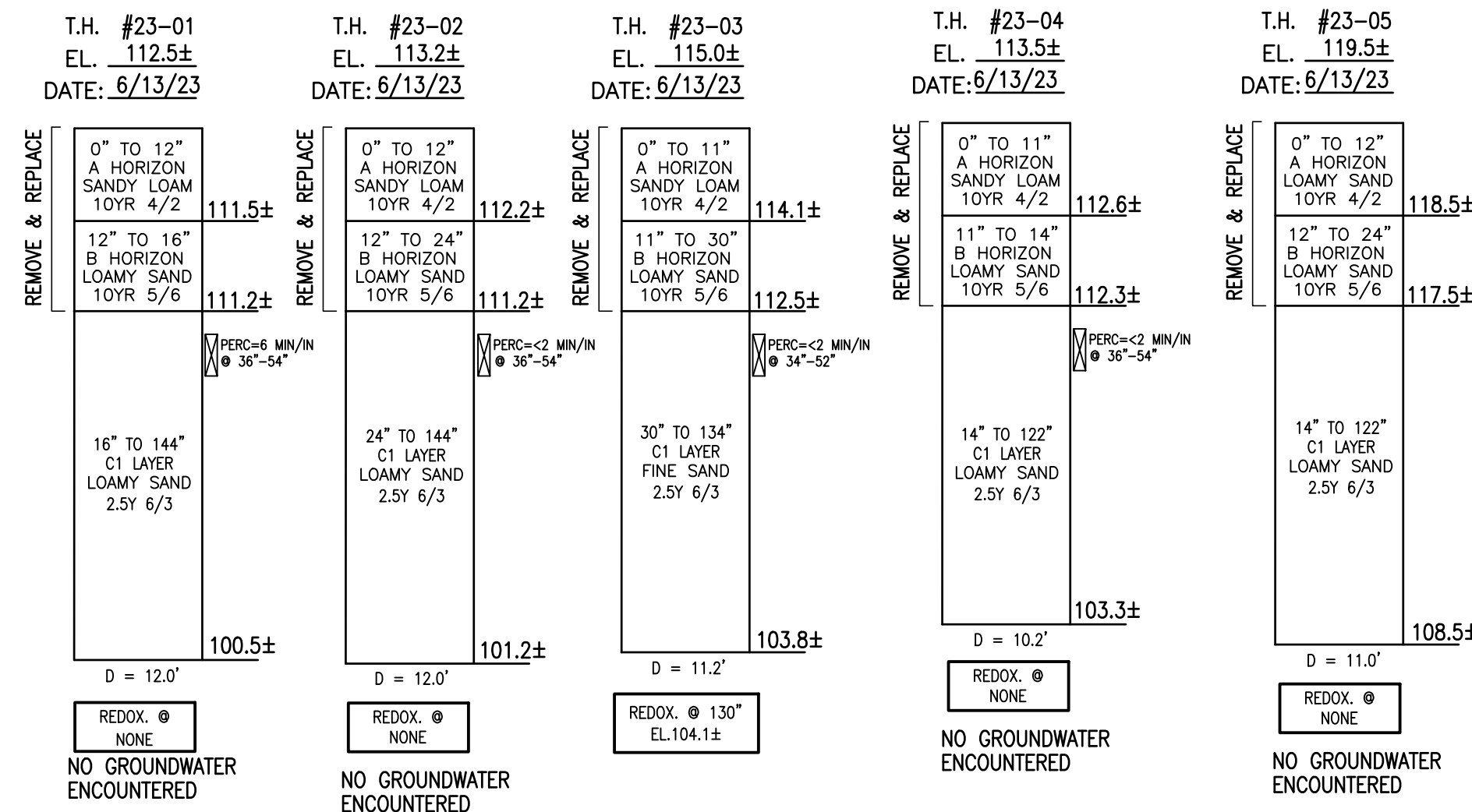
DATE:

JULY 31, 2023

SITE/SEPTIC DESIGN PLAN

SOIL LOGS

PERFORMED BY: PAUL LOUDERBACK SE#14618 (MERRILL ENGINEERS)
WITNESSED BY: PAT BRENNON (HINGHAM B.O.H. CONSULTANT)
DATE: JUNE 13, 2023



TREE MITIGATION CALCULATIONS

(REQUIRED MITIGATION PER HINGHAM ZONING BY-LAW SECTION I-6.6.(ii))

- A TOTAL OF 2 TREES WITHIN PROPERTIES TREE YARD WILL BE AFFECTED BY PROPOSED WORK. THE TREES HAVE RESECTIVE DIAMETER BREAST HEIGHT (DBH) CALIPER MEASUREMENTS OF: 18" AND 20". (18" x 20" = 38")
- REQUIRED MITIGATION: FOR EVERY ONE (1) INCH OF PROTECTED TREE CALIPER DISRUPTED, 0.5 INCH OF NEW TREE PLANTING MITIGATION MUST BE DONE. (38"/2 = 19" DBH CALIPER MITIGATION)
- PROPOSED TREES MUST HAVE A 3" MINIMUM CALIPER. (19"/(3"/TREE) = 7 TOTAL TREES

SEPTIC DESIGN (NOT DESIGNED FOR GARBAGE GRINDER)

- DESIGN DAILY FLOW: 310 CMR 15.203 (1); SYSTEM SEWAGE FLOW DESIGN CRITERIA
- DESIGN SEPTIC TANK (310 CMR 15.223 TO 15.228)
- DESIGN SOIL ABSORPTION SYSTEM
- EXCAVATION NOTE

SEPTIC CONSTRUCTION NOTES

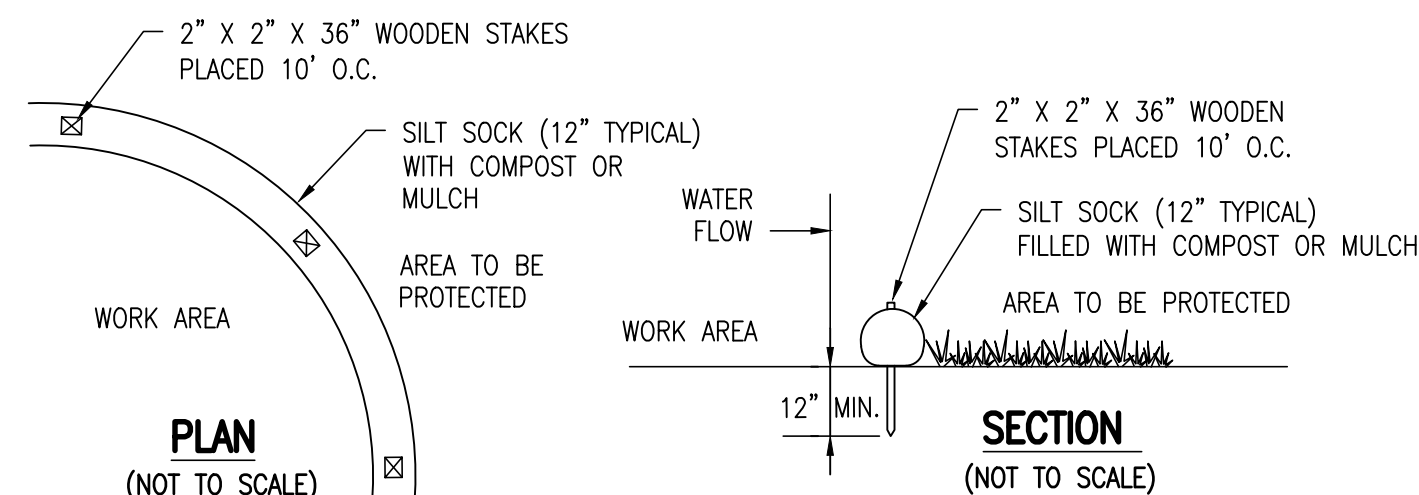
- CALL DIG SAFE 1-888-344-7233 AT LEAST 3 DAYS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO COMMENCEMENT OF WORK. THE BOARD OF HEALTH & MERRILL TO BE NOTIFIED OF ANY INCONSISTENCIES NOTED IN THE FIELD.
- THE INSTALLATION OF THE SEPTIC SYSTEM MUST BE PERFORMED BY A LICENSED CONTRACTOR THAT HAS A WORKING KNOWLEDGE OF THE STATE ENVIRONMENTAL CODE TITLE V AND THE LOCAL BOARD OF HEALTH REGULATIONS. THE CONTRACTOR IS REFERRED TO TITLE V AND THE LOCAL REGULATIONS FOR ANY REQUIREMENTS THAT IS NOT SPECIFICALLY MENTIONED ON THE PLANS.
- NO CHANGES ARE TO BE MADE IN THE FIELD WITHOUT THE APPROVAL OF THE BOARD OF HEALTH AND MERRILL.
- CONTRACTOR TO CONFIRM GROUNDWATER ELEVATION AT FOUNDATION PRIOR TO CONSTRUCTION.
- PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL SECURE ALL NECESSARY STATE, MUNICIPAL AND UTILITY PERMITS AND VERIFY THE PROPOSED LOCATION OF UTILITIES WITH UTILITY COMPANIES.
- ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.
- ALL FILL USED ON THIS SITE WILL BE CLEAN GRANULAR FILL.
- ALL TREE STUMPS & DEBRIS SHALL BE DISPOSED OF OFF SITE AT AN APPROVED FACILITY. ALL TREES WITHIN 5' OVERDIG AREA AND SIDE SLOPES SHALL BE REMOVED.
- MERRILL RECOMMENDS PROPERLY DESIGNED FOUNDATION DRAINS, BY OTHERS, FOR EVERY STRUCTURE WITH A BASEMENT.
- THE TOP OF ALL SYSTEM COMPONENTS, INCLUDING THE SEPTIC TANK, DISTRIBUTION BOX OR DOSING CHAMBER AND SOIL ABSORPTION SYSTEM, SHALL BE INSTALLED NO MORE THAN 36" BELOW FINISH GRADE. THE ENTIRE STRUCTURE MAY REQUIRE A RISER OVER THE INVERTS TO REDUCE THE DEPTH OF COVER OVER THE TOP OF THE CHAMBER.
- ALL SYSTEM COMPONENTS SHALL BE MARKED WITH MAGNETIC TAPE OR A COMPARABLE MEANS IN ORDER TO LOCATE THEM ONCE BURIED.
- ALL AREAS DISTURBED BY CONSTRUCTION AND NOT TO BE PAVED OR OTHERWISE TREATED AS NOTED ON PLAN, SHALL BE GRADED WITH 4" OF SCREENED LOAM AND SEEDED.
- SET SANITARY COVERS SO FINISHED ADJACENT GRADE ARE LOWER TO ENSURE SURFACE RUNOFF IS NOT SHEDDING OVER COVERS, SLOPE GROUND TO 2% MIN.
- THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE GRADING AROUND THE FOUNDATION MEETS THE REQUIREMENTS OF THE MASS. STATE BUILDING CODE AND THE INTERNATIONAL RESIDENTIAL CODE (IRC 2009) SECTION R401.3. THE GRADE SHALL DROP A MINIMUM OF 6" WITHIN 10 FEET OF THE FOUNDATION AS REQUIRED TO ENSURE WATER DRAINS AWAY FROM THE FOUNDATION. ADDITIONALLY, THE MINIMUM DISTANCE FROM FINISH GRADE TO ANY WOOD FRAMING/CONSTRUCTION SHALL MEET THE MINIMUM REQUIREMENTS OF THE MASS. STATE BUILDING CODE AND THE IRC 2009.
- IT IS THE CONTRACTOR'S RESPONSIBILITY TO ENSURE THAT AN ACCURATE BENCHMARK IS SET ON THE SITE PRIOR TO CONSTRUCTION.
- A FINAL GRADING INSPECTION IS NEEDED BY THE ENGINEER AND SHALL BE SHOWN ON THE AS-BUILT PLAN.
- THERE ARE NO KNOWN WELLS WITHIN 250 FEET OF THE SAS.
- THERE ARE NO KNOWN PUBLIC WATER SUPPLY WELLS WITHIN 400 FEET OF THE SAS.
- THERE ARE NO EXISTING FOUNDATIONS WITHIN 25 FEET OF THE SAS UNLESS OTHERWISE NOTED.
- THERE ARE NO KNOWN PERENNIAL STREAMS OR SURFACE WATER SUPPLY WITHIN 200 FEET OF THE SAS.
- THERE ARE NO KNOWN PROTECTED WATER BODIES WITHIN 150 FEET OF THE SAS.
- THERE ARE NO KNOWN WETLANDS WITHIN 100 FEET OF THE SAS.
- THERE ARE NO KNOWN SURFACE OR SUBSURFACE DRAINS WITHIN 50 FEET OF THE SAS.
- THERE ARE NO KNOWN SURFACE OR SUBSURFACE DRAINS WHICH DISCHARGE INTO A SURFACE WATER SUPPLY WITH 175 FEET OF THE SAS.
- THERE ARE NO KNOWN SURFACE OR SUBSURFACE DRAINS WHICH DISCHARGE INTO A PROTECTED WATER BODY WITH 125 FEET OF THE SAS.
- THE SITE DOES NOT FALL WITHIN AN APPROVED ZONE II.
- THE PROPOSED DESIGN DOES NOT REQUIRE A VARIANCE OR LOCAL UPGRADE APPROVAL FROM TITLE 5 OR LOCAL REGULATIONS.

SEPTIC SYSTEM INSPECTIONS

- THE CONTRACTOR WILL PROVIDE A 48 HOUR ADVANCED NOTICE TO THE BOARD OF HEALTH AND MERRILL ENGINEERS AND LAND SURVEYORS PRIOR TO NEEDING INSPECTIONS.
- AN EXCAVATION INSPECTION FOR BOTH FIELD AND SEPTIC TANKS IS REQUIRED BY THE BOARD OF HEALTH AND ENGINEER PRIOR TO PROCEEDING WITH THE INSTALLATION.
- NOTIFY BOARD OF HEALTH AND MERRILL CORPORATION PRIOR TO BACKFILLING OF SYSTEM. THE CONTRACTOR SHALL NOT BACKFILL ANY COMPONENT OF THE SYSTEM UNTIL MERRILL CORPORATION HAS VERIFIED THE SYSTEM LOCATION & ELEVATION.
- NOTIFY THE BOARD OF HEALTH AND MERRILL CORPORATION AFTER THE SEPTIC SYSTEM HAS BEEN BACKFILLED FOR FINAL GRADING INSPECTION.

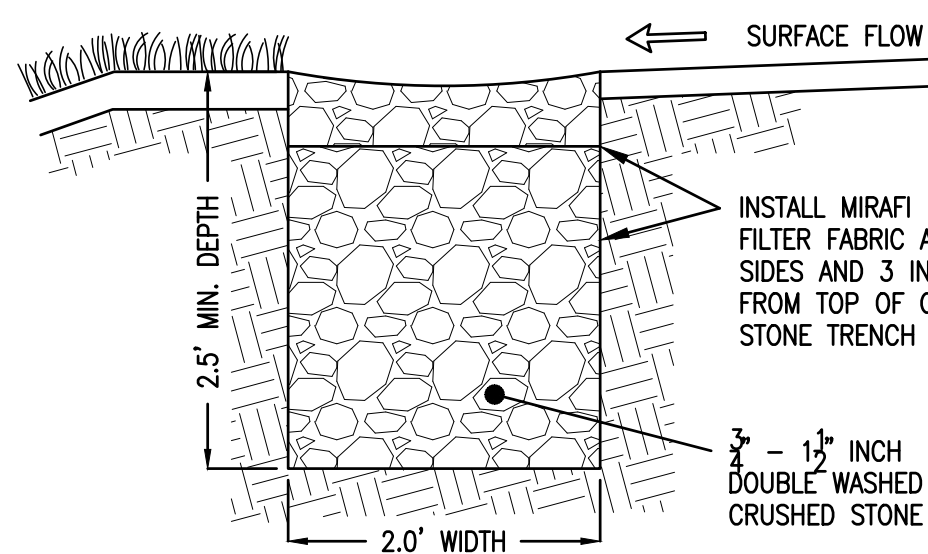
SEPTIC MAINTENANCE NOTES

- EVERY SEPTIC TANK OR TIGHT TANK SHALL BE PUMPED WHENEVER NECESSARY TO ENSURE PROPER FUNCTIONING OF THE SYSTEM. PUMPING IS REQUIRED WHENEVER THE TOP OF THE SLUDGE OR SOLIDS LAYER IS WITHIN 12 INCHES OR LESS OF THE BOTTOM OF THE OUTLET TEE OR THE TOP OF THE SCUM LAYER IS WITHIN TWO INCHES OF THE BOTTOM OF THE OUTLET TEE. PUMPING FREQUENCY IS A FUNCTION OF USE AND IS RECOMMENDED ON AN ANNUAL BASIS.



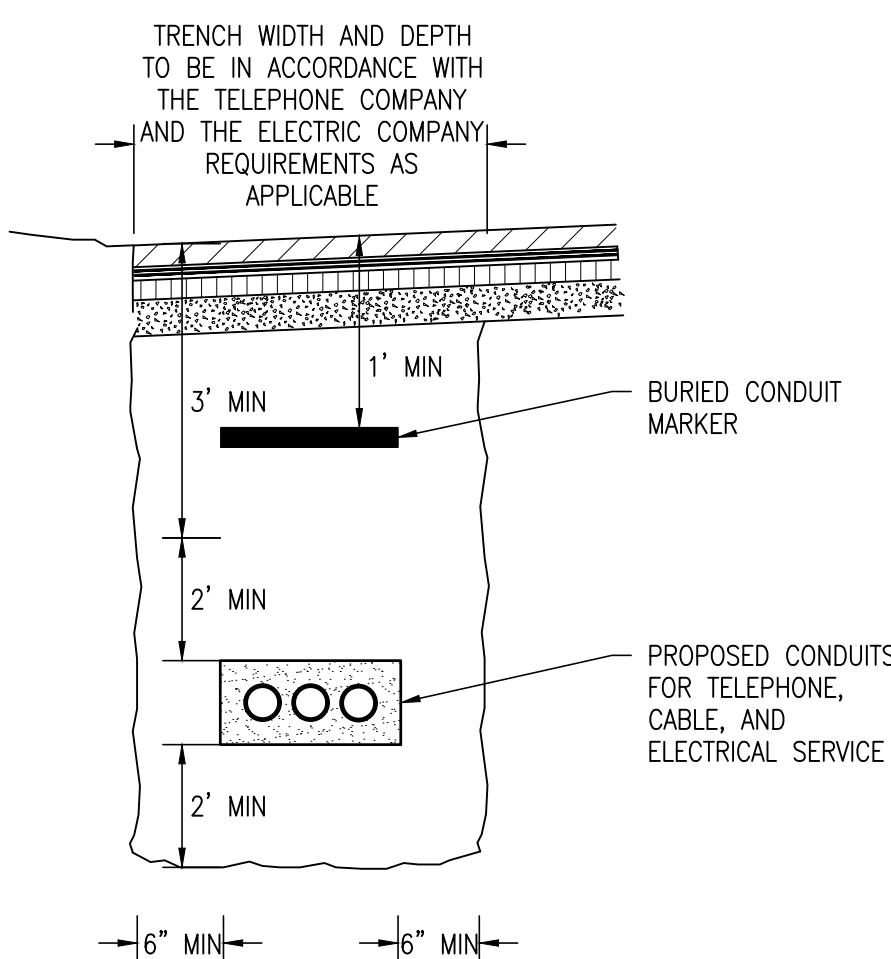
SILT SOCK DETAIL (NOT TO SCALE)

NOTE: REFER TO THE PLAN FOR PROPOSED LOCATION.

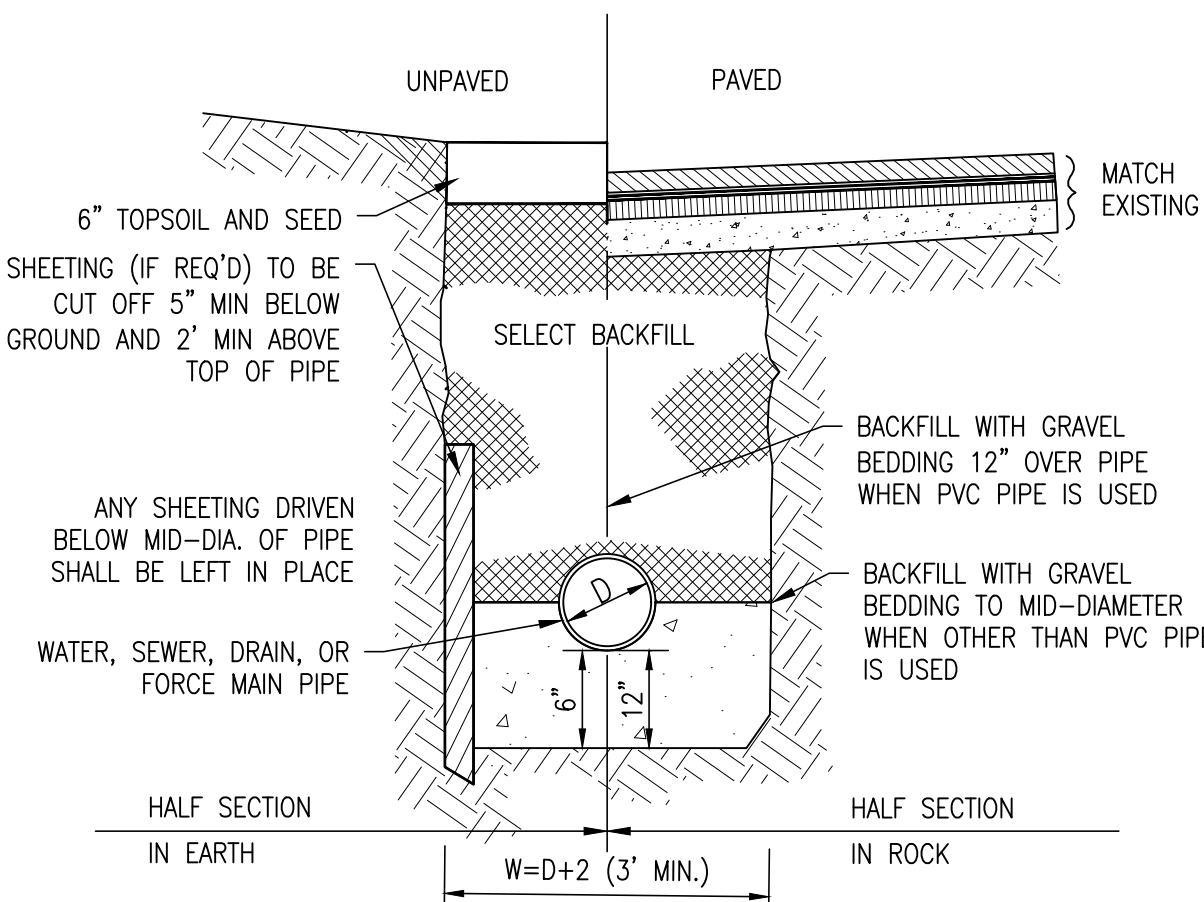


STONE TRENCH DETAIL (NOT TO SCALE)

(NOT TO SCALE)

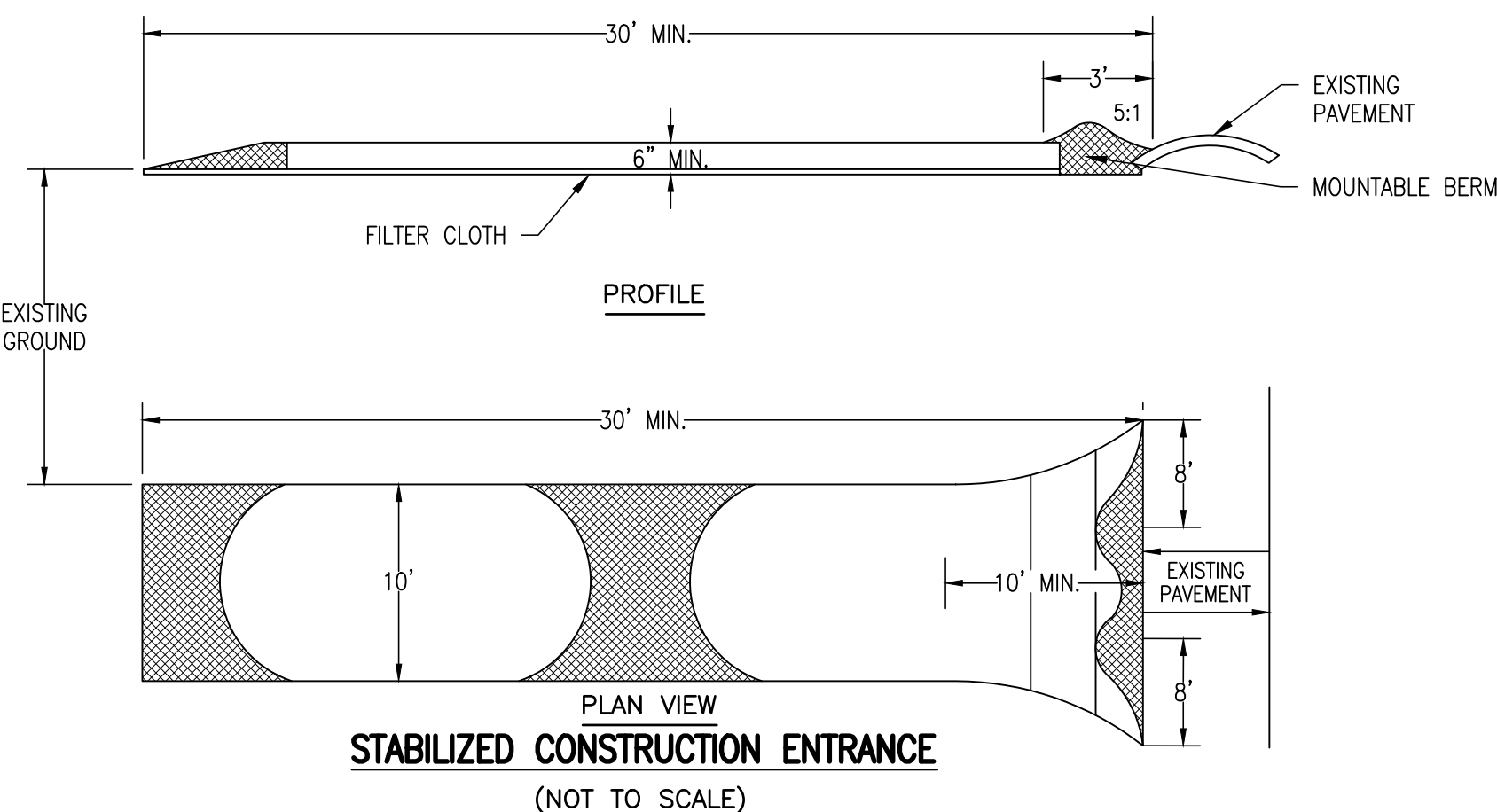


TYPICAL ELECTRIC/TELEPHONE/CABLE CONDUIT (US-UTILITY SERVICE) DETAIL (NOT TO SCALE)



TYPICAL UTILITY TRENCH (NOT TO SCALE)

(NOT TO SCALE)



STABILIZED CONSTRUCTION ENTRANCE SPECIFICATIONS

- STONE SIZE - USE 2" STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
- LENGTH - AS REQUIRED, BUT NOT LESS THAN 30 FT.
- THICKNESS - NOT LESS THAN SIX (6) INCHES.
- WIDTH - TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
- FILTER CLOTH - WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE. FILTER WILL NOT BE REQUIRED ON A SINGLE FAMILY RESIDENCE LOT.
- SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE PERMITTED.
- MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAYS MUST BE REMOVED IMMEDIATELY.
- WASHING - WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS OF WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN.

merrillinc.com

REVISIONS:

COMMON DRIVEWAY UPDATE	6/17/24
BLDG FOOTPRINT UPDATE	5/14/24
MITIGATION UPDATE	5/8/24
MITIGATION	3/15/24
BLDG. LAYOUT	3/15/24
REVIEW COMMENTS	2/16/23
SP & SITE PLAN REVIEW	12/8/23
BOH REVIEW COMMENTS	8/31/23
SAS CHAMBER LAYOUT	8/3/23

DRAWN BY:

PAL

DESIGNED BY:

DK/PAL/DA

CHECKED BY:

DK/DA

SCALE:

AS NOTED

STAMP:



427 Columbia Road
Hanover, MA 02339
781-826-9200

40 Court Street, Ste 2A
Plymouth, MA 02360
508-746-6060

Marine Division:
26 Union Street
Plymouth, MA 02360
508-746-6060

448 N. Falmouth Hwy. Unit A
North Falmouth, MA 02556
508-563-2183

PROJECT #:

22-083.1

PROJECT:

SITE PLAN

0 ARNOLD ROAD
ASSESSOR'S
MAP 100 BLOCK 0 LOT 65
HINGHAM MASSACHUSETTS

CLIENT:

GERRY RANKIN
30 ARNOLD ROAD, LLC
41 BREWSTER ROAD
HINGHAM, MA 02043
(617)-799-0588

DRAWING PATH:
H:\22-083.1\DESIGN\22-083.1 SP
6-13-2023.DWG

DATE:

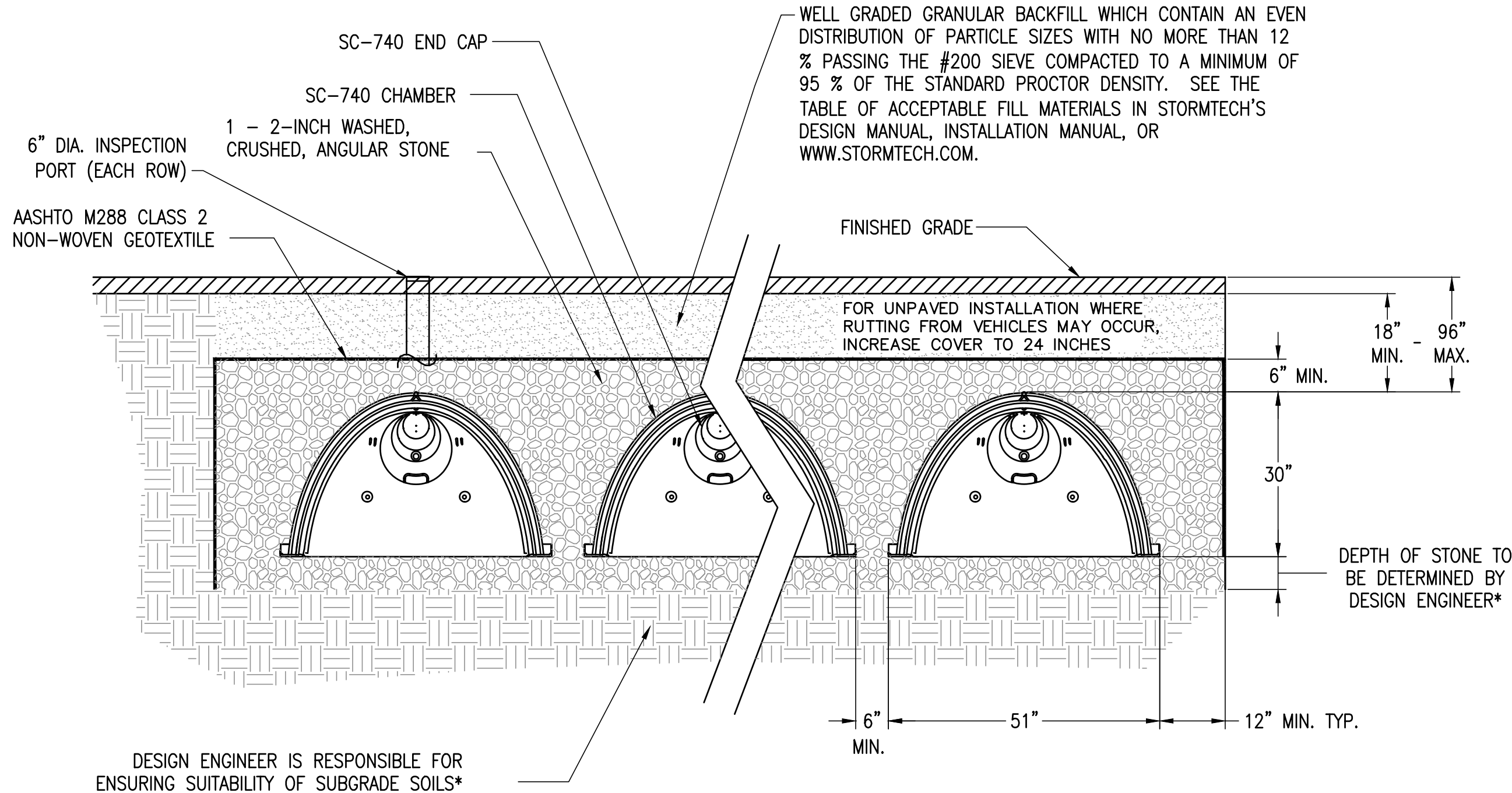
JULY 31, 2023

SITE/SEPTIC DESIGN PLAN

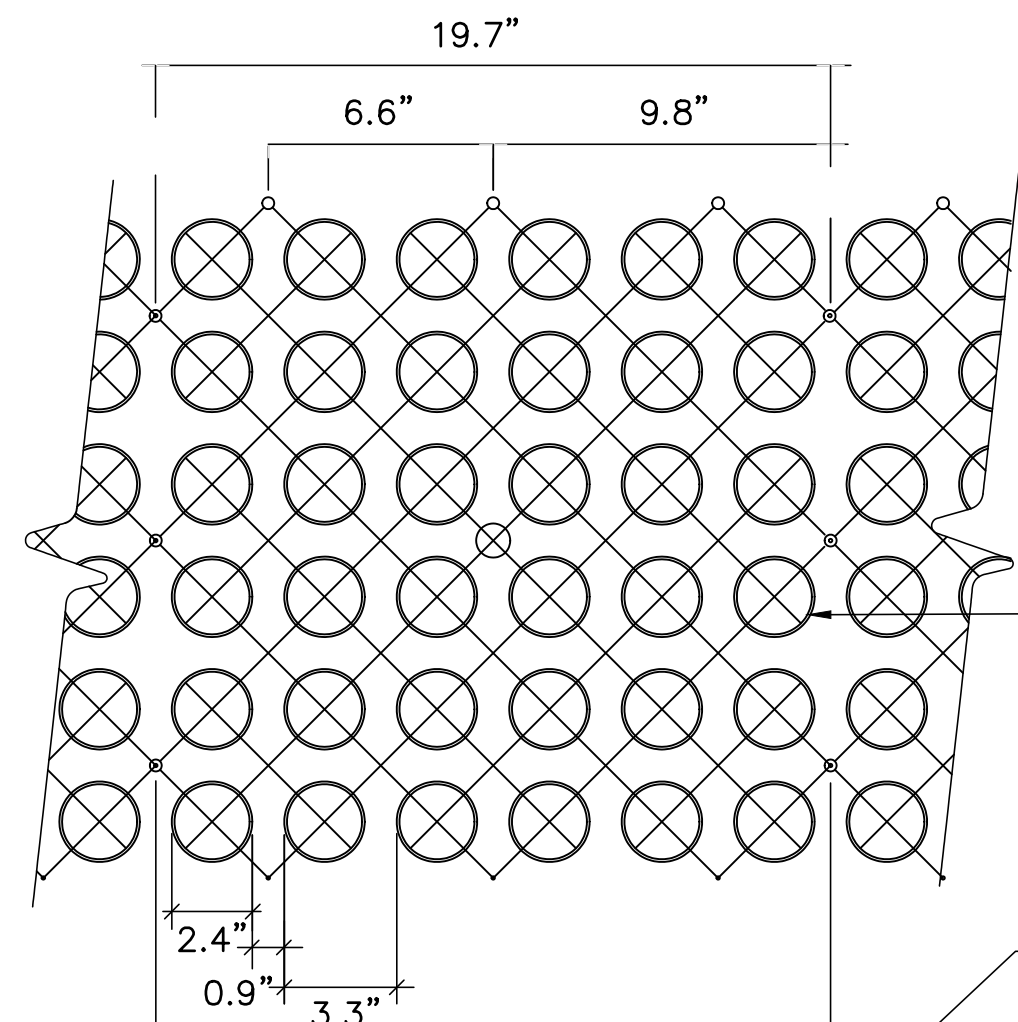
SHEET 3 of 6

© Merrill Corporation

COPYRIGHT © BY MERRILL CORPORATION. STORED IN A RETRIEVAL SYSTEM, OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC, MECHANICAL, PHOTOCOPYING, RECORDING OR OTHERWISE, WITHOUT THE EXPRESS WRITTEN CONSENT OF MERRILL CORPORATION WITH THE EXCEPTION OF REPRODUCTION FOR PERSONAL USE ONLY. ANY REPRODUCTION FOR OTHER THAN PERSONAL USE WITHOUT THE EXPRESS WRITTEN CONSENT OF MERRILL CORPORATION SHALL RENDER IT UNLAWFUL.



STORMTECH SC-740 CHAMBER SYSTEM
TYPICAL CROSS SECTION DETAIL
NOT TO SCALE



SPECIFICATIONS
UNIT SIZE - 20" X 20" X 1" OR 40?X 40?X 1?
AVAILABLE IN 9 STANDARD ROLL SIZES
UNIT WEIGHT - 18 OZ. OR 4.5 POUNDS
STRENGTH - 15,940 PSI
COLOR - BLACK
RESIN - 100% RECYCLED HDPE

GRASSPAVE2 SQUARES

SEE ENLARGEMENT BELOW

HYDROGROW MIX BELOW RING
SUPPLIED FREE BY MANUFACTURER

RINGS FILLED WITH CONCRETE
SAND (CLEAN, SHARP SAND)

COMPACTED SANDY GRAVEL ROAD BASE
95% MODIFIED PROCTOR DENSITY
- 12 INCH BASE COURSE

COMPACTED SUBGRADE

TOP OF GRASS ROOT MASS 1/2"
ABOVE TOP OF RING

GRASSPAVE2 ATTACH WITH
SNAP-FIT FASTENERS

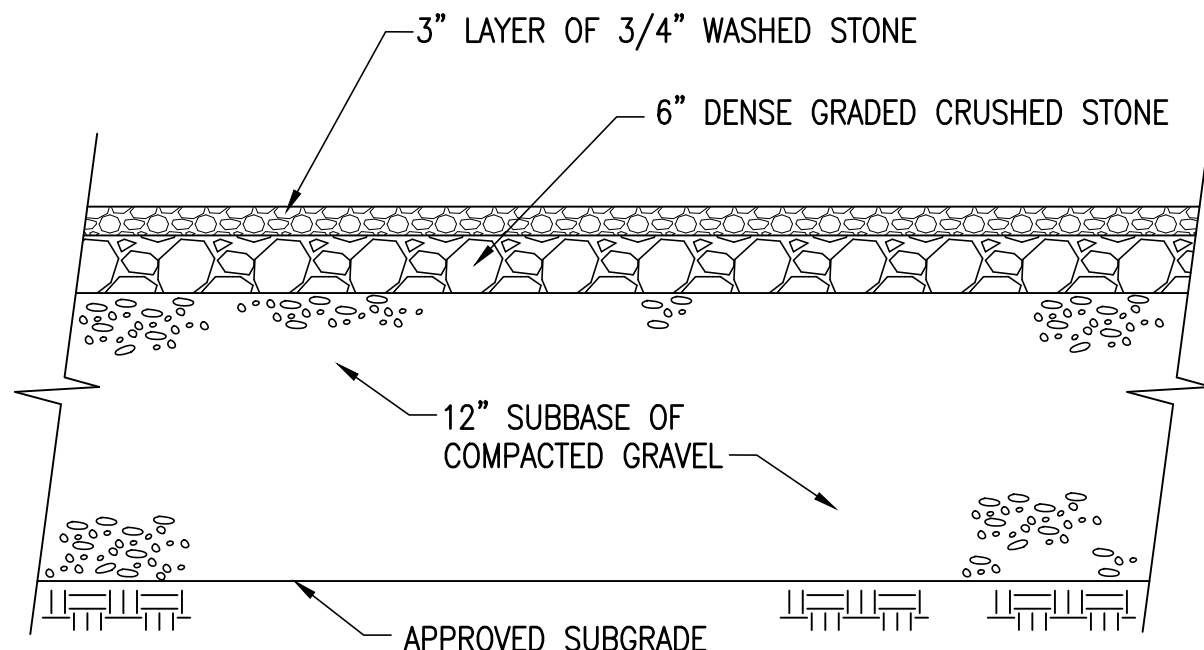
RINGS FILLED WITH CONCRETE
SAND (CLEAN, SHARP SAND)

COMPACTED SANDY GRAVEL
BASE COURSE

ENLARGEMENT

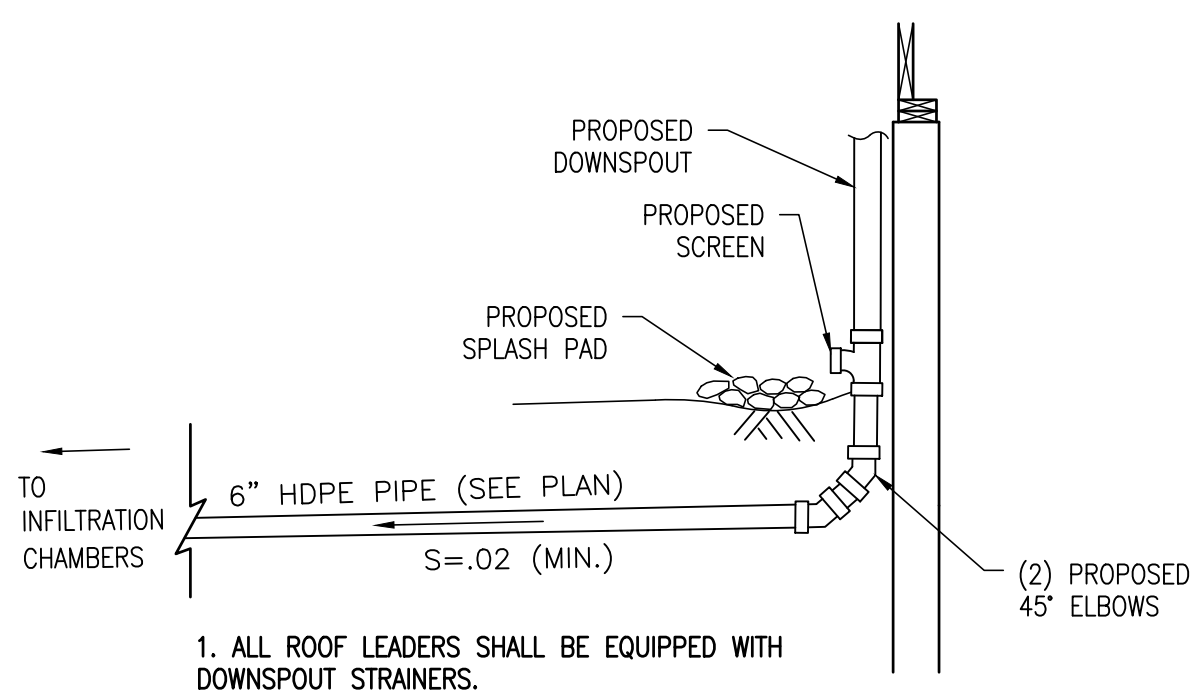
GRASSPAVE2 BY Invisible Structures, Inc. OR EQUIVALENT

TYPICAL GRASSPAVE2 DETAIL
(NOT TO SCALE)

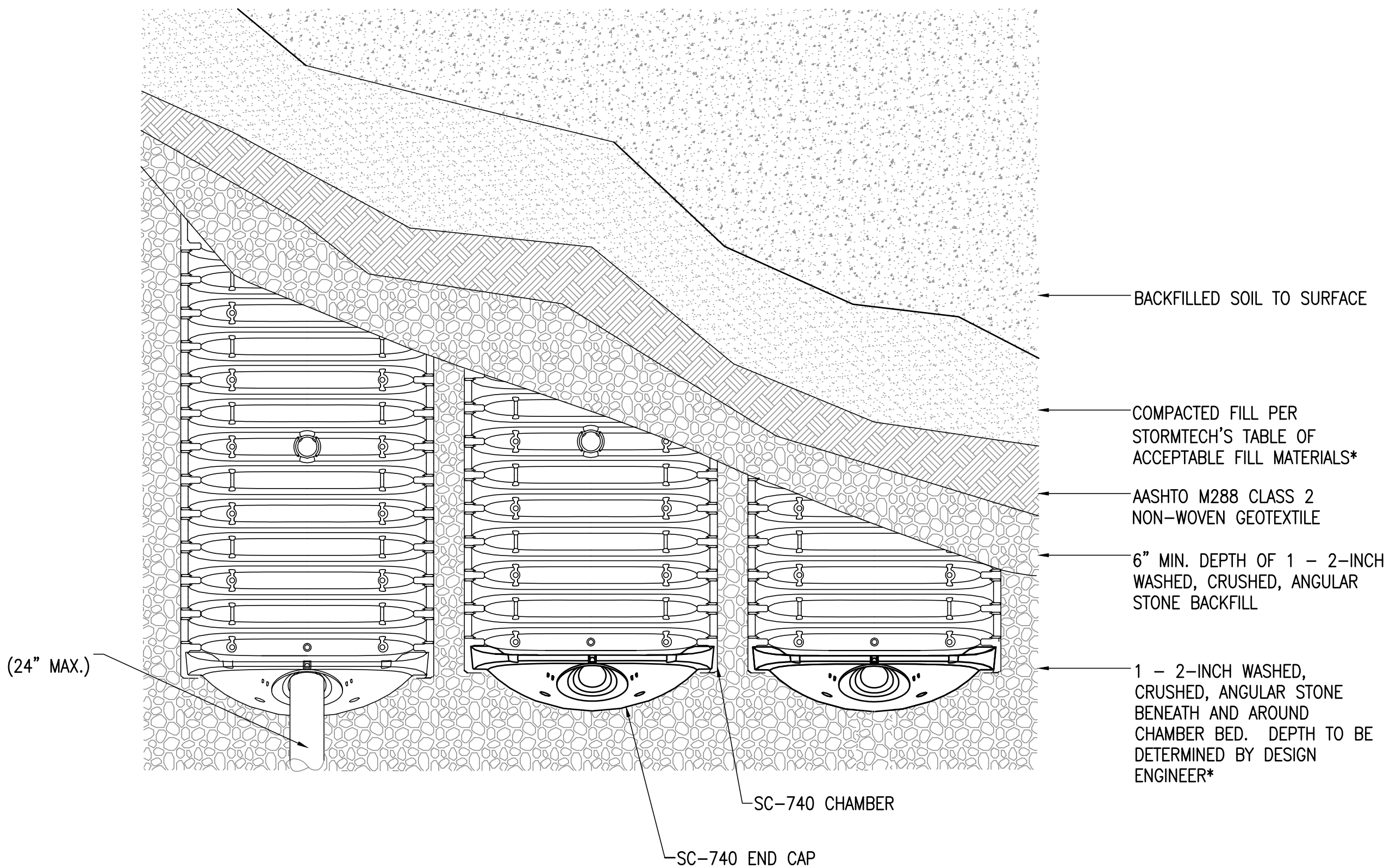


NOTE:
1. ALL UNSUITABLE MATERIAL SHALL BE REMOVED AND REPLACED WITH
CLEAN GRAVEL BASE (95% COMPACTION)

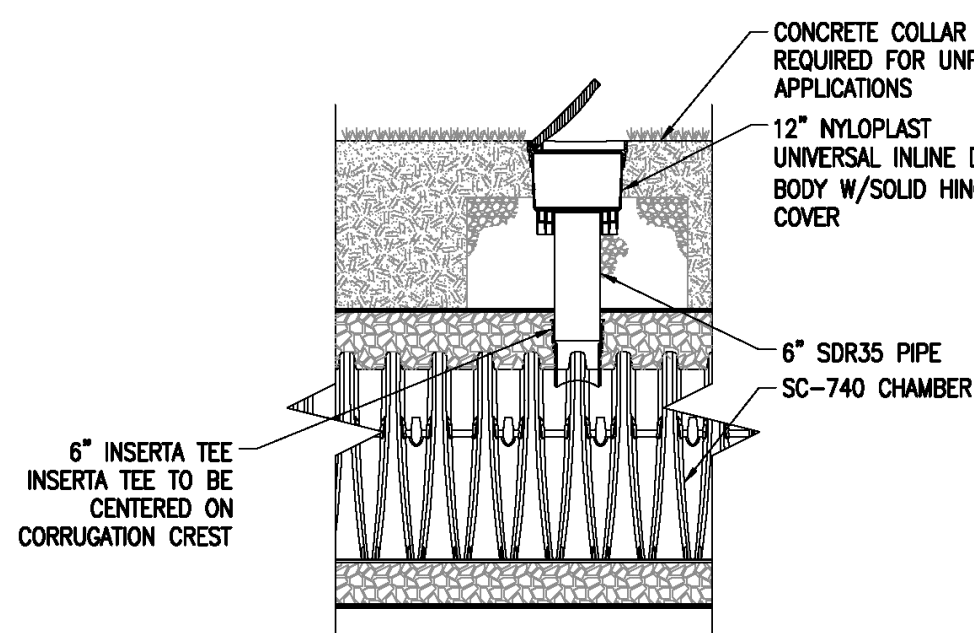
GRAVEL DRIVEWAY SECTION DETAIL
(NOT TO SCALE)



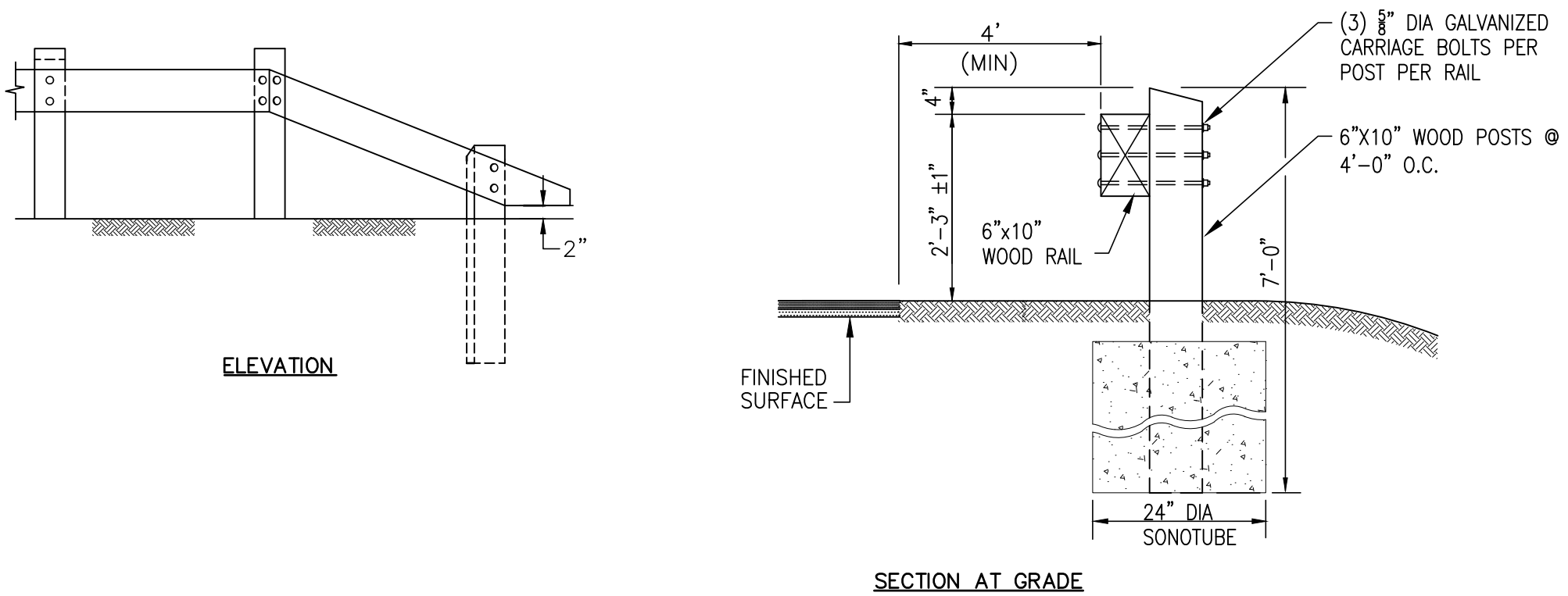
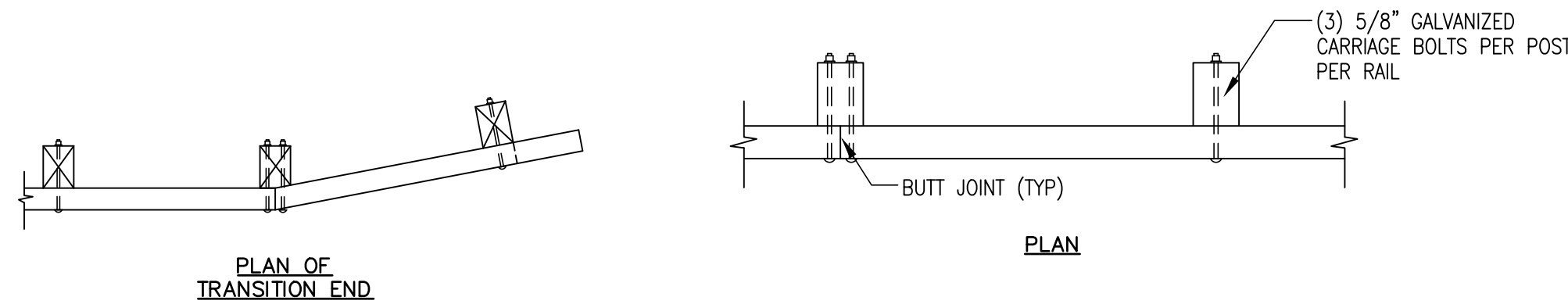
TYPICAL DOWNSPOUT DETAIL
(NOT TO SCALE)



STORMTECH SC-740 CHAMBER SYSTEM
PLAN VIEW DETAIL
NOT TO SCALE



SC-740 6" INSPECTION PORT DETAIL
NOT TO SCALE



NOTES:
1. ALL RAIL AND POST SECTIONS TO BE PRESSURE TREATED #1 SOUTHERN
YELLOW PINE OR EQUAL.
2. BOLT CONNECTIONS TO BE DESIGNED BY A REGISTERED PROFESSIONAL
STRUCTURAL ENGINEER PRIOR TO CONSTRUCTION.

WOOD GUARDRAIL DETAIL
(NOT TO SCALE)

merrillinc.com

REVISIONS:

COMMON DRIVEWAY UPDATE	6/17/24
BLDG FOOTPRINT UPDATE	5/14/24
MITIGATION UPDATE	5/8/24
MITIGATION	3/15/24
BLDG. LAYOUT	3/15/24
REVIEW COMMENTS	2/16/23
SP & SITE PLAN REVIEW	12/8/23
BOH REVIEW COMMENTS	8/31/23
SAS CHAMBER LAYOUT	8/3/23

DRAWN BY:

PAL

DESIGNED BY:

DK/PAL/DA

CHECKED BY:

DK/DA

SCALE:

AS NOTED

STAMP:



Merrill
Engineers and Land Surveyors

427 Columbia Road
Hanover, MA 02339
781-826-9200

40 Court Street, Ste 2A
Plymouth, MA 02360
508-746-6060

Marine Division:
26 Union Street
Plymouth, MA 02360
508-746-6060

448 N. Falmouth Hwy. Unit A
North Falmouth, MA 02556
508-563-2183

PROJECT #:

22-083.1

PROJECT:

SITE PLAN

0 ARNOLD ROAD
ASSESSOR'S
MAP 100 BLOCK 0 LOT 65
HINGHAM MASSACHUSETTS

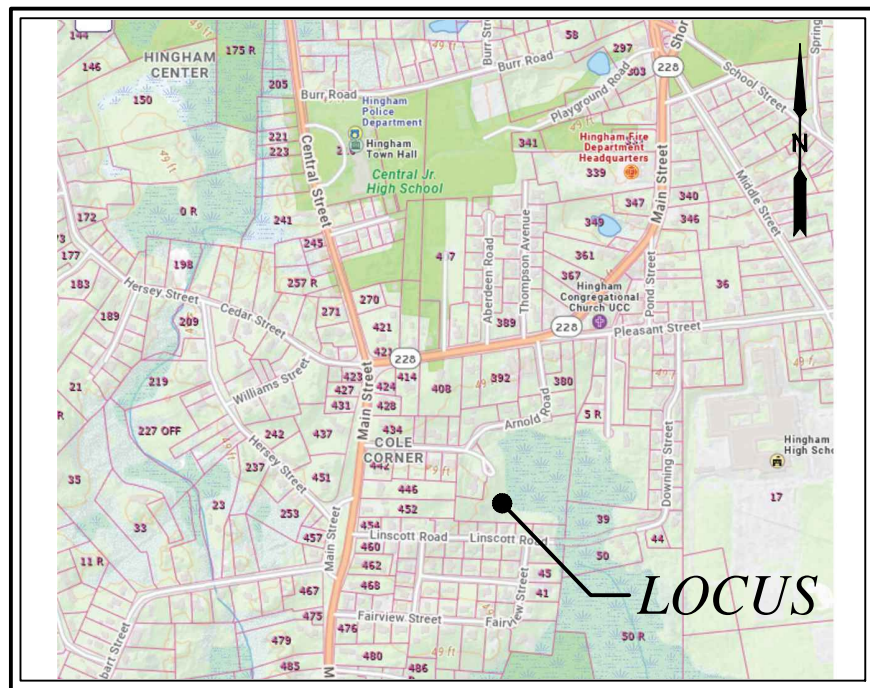
CLIENT:
GERRY RANKIN
30 ARNOLD ROAD, LLC
41 BREWSTER ROAD
HINGHAM, MA 02043
(617)-799-0588

DRAWING PATH:
H:\22-083.1\DESIGN\22-083.1 SP
6.16.24.DWG

DATE:

JULY 31, 2023

**SITE/SEPTIC
DESIGN PLAN**



LOCATION MAP SCALE: 1" = 1000'±

RECORD OWNER:

ASSESSORS MAP 100 BLOCK 0 LOT 65
0 ARNOLD ROAD

30 ARNOLD RD LLC
41 BREWSTER RD
HINGHAM, MA 02043
DEED BOOK 57925 PAGE 110

ALTERATION AND MITIGATION CALCULATIONS:

BW BUFFER ZONE ALTERATION CALCULATIONS:

0'-50' (PERVIOUS) = 890± SF (W/ 1 TREE REMOVAL)
50'-100' (PERVIOUS) = 2,060± SF (NO TREE REMOVAL)

HINGHAM BUFFER ZONE MITIGATION NOTES:

FOR WORK WITHIN 50'-100' BUFFER ZONE:

- 1:1 MITIGATION REQUIRED FOR PROPOSED IMPERVIOUS SURFACES
- NO MITIGATION REQUIRED FOR PROPOSED PERVIOUS SURFACES

FOR WORK WITHIN 0'-50' BUFFER ZONE:

- 2:1 MITIGATION REQUIRED FOR PROPOSED IMPERVIOUS SURFACES
- 1:1 MITIGATION REQUIRED FOR PROPOSED PERVIOUS SURFACES

PROPOSED MITIGATION:

TOTAL AREA = 890 SF (W/ 2 PROPOSED TREES)

WETLAND MITIGATION PLANT SCHEDULE*

SHRUBS:

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
Clethra Alnifolia (CA)	Sweet Pepperbush	3 GAL	5
Rhododendron (RH)	Azalea	3 GAL	3
Vaccinium Angustifolium (VA)	Lowbush Blueberry	1 GAL	5

TREES:

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
Acer Rubrum (AR)	Red Maple Saplings	2" CAL. MIN.	2

* MITIGATION PLANTING SCHEDULE DONE BY INDEPENDENT

ENVIRONMENTAL CONSULTANTS, INC.

MITIGATION PLANTING NOTES:

- PLANTING SHALL OCCUR DURING THE FALL GROWING SEASON.
- PROPER WATERING OF NEW SHRUBS IS REQUIRED FOR THE FIRST FEW WEEKS OF AFTER PLANTING IN LATE SEPTEMBER.
- NATIVE PLANTS WILL BE MONITORED FOR 3 FULL GROWING SEASONS.
- CONSERVATION GRASS MIXTURE WILL BE SPREAD IN THE PROPOSED PLANTING AREA.

LANDSCAPE PLANT SCHEDULE

SHRUBS:

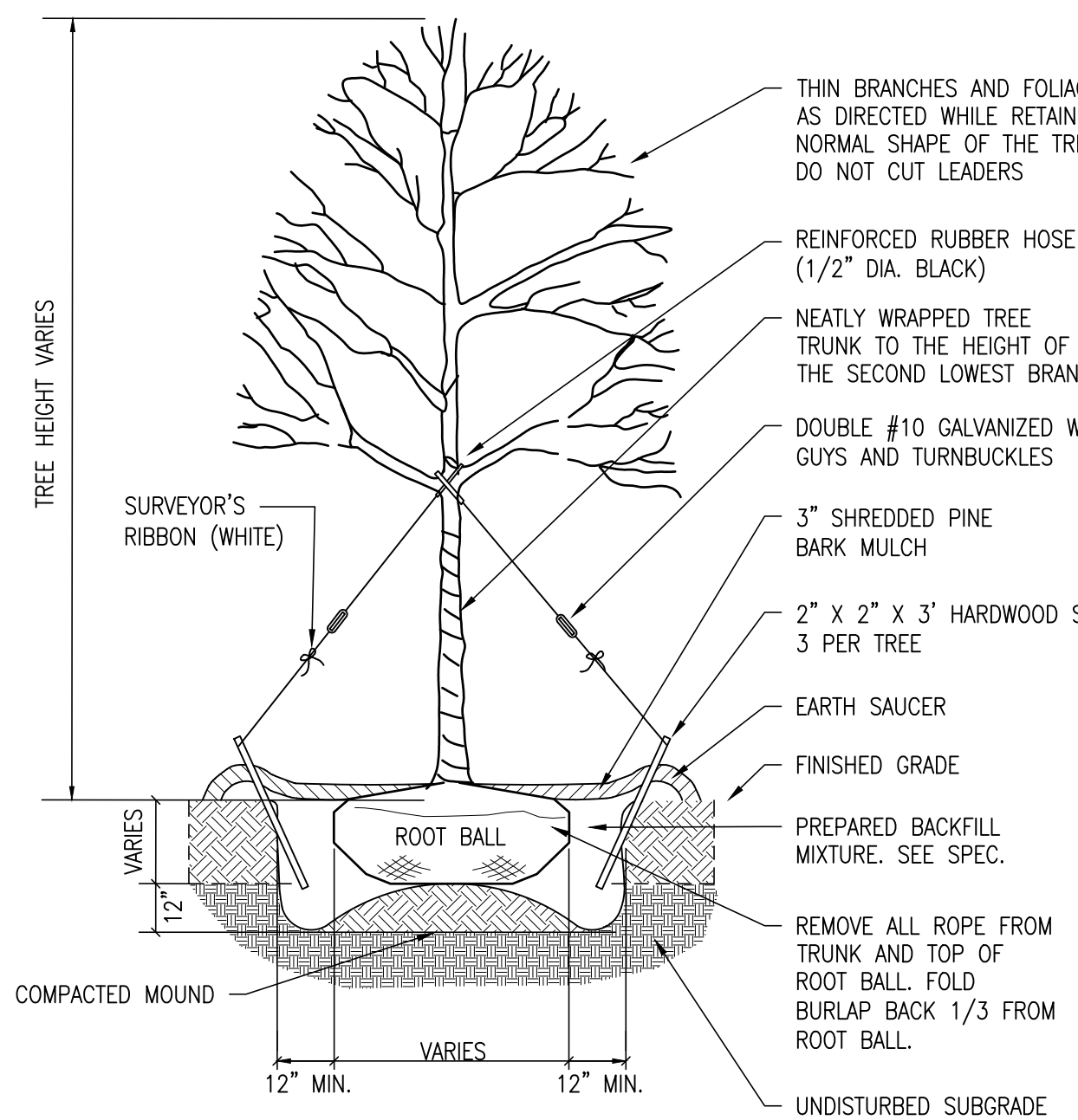
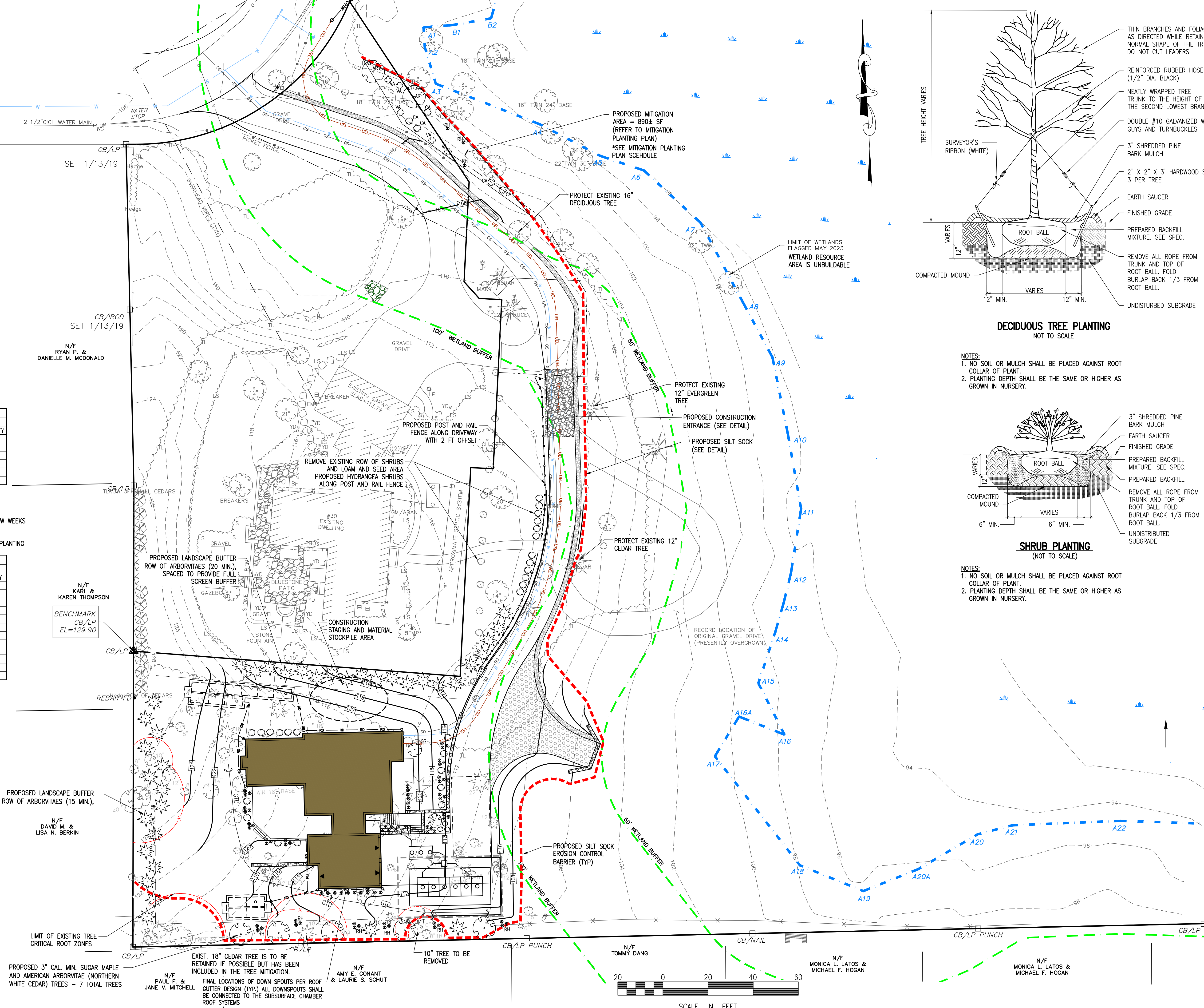
BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
Rhododendron (RH)	Azalea	3 GAL	18
Hydrangea Macrophylla (HM)	Bigleaf Hydrangea	3 GAL	3
Cornus Sanguinea (CS)	Blood Twig Dogwood	2 GAL	10
Buxus Sempervirens (BS)	American Boxwood	2 GAL	7
Ilex Crenata Compacta (IC)	Japanese Holly	3 GAL	10
Rosa Daydream (RD)	Daydream Rose	2 GAL	10
Rosa European (RE)	Floribunda Rose	3 GAL	5

TREES:

BOTANICAL NAME	COMMON NAME	SIZE	QUANTITY
Acer Saccharum	Sugar Maple	3" CAL. MIN.	5
Thuja Occidentalis	American Arborvitae	6-8 ft	37

LEGEND

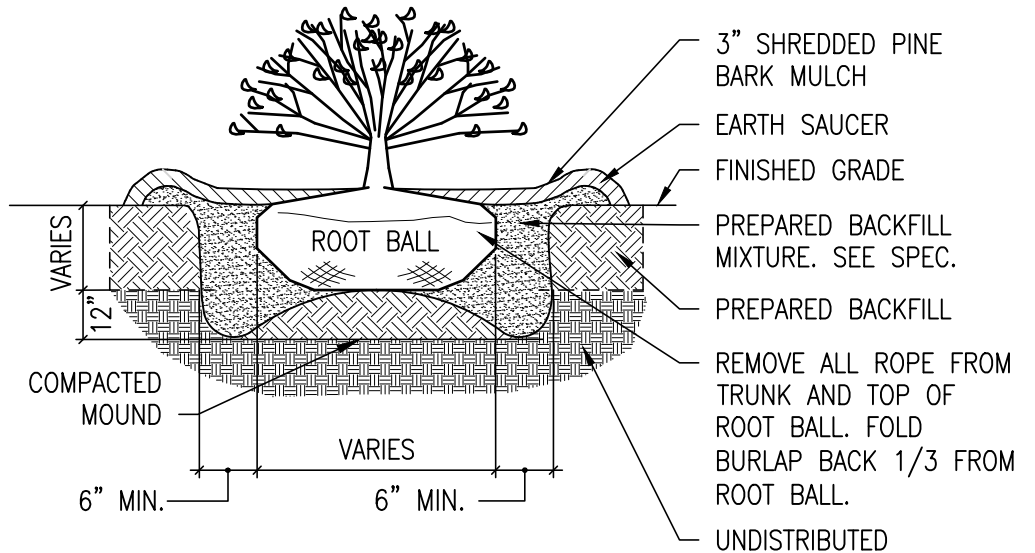
DMH	○	DRAIN MANHOLE
AC	□	HVAC UNIT
LAMP	*	LAMP POST (PRIVATE)
MH	○	MANHOLE (UNKNOWN)
RHT	◇	ROOF HEIGHT
ROCK	■	LARGE ROCK (BOULDER)
SIGN	→	SIGN
SLAB	×	SLAB ELEVATION
SMH	○	SEWER MANHOLE
TH	+	THRESHOLD
TOP	+	TOP OF FOUNDATION
○	○	DECIDUOUS TREE
★	★	CONIFEROUS TREE
UP	○	UTILITY POLE
WELL	●	WATER WELL
○	○	POST AND RAIL FENCE
×	×	CHAIN LINK FENCE
- - -	- - -	CONTOUR LINE
LS	LS	LANDSCAPE AREA
- - -	- - -	BUILDING OVERHANG
- - -	- - -	EDGE OF POND
- - -	- - -	GUARD RAIL
- - -	- - -	OVERHEAD WIRES
GTD	GTD	GRADE TO DRAIN
TW	TW	TOP OF WALL
BW	BW	BOTTOM OF WALL



DECIDUOUS TREE PLANTING

NOT TO SCALE

- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.



SHRUB PLANTING

(NOT TO SCALE)

- NOTES:
- NO SOIL OR MULCH SHALL BE PLACED AGAINST ROOT COLLAR OF PLANT.
 - PLANTING DEPTH SHALL BE THE SAME OR HIGHER AS GROWN IN NURSERY.

merrillinc.com

REVISIONS:

COMMON DRIVEWAY UPDATE	6/17/24
BLDG FOOTPRINT UPDATE	5/14/24
MITIGATION UPDATE	5/8/24
MITIGATION	3/15/24
BLDG. LAYOUT	3/15/24
REVIEW COMMENTS	2/16/23
SP & SITE PLAN REVIEW	12/8/23
BOH REVIEW COMMENTS	8/31/23
SAS CHAMBER LAYOUT	8/3/23

DRAWN BY:

PAL

DESIGNED BY:

DK/PAL/DA

CHECKED BY:

DK/DA

SCALE:

AS NOTED

STAMP:



Merrill
Engineers and Land Surveyors

427 Columbia Road
Hanover, MA 02339
781-826-9200

40 Court Street, Ste 2A
Plymouth, MA 02360
508-746-6060

Marine Division:
26 Union Street
Plymouth, MA 02360
508-746-6060

448 N. Falmouth Hwy. Unit A
North Falmouth, MA 02556
508-563-2183

PROJECT #:

22-083.1

PROJECT:

SITE PLAN

0 ARNOLD ROAD
ASSESSOR'S
MAP 100 BLOCK 0 LOT 65
HINGHAM MASSACHUSETTS

CLIENT:

GERRY RANKIN
30 ARNOLD ROAD, LLC
41 BREWSTER ROAD
HINGHAM, MA 02043
(617)-799-0588

DRAWING PATH:

H:\22-083.1\DESIGN\22-083.1 SP

DATE:

JULY 31, 2023

MITIGATION PLANTING PLAN

SHEET 6 of 6
© Merrill Corporation