

		EXISTING CONTOUR
Г		PROPOSED CONTOUR
ON	G	EXISTING GAS LINE
	<i>W</i>	EXISTING WATER LINE
	w	PROPOSED CONTOUR
EMENT	OHW	OVERHEAD WIRES
RM CRETE CURB	UE	EXISTING UNDERGROUND ELECTRIC UTILITIES
LVE UND/DRILL HOLE		PROPOSED UNDERGROUND ELECTRIC UTILITIES
k flag #		LIMIT OF WORK / EROSION CONTROLS

2. CONSTRUCTION SUPERVISOR IS RESPONSIBLE FOR INSTALLATION OF ADDITIONAL EROSION CONTROL MEASURES AS NEEDED DURING CONSTRUCTION

3. CONSTRUCTION SUPERVISOR SHALL MAINTAIN A SURPLUS SUPPLY OF EROSION CONTROL MATERIALS ON-SITE FOR EMERGENCY USE AS NEEDED (COMPOST SOCK, SILT FENCE, SUPPORT FENCING, CRUSHED STONE, STAKES,

4. ALL AREAS DISTURBED DURING CONSTRUCTION SHALL AT ALL TIMES BE ENCOMPASSED BY APPROVED SEDIMENT CONTROL MEASURES.

5. CONSTRUCTION SUPERVISOR TO ENSURE PAVED CONSTRUCTION ENTRANCE (EXISTING DRIVEWAY) IS SWEPT CLEAN ON AN AS NEEDED BASIS TO

6. WIND-BORNE DUST FROM EXPOSED SOILS DURING CONSTRUCTION SHALL BE CONTROLLED BY FREQUENT WATERING. IF WATER IS UNAVAILABLE, CALCIUM CHLORIDE MAY BE APPLIED WITH A MECHANICAL SPREADER IN

7. NO DEWATERING IS ANTICIPATED DURING CONSTRUCTION. IF DEWATERING BECOMES NECESSARY, CONTRACTOR SHALL CONTACT THE DESIGN ENGINEER FOR DETERMINATION OF ADDITIONAL MEASURES TO BE USED TO RECEIVE

NOTIFY CONSERVATION AGENT FOR INSPECTION AND APPROVAL OF BARRIER INSTALLATION PRIOR TO PROCEEDING. 2. MAINTAIN EXISTING PAVED DRIVEWAY AS CONSTRUCTION ENTRANCE AND MAINTAIN EXISTING GARAGE SLAB AS STAGING AREA DURING DEMO AND CONSTRUCTION PHASE OF PROJECT.

1. INSTALL EROSION & SEDIMENT CONTROL BARRIERS AS INDICATED HEREON

DEVELOPMENT SEQUENCE

3. TEMORARILY DISCONNECT EXISTING UTILITIES IN CONFORMANCE WITH UTILITY COMPANY REQUIREMENTS.

4. DEMO AND REMOVE EXISTING DWELLING AND FOUNDATION.

5. EXCAVATE AND INSTALL DWELLING FOUNDATION. BACKFILL AROUND FOUNDATION.

6. COMPLETE CONSTRUCTION OF DWELLING AND GARAGE.

7. INSTALL/RECONNECT EXISTING UTILITIES AND BACKFILL TRENCHES. INSTALL ROOF RUNOFF INFILTRATION SYSTEMS.

8. GRADE AND INSTALL NEW DRIVEWAY EXTENSION.

9. INSTALL DECK, PATIO AND WALKWAY.

10. FINISH GRADE LAWN WITH SCREENED LOAM AND LANDSCAPE AROUND FOUNDATION.

11. PERMANENTLY STABILIZE PROPOSED LAWN AND LANDSCAPE AREAS. INSTALL GRASS SEED AT A MINIMUM RATE OF 4.0 LBS/1000 S.F. STABILIZE USING EMULSION BINDER AT A RATE OF 70-90 LBS/1000 S.F.

SITE NOTES 1. OWNER: CORINNE R. WHITTINGTON 2014 LIVING TRUST RICHARD & CORINNE WHITTINGTON, TRUSTEES 8 GREENBRIAR COURT PLYMOUTH, MA 02360 `Ó 2. ASSESSORS REFERENCE: MAP 4.2, LOT 4 3. DEED REFERENCE: BARNSTABLE COUNTY REGISTRY BOOK 36107, PAGE 129 BP, 4. ZONED: SINGLE R-40 ZONING DISTRICT & NORTH SAGAMORE WATER RESOURCE DISTRICT. DWELLING CONSTRUCTED IN 1926. 5. THE SITE IS LOCATED IN ZONE "X" (AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD PLAIN) AS SHOWN ON F.E.M.A. FIRM #25001C0317J DATED 7-16-14. 6. COASTAL BEACH AND COASTAL BANK RESOURCE AREAS EXIST WITHIN 100 FEET OF THE SITE, COASTAL BANK DELINEATED BY KEN THOMSON, BOTANIST MEAN LOW WATER LINE-EL=0.3 NAVD88 7. THE SITE DOES NOT FALL WITHIN A DEP APPROVED ZONE II. (APPROXIMATE LOCATION) 8. EXISTING ON-SITE SOILS CONSIST OF HOOKSAN-DUNE SAND (613C) AND PLYMOUTH LOAMY COARSE SAND (435C) AS DESIGNATED ON NRCS WEB SOILS SURVEY. DESIGNATED SOILS ARE IN HYDROLOGIC SOIL GROUP 'A' AND DEPTH TO WATER TABLE IS GREATER THAN 80 INCHES. 9. TOPOGRAPHY DEVELOPED FROM AN ON-THE-GROUND SURVEY CONDUCTED BY LAND PLANNING, INC. IN OCTOBER 2023 10. LOCATION OF UTILITIES HAS BEEN COMPILED FROM EXISTING PLANS AND FIELD SURVEYS BY LAND PLANNING, INC. AND ARE APPROXIMATE ONLY. CONTRACTORS SHALL VERIFY ALL UTILITY LOCATIONS PRIOR TO COMMENCEMENT OF CONSTRUCTION. 11. DIG SAFE AND ALL APPLICABLE MUNICIPAL UTILITIES SHALL BE NOTIFIED AT LEAST 72 BUSINESS HOURS PRIOR TO ANY EXCAVATION ON SITE. DIG SAFE # 1-888-344-7233. 12. LIMIT OF WORK IS DEFINED BY EROSION CONTROL BARRIER. AREA OF PROJECT TO BE DISTURBED IN 100' BUFFER ZONE = $5200 \pm$ S.F. AREA OF TEMPORARY DISTURBANCE IN 50' BUFFER ZONE = $290\pm$ S.F. 13. PROPOSED DWELLING IS PLACED AS SHOWN IN THE GENERAL LOCATION OF EXISTING DWELLING. NO CHANGE IN GRADING IS BEING PROPOSED. 14. EXISTING FENCING, BRICK WALK AND LANDSCAPE TIMBERS ARE TO BE REMOVED. 15. THE PROPOSED COMPOST SOCK AND ORANGE CONSTRUCTION FENCE MUST BE INSTALLED AND INSPECTED PRIOR TO THE START OF WORK. Residential Redevelopment Site Plan 160 CLARK ROAD Bourne, Massachusetts Applicant: Richard & Corinne Whittington 8 Greenbrier Court Plymouth, MA 02360 Scale: 1" = 20' January 26, 2024 DRAWING: P3777WK-SP DESIGNED BY: SWW CHECHED BY: NGH 3/14/24 LAND PLANNING, INC. 1115 MAIN STREET SWW NGH HANSON, MA 02332 781-294-4144 SWW NGH SWW NGH DRAWN CHK SHEET 1 OF ' BELLINGHAM GRAFTON HANSON

March 18, 2024

Bourne Board of Health 24 Perry Avenue Buzzards Bay, MA 02532

RE: Waiver Request - 160 Clark Road

Dear Members of the Board:

We are respectfully requesting to be heard before the next Board of Health meeting to discuss a waiver from the Board of Health Regulation regarding a 150' setback for all leaching facilities from a wetland resource area, and a permit to connect a proposed 5 bedroom structure to the existing system. Currently, the nearest corner of the existing leaching system is 128' from the top of the coastal bank and 173' from the edge of the coastal beach. The existing leaching system replaced a former system that consisted of two failed cesspools. The former cesspools leached untreated sewage into the ground and were located as near as103' from the coastal bank and 135' from the coastal beach.

The existing system as installed is actually "over-sized" for our intended use, as we are proposing to connect a newly constructed 5-bedroom home, which candidly will only be a 1 bedroom occupied home for 9 months out of the year with just my wife and I (for at least the next 25 years God-willing). Assuredly we would expect extended stays from friends and family during the summer months.

I must add, prior to purchasing 160 Clark Road, I visited the BOH department as part of my due diligence and confirmed the property had an approved 6-bedroom design, even though I was in receipt of a recent, satisfactory Title V inspection report (included here). The plan I reviewed, which was for the replacement of failed cesspools, was dated January 14, 2003. Honestly, I was not aware of the 150' setback regulation at that time, however if I were, why wouldn't have I presumed the waiver would have already been obtained for a portion of the existing leaching facility to be installed within the 150' setback, especially when that regulation was promulgated in 1988?

Enclosed is the completed application and design plans, along with copies of the Order of Conditions and a recent Structural Engineer's report. Thank you in advance for your consideration of this request.

Thank you,

Richard Whittington



Bourne Board of Health **Application for Septic** Variance or Waiver Requests



In accordance with the established procedures of the Bourne Board of Health, this application is for septic variances and waivers which have not been approved administratively and require approval at a public meeting. Please use the following application form for guidance on how to apply for variances and waivers which serve new construction, changes in use, or increases in flow to on-site sewage disposal systems with design flows of less than 10,000 gallons/ day.

1. Facility Name and Address:

Corinne R. Whittington 2014 Living Trust				
Owner's Name Richard & Corinne Whittington, Trustees				
Facility's Street Address 160 Clark Road, Bourne, MA				
Owner's Telephone Number 617-592-3185				
Owner's E-mail Address richw@whitmanhomes.com				
Owner's Mailing Address 8 Greenbriar Court, Plymouth, MA 02360				

2. Applicant or Preparer's Name and Address (if different from above):

	Preparer's Name	Steven Wry, EIT, SE, SI
-	Company	Land Planning, Inc.
•	Telephone Numbe	781-294-4144
-	E-mail Address	swry.landplanning@yahoo.com
-	Mailing Address	1115 Main Street
	State/ Zip Code	Hanson, MA 02341
З. Туре	e of Facility (check a	
4. Des	cribe Facility (i.e. sin Single Family I	ngle-family dwelling, 45 seat restaurant): Dwelling
5. Тур	e of System (check	all that apply): 🖾 Conventional Title 5 🛛 🛛 I/A System
	Pumped System	n 🖾 Gravity System 🛛 Pressure Dosed 🖾 Tight Tank 🖾 Other

6. Describe the existing/ proposed septic system components:

1500 gal precast concrete septic tank, distribution box and soil absorption system consisting of five precast leaching chambers surrounded by washed stone.

7. Design Flow per 310 CMR 15.203 (in gallons/ day):

667 gallons per day

Design flow of system: <u>Existing=660 gpd : Proposed =550 gpd</u> Total design flow of facility:

8. Enclose a **letter of request for variances/ waivers** which makes reference to the specific provisions of Title 5 and/ or the Board Bourne of Health Regulations for which a variance is sought. Please use this opportunity to demonstrate compliance with 310 CMR 15.410, and to justify the relevant facts and circumstances of the individual case. Note that with regard to variances for new construction, enforcement of the provision from which a variance is sought must be shown to deprive the applicant of substantially all beneficial use of the subject property in order to be manifestly unjust. Be sure to explain why full compliance with the applicable regulations is not feasible, and how a level of environmental protection that is at least equivalent to that provided under Title 5 and the Board of Health Regulations can be achieved without strict application of said regulations.

9. In order for this Application to be deemed complete, it must be accompanied by the following:

- 125 filing fee + any other applicable permit application fees paid to the Town of Bourne.
- Application for a Disposal System Construction Permit (may be filled out by installer)
- Six copies of Letter of request describing nature of variances (see samples)
- Six sets of complete engineered plans and specifications, one with original stamp of design engineer; plus, one electronic copy.
- Six sets of floor plans, existing and proposed.
- Six copies of Nitrogen Loading Calculation Worksheet *required for all applications
- If abutter notification is required, one of each of the following must be submitted:
 - > A copy of the certified list of abutters from the Assessor's Department
 - > Sample letter for abutter notification postmarked 10 days prior to meeting date
 - > Proof of certified mailing (receipts) meeting requirements of 310 CMR 15.405(2)
- □ Proposals for installation of Innovative/Alternative septic systems must be accompanied by:
 - > A copy of the Certification for Use including technology specific conditions
 - > Draft disclosure notice for the I/A technology to be recorded in the deed

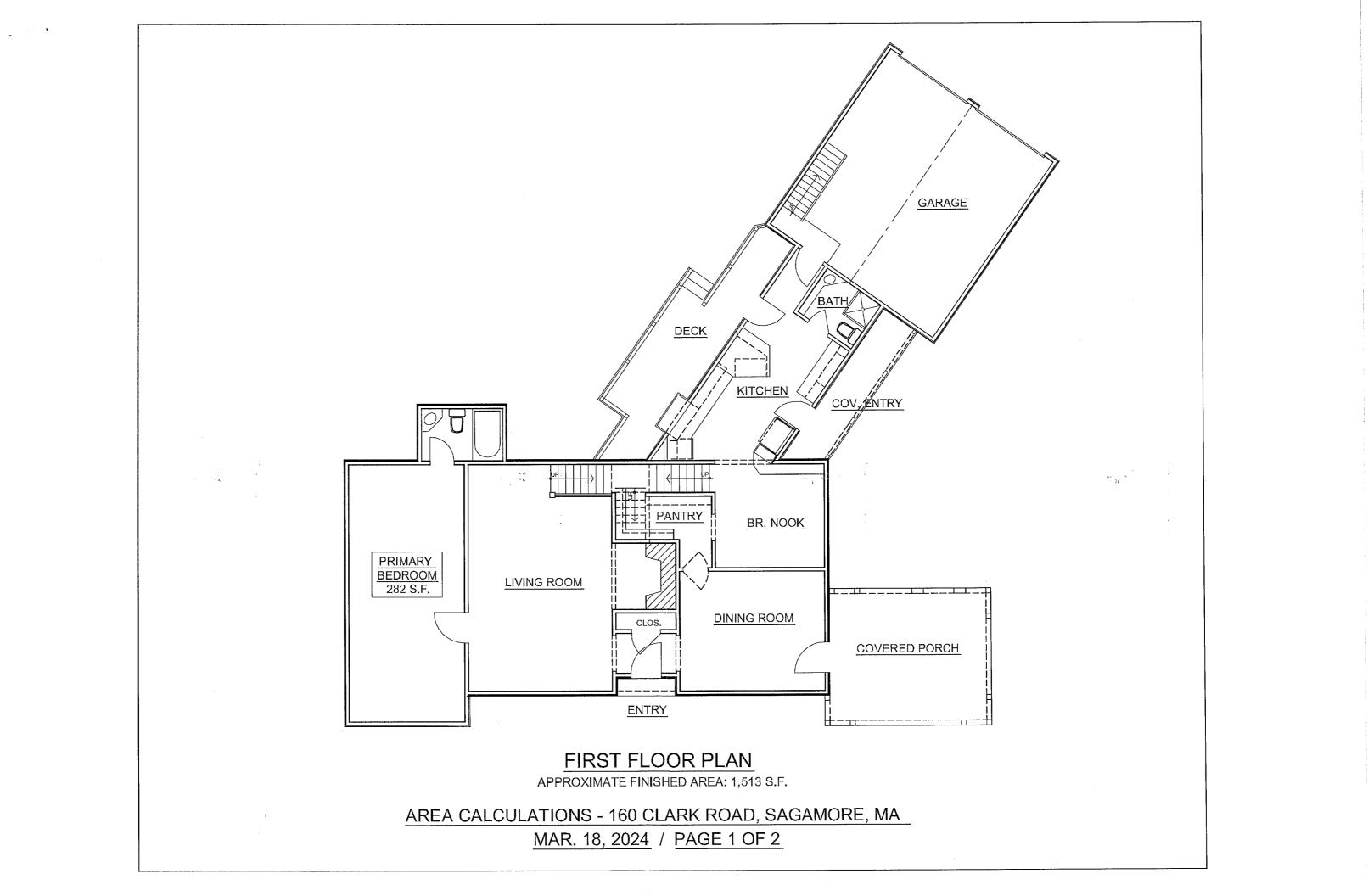
U Hydrogeologic data for all leaching facilities proposed within 100ft of a wetland/watercourse

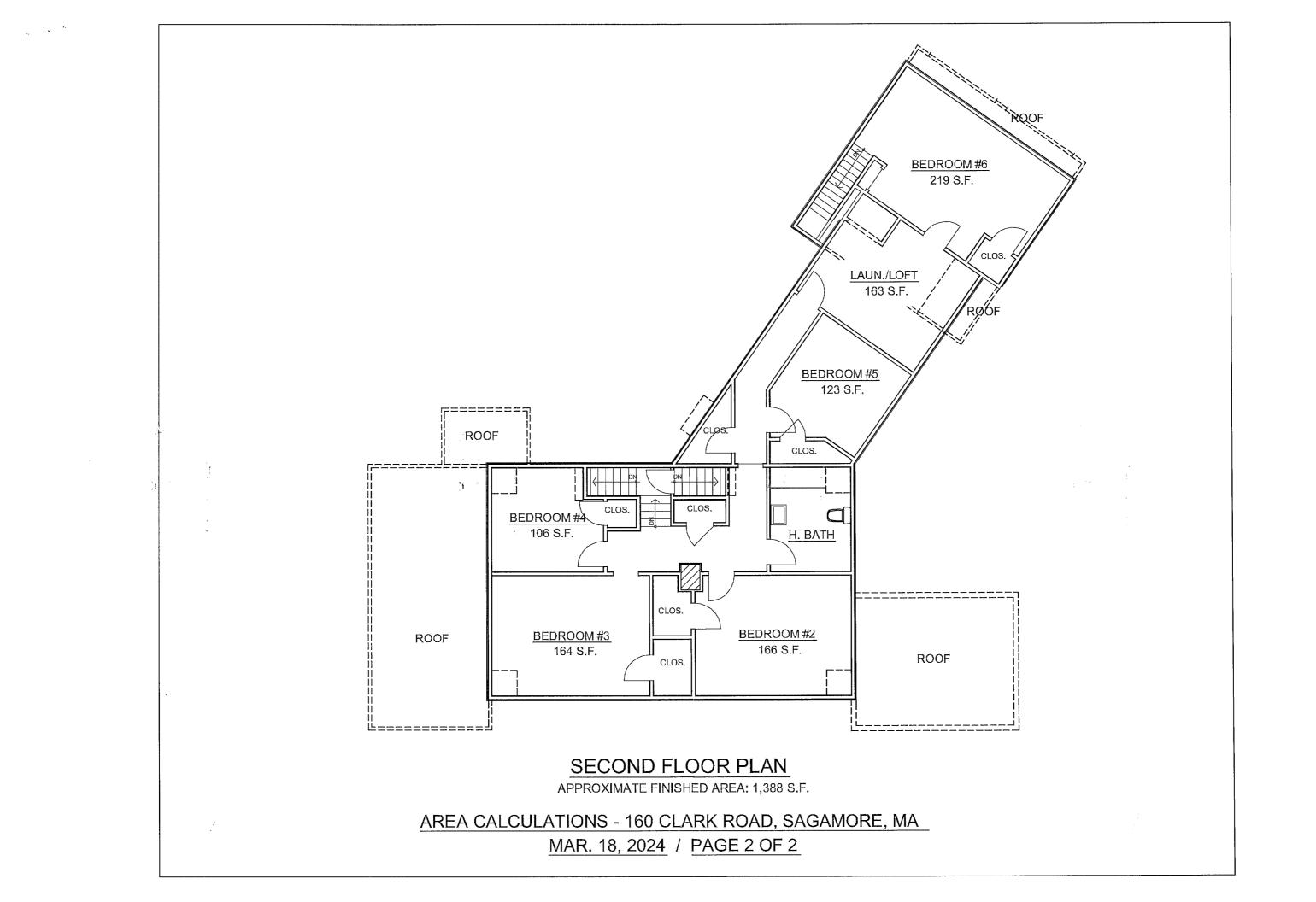
I Percentage of Increase Worksheet may be required for waivers or increases in flow

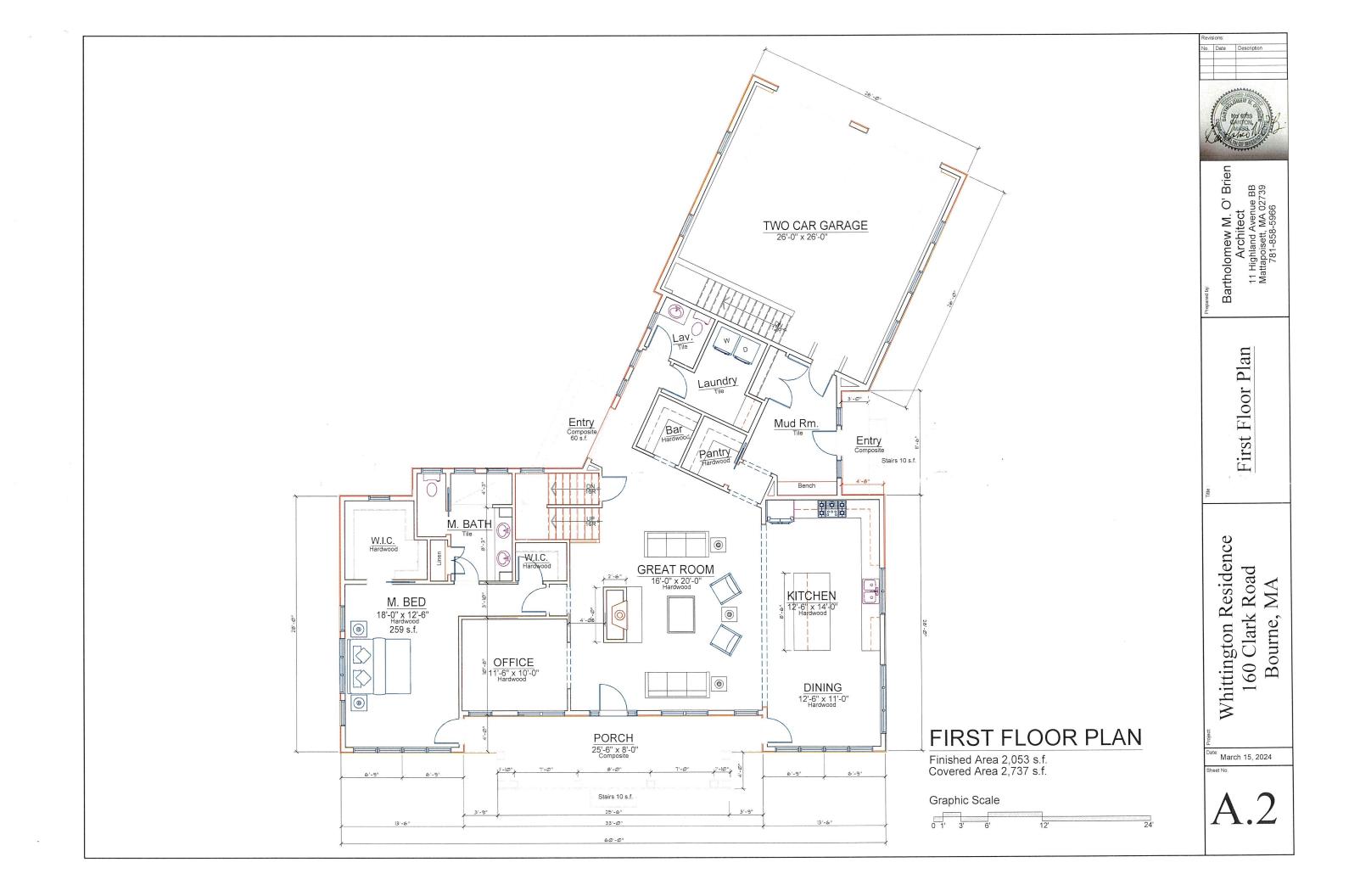
10. Certification:

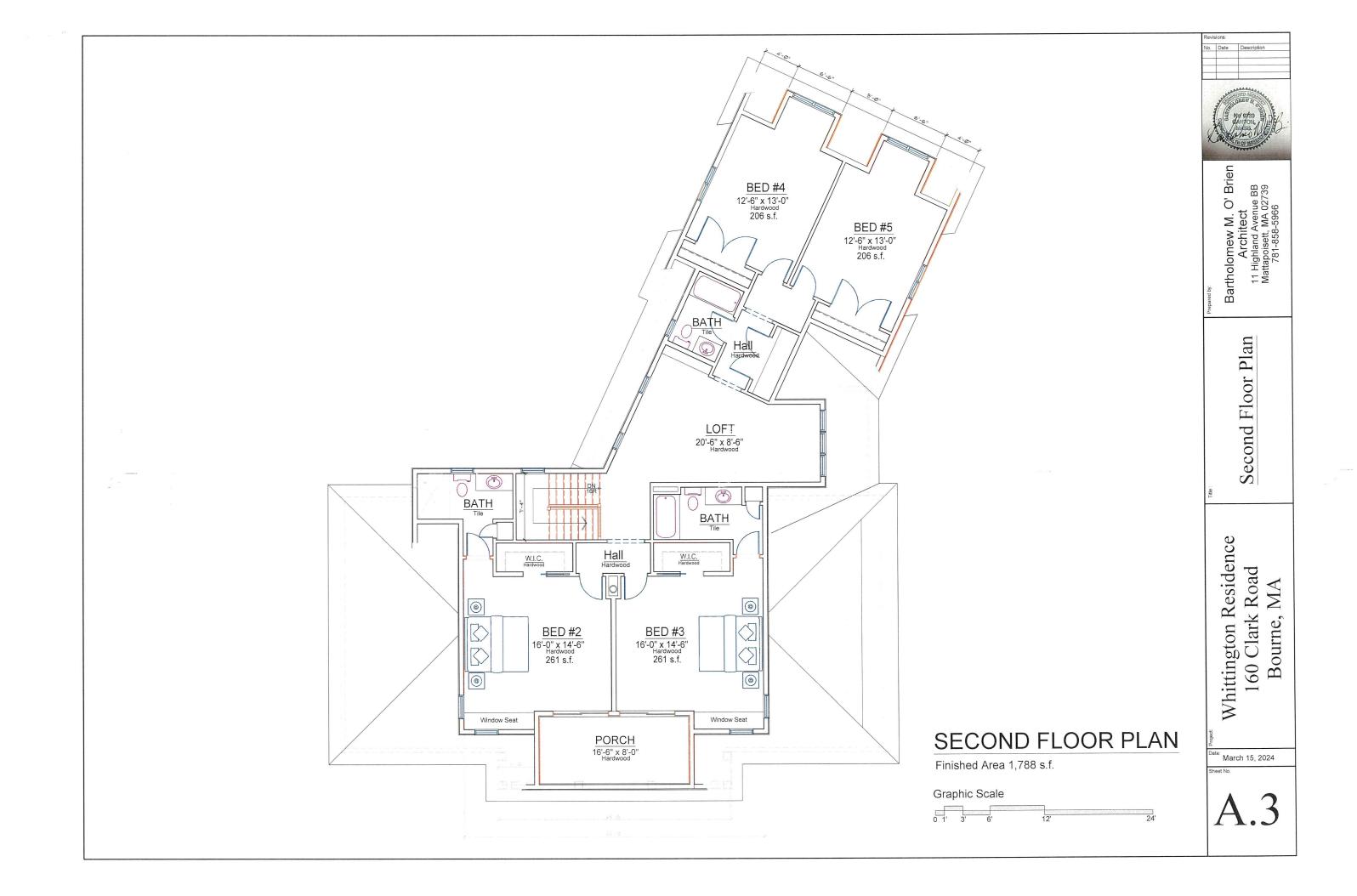
"I certify under penalty of law that this document and all attachments, to the best of my knowledge and belief, are true, accurate, and complete. I am aware that there may be significant consequences for submitting false information, including, but not limited to, penalties or fine and/or imprisonment for deliberate violations."

	02 10 24
Facility Owner's Signature	Date
Print Name Richard Whittington	
Signature of Preparer	03-19-24 Date
Print Name St even Wry EIT, SE, SI	











Terri A. Guarino Health Agent

TOWN OF BOURNE BOARD OF HEALTH

24 Perry Avenue Buzzards Bay, MA 02532 www.townofbourne.com/health Phone (508) 759-0600 ext. 1513 Fax (508) 759-0679



Percentage of Increase Worksheet

Date of Hearing: 3-27.24 Address of Hearing: 239 MAIN ST. BUZZALDS BAY, MA Owners Mailing Address: 8 GREENBLIEL Ct. PLYMOUTH MA 02360

Request for variances or waivers that include renovations, alterations, or additions to the existing dwelling, architecturals of the existing house and the proposed house must be submitted to the Board of health at the time of the variance or waiver request and shall include the following:

	EXISTING	PROPOSED	% INCREASE
Bedroom Square Footage (any labeled bedroom and or room which provides minimum seclusion as per Board of Health definition)	1060 S.F.	1193 S.F.	12-5%
Non-Bedroom Space (living room, kitchen,	1841 S.F.	2648 S.F.	43,8%
bathrooms, closets, hallways etc.)	2901 s.F.	3841 S.F.	
	Percentage of Total Increas	se 32.470	

For the purpose of any variances or waiver requests for a reduction in the 150 foot setback to the wetlands/top of coastal bank, which includes a proposal for renovations, alterations or additions to the existing dwelling, the following guidelines shall apply:

For projects where the renovations, alterations or additions result in an increase of bedroom space by Board of Health definition, of 25% or greater, a septic system which includes nitrogen removal, i.e. some type of Alternative Technology System with pressure dosing shall be required

For projects where the renovations, alterations or additions result in an increase of non-bedroom space such as kitchen, living room, bathroom etc. of 50% or greater an Alternative Technology system may be required.

Formula for total increase percentage: Subtract existing from proposed = square footage added Divide square footage added by existing = % increase

800 existing 1200 proposed 1200 - 800 = 400 square footage added 400 / 800 = 50% increase

	vn of Bourne - Water Resources Nitrogen Loading and Mitigation Worksheet	Facility Address: 160 Clark Road Preparer's Name: Steven Wry Date:
	ee Cape Cod Commission Technical Bulletin 91-001 for further details: ttps://capecodcommission.org/resource-library/file/?url=/dept/commission/team/Website_Resources/regulatory/NitrogenLoadTechbulletin.pdf	Watershed:
Project Nitrogen Loa 1.	Proposed Wastewater New Construction/ Increases in Flow, Raze & Rebuild, or Repairs/ Upgrade Project Title-5 wastewater flows: 550.0 gpd (a) Actual wastewater flows: 175.0 * (b)	Existing Conditions Calculate (A') through (P') as w/ (A) through (P): Title-5 wastewater flows: Actual wastewater flows: Actual wastewater flows: Avg. wastewater flows: 417.5 gpd (A')
Place V in app	Average wastewater flows: 362.5 gpd (a)+(b)+2= (A) * Actual water use flows per unit in Bourne	
Yes No	Will the project be connected to sewer ? Is project Title-5 wastewater flow 10,000 gpd or greater ?	Place v in applicable box: Yes No X Is existing development on sewer ?
	is project rule 3 wastemate now 19000 Pba of Brazer .	(If 'Yes', then go to line 2.)
Place V X	n applicable box and multiply unsewered wastewater flow by applicable conversion factor: Standard Title-5 System (35-ppm-N) x 0.048359 DEP-approved I/A System (25-ppm-N) x 0.034542 DEP-approved I/A System (19-ppm-N) x 0.026252 DEP-approved I/A (12-ppm-N) x 0.016580	X Standard Title-5 System DEP-approved I/A System (commercial) DEP-approved I/A System (residential) DEP-approved enhanced I/A
	Wastewater nitrogen load (Title-5 flows) = 26.60 kg-N/yr (B)	31.92 kg-N/yr (B')
	Wastewater nitrogen load (Actual flows) = 8.46 kg-N/yr (C)	8.46 kg-N/yr (C') wastewater offsets
	Stormwater Runoff Town of Bourne Recharge rate for Bourne (inches; for natural areas from Technical Bulletin 91-001):: 21 (RECH)	
	Project site area: 0.522 acres (D)	Project site area: 0.522 acres (D)
	Project site wetland area: 0.000 acres (E)	Project site wetland area: 0.000 acres (E)
	Project site upland area: 0.522 acres (F)	Project site upland area: 0.522 acres (F)
	Pervious unpaved upland: 0.382 acres (G)	Pervious unpaved upland: 0.423 acres (G')
	0 % using LID Paved area: 2,654 s.f. (H)	Paved area: 2,102 s.f. (H')
	Factor may be adjusted for employment of $LID \rightarrow x$ 1.4158E-04 $LID = low impact development$ = 0.37576394kg-N/yr(I)	Paving runoff offset: 0.2976 kg-N/yr (l')
	Roof area: 3,418 s.f. (J)	Roof area: 2,175 s.f. (J')
	x 7.0792E-05 = 0.2420 kg-N/yr (K)	Roof runoff offset: 0.1540 kg-N/yr (K')
	Fertilizer Previous unpaved upland - roof area = Managed turf/ lawn area 13,222 s.f.	Managed Turf/ lawn area: 16,251 s.f.
	x 3.4019E-04 = 4.498 kg-N/yr (L)	Fertilizer offset: 5.528 kg-N/yr (L')
	Total Nitrogen Load 31.71 kg-N/yr (M)= (B)+(I)+(K)+(L)	Existing nitrogen load (Title-5 flows): 37.90 kg-N/yr (M')
	Total project nitrogen load (Actual flows): 13.58 kg-N/yr (N)= (C)+(I)+(K)+(L)	Existing nitrogen load (Actual flows): 14.44 kg-N/yr (N')
	Nitrogen load per acre (Average): 43.42 kg-N/yr/acre (O)= (M)+(N) ÷2 +(D)	Nitrogen offset per acre: 50.17 kg-N/yr/acre (O')
	Proposed Nitrogen Loading Concentration	Existing nitrogen loading concentrations:
		(N) (P') (A = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 = 2 =
		$76 + (G)_{x}(RECH) + 9.7286 + (H) + 10,594 + (K) + 0.75$ Actual flows 9.26 ppm-N (Q') Actual flows 9.26 ppm-N (Q') (Q')
neut norga	Project nitrogen loading concentration (Average): 11.49 ppm-N (R)= (P)+(Q) ÷2	
next page> Resource/ Impact B	sed Criteria	
Marine Water Recha Yes No 2.	ge Areas / Coastal Embayments Is the project located in any of the following watersheds: Buttermilk Bay Basins, Phinneys Harbor / Back River / Eel Pond, Pocasset River Basin, P	ocasset Harbor / Hen Cove / Red Brook Harbor, Megansett / Squeteague Harbors** ?
	(If 'No', then go to line 3.)	
	Name of Watershed (from Regional Policy Plan Data Viewer):	
	Critical Nitrogen-loading limit** : 0.000 kg-N/year/acre (S)	
	Does project's nitrogen load (O) exceed the existing load (O') <u>AND</u> the critical nitrogen load (S) ?	
	(If 'No', then go to line 3.) Excess project nitrogen load to be mitigated: kg-N/yr (T)= LESSER OF (O)-(3	s) x(F) <u>AND</u> (O)-(O') x(F)
	Excess project introgen load to be initigated.	
** When	nitrogen-loading limit has been determined through either a Total Maximum Daily Load (TMDL), a Massachusetts Estuaries Project-accepted technical rep pursuant to Objective WR3, or if impaired water quality has been documented for the receiving coastal waters, the nitroge <mark>n loading limit shall be 0 kg-</mark>	ort, or specified by a Commission-approved comprehensive wastewater management plan N/yr per acre pursuant to Objective WR3.
Groundwater Quali Yes N 3.		
	Potential Public Water Supply Areas	
4. Yes N		
	Does the project's nitrogen loading concentration (R) exceed the greater of 1 ppm or the existing concentration (R') ? (If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)	
	Does the project use, treat, generate, store or dispose of hazardous materials in excess of the greater of a) household quantities or b) existing qua (If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)	ntities ?

	-	Wellhead Protection Areas
5.	Yes No	Is project in a Wellhead Protection Area (WHPA) ?
	X	Does the project's nitrogen loading concentration (R) exceed the greater of 5 ppm or the existing concentration (R') ? (If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)
	X	Does the project use, treat, generate, store or dispose of hazardous materials in excess of the greater of a) household quantities or b) existing quantities ? (If 'Yes', the project must provide an alternative strategy for meeting Objective WR1)
Fresh W	Vater Recharge	Areas
6.	Yes No	Is project wastewater disposed of within 300 feet of a stream or fresh surface water body? (If 'No', then go to line 7.)
	X	Is the project located in a freshwater recharge area (FWRA) hydraulically upgradient of a stream or fresh surface water body? (If 'Yes', the project must provide an alternative strategy for meeting Objective WR2)
Other P	Potential Impact	s
7.	Yes No X	Will the project withdraw more than 20,000 gallons of water per day ? (If 'Yes', then the project must provide documentation demonstrating that there will not be significant impacts to water levels, surface waters and wetlands)
8.	The project	must demonstrate compliance with Objective WR4, including use of Low Impact Development to mitigate impacts of stormwater runoff and O & M plans for maintaining stormwater infrastructure and landscaping.
1		

Nitrogen Loading Calculations

Existing Conditions with Existing Conventional Septic System

more than the second product of the second sec

	Road, Sagam											
	tisting Number of I t Size:	Bedroom		Square Feet		Water Recharg Natural Area:	e Factor = 18,443 S		1.75 eet	Feet	(Bourne @	21" per year)
	pof:			Square Feet		Lawn:		Square F				
Pa	wement/Walk/Dec	k :	2102	Square Feet		Title V flow:	110 0	Gallons p	er day per	bedroc	om	
WASTEWAT	<u>rer</u>											
Tit	ile V (2 people per											
	6 bedrooms	$x - \frac{1}{t}$	10 gpd edroom	– X – <u>3.788</u> gal	<u>5 L</u> =	2498.1 L/d	X <u> </u>	<u>ng </u> =	87,433.5	i mg/d		
Ac	tual (2.5 people /	unit avera	age occupa	ancy within th	ne town)						
	6 bedrooms	X — 1 b	10 gpd edroom	- X <u>3.785</u> gal	<u>5 L</u> — X	$\frac{2.5}{12}$ =	520.4 I	∟/d ×_	<u>35</u> L	mg _	18,214	l.0 mg/d
<u>IMPERVIOU</u>	S SURFACES											
Roof Area =	2,175 Sq. Ft.	x	40 in <i>.</i> Year	- X	et <u></u> 2 in. X	28.32 L cub. Ft.	- X <u>1 y</u> 365 d	r ay =	562.5	L/d X	0.75 mg L	= 421.9 mg/d
Pave Area =	2,102 Sq. Ft.	x	40 in. Year	- X	et 2 in. X	28.32 L cub. Ft.	• x - <u>1 y</u> 365 d	r ay =	543.6	L/d X	<u>1.5 mg</u> L	= 815.4 mg/d
LAWN												
Lawn Area =	9,966 Sq. Ft.	X - <u>100</u>	<u>3 lbs.</u> 0 s.f.*yr	- X	yr x	454,000 mg lb.	x 0.25	=	9,297.0	mg/d		
NATURAL												
Natural Area =	18,443 Sq. Ft.	x <u>1.</u>	75 ft yr	- X - <u>28.32</u> cub. F	<u>L</u> _X	<u> </u>	. =	2,504.2	2 L/d			
SUMMARY			•									
Title V Flow	87433.5	+	421.9	+ 815.4	+	9297.0 mg	=		97967.8	mg	= 16.0	04 ppm
	2498.1	+	562.5	+ 543.6	+	9297.0 mg 2504.2 liters		•	6108.4			••
Actual	18214.0	+	421.9	+ 815.4	+	9297.0 ma	=		28748.3	ma	= 6.96	6 ppm
	520.4	+	562.5	+ 543.6	+	9297.0 mg 2504.2 liters		-	4130.7	liters	-144	- I . I
	Final Calculatior	ı	(16.04	+ 6.96)/2	=	11.	50 pp	m]		
Dated:3/	18/2024									Ca	alculations b	y Land Planning, I

Calculations by Land Planning, Inc.

Nitrogen Loading Calculations

Proposed Conditions with Conventional Septic System

Proposed Conditions with Conventional Septic System				
160 Clark Road, Sagamore, MA Proposed Number of Bedrooms: 5 Water Recharge Factor = 1.75 Feet (Bourne @ 21" per year) Lot Size: 22,720 Square Feet Natural Area: 16,648 Square Feet Roof: 3,418 Square Feet Lawn: 8,893 Square Feet Pavement/Patio/Walk/Deck: 2,654 Square Feet Title V flow: 110 Gallons per day per bedroom				
WASTEWATERTitle V (2 people per bedroom)5bedrooms X <u>110 gpd</u> bedroomX <u>3.785 L</u> gal = 2081.8L/dX <u>35 mg</u> L= 72,863.0mg/d				
Actual (2.5 people / unit average occupancy within the town) 5 bedrooms X <u>110 gpd</u> X <u>3.785 L</u> X <u>2.5</u> = 520.4 L/d X <u>35 mg</u> = 18,214.0 mg/d				
IMPERVIOUS SURFACES				
Roof 3,418 Sq. Ft. X 40 in. Year X feet X 28.32 L X 1 yr = 884.0 L/d X 0.75 mg = 663.0 mg/d				
Pave Area = 2,654 Sq. Ft. $X - \frac{40 \text{ in.}}{\text{Year}} X - \frac{\text{feet}}{12 \text{ in.}} X - \frac{28.32 \text{ L}}{\text{cub. Ft.}} X - \frac{1 \text{ yr}}{365 \text{ day}} = 686.4 \text{ L/d } X - \frac{1.5 \text{ mg}}{\text{L}} = 1029.6 \text{ mg/d}$				
LAWN				
Lawn Area = 8,893 Sq. Ft. X <u>3 lbs.</u> X <u>1 yr</u> X <u>454,000 mg</u> X 0.25 = 8,296.1 mg/d				
NATURAL				
Natural Area = 16,648 Sq. Ft. X <u>1.75 ft</u> <u>yr</u> X <u>28.32 L</u> <u>x</u> <u>1 yr</u> = 2,260.5 L/d				
SUMMARY Title V Flow 72863.0 + 663.0 + 1029.6 + 8296.1 mg = 82851.7 mg = 14.01 ppm 2081.8 + 884.0 + 686.4 + 2260.5 liters 5912.7 liters = 14.01 ppm				
Actual <u>18214.0 + 663.0 + 1029.6 + 8296.1 mg</u> = <u>28202.7 mg</u> = 6.48 ppm 520.4 + 884.0 + 686.4 + 2260.5 liters 4351.3 liters				
520.4 + 884.0 + 686.4 + 2260.5 liters 4351.3 liters				
Final Calculation (14.01 + 6.48) / 2 = 10.25 ppm				
Dated:3/18/2024 Calculations by Land Planning, In				

Calculations by Land Planning, Inc.

John W. Queen, P. E. STRUCTURES ENGINEERING

464 Baxters Neck Road Marstons Mills, MA 02648 Tel: 617-571-9637

March 4, 2024

Rich Whittington Whitman Homes 1200 Turnpike Street Canton, MA 02021

Re: 160 Clark Road, Sagamore, MA - Structural Condition Report

Dear Mr. Whittington:

I have reviewed the structural condition of the existing house and have found a number of structural concerns with the framing and foundations.

The floor framing members are not up to code. The foundation walls are made of a combination of stone and block that do not bear on sufficient footings but bear on a combination of soil and large stones. There are interior rotted timber posts bearing on stone and lally columns also bearing on stone. Many other areas of deterioration and structural concerns are evident. Due to the location, the structure is in a high wind zone and does not appear capable of resisting the wind speed required by code.

In my opinion, to renovate the structure is economically not feasible, considered beyond repair and should be torn down and replaced with a new house that will meet code and capable of withstanding the high wind speeds required by code.

Sincerely,

chuW. Queen

John W. Queen, P. E.





Owner information is required for eve page.

Commonwealth of Massachusetts Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	City/Town	State	Zip Code	Date of Inspection	
у	Sagamore Beach	Ma	02562	6-16-2023	
	Owner's Name				
	Donald Doyle				
	Property Address				
	160 Clark Road				

Inspection results must be submitted on this form. Inspection forms may not be altered in any way. Please see completeness checklist at the end of the form.

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Inspector Information

Dan Hawkins		
Name of Inspector B&B Excavation		
Company Name 374 Route 130		
Company Address Sandwich	Ма	02563
City/Town (508) 477-0653	State SI14324	Zip Code
Telephone Number	License Number	

B. Certification

I certify that: I am a DEP approved system inspector in full compliance with Section 15.340 of Title 5 (310 CMR 15.000); I have personally inspected the sewage disposal system at the property address listed above; the information reported below is true, accurate and complete as of the time of my inspection; and the inspection was performed based on my training and experience in the proper function and maintenance of on-site sewage disposal systems. After conducting this inspection I have determined that the system:

- 1. 🔳 Passes
- 2. Conditionally Passes
- 3. I Needs Further Evaluation by the Local Approving Authority
- 4. 🗌 Fails

Dan Hawkins	Digitally signed by Dan Hawkins Date: 2023.06.20 08:19:19 -04'00'	6-16-2023
Inspector's Signature		Date

The system inspector shall submit a copy of this inspection report to the Approving Authority (Board of Health or DEP) within 30 days of completing this inspection. If the system has a design flow of 10,000 gpd or greater, the inspector and the system owner shall submit the report to the appropriate regional office of the DEP. The original form should be sent to the system owner and copies sent to the buyer, if applicable, and the approving authority.

Please note: This report only describes conditions at the time of inspection and under the conditions of use at that time. This inspection does not address how the system will perform in the future under the same or different conditions of use.



Commonwealth of Massachusetts Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160 Clark Road				
Owner information is	Property Address				
	Donald Doyle				
	Owner's Name				
	Sagamore Beach	Ma	02562	6-16-2023	
required for every page.	City/Town	State	Zip Code	Date of Inspection	

C. Inspection Summary

Inspection Summary: Complete 1, 2, 3, or 5 and all of 4 and 6.

1) System Passes:

I have not found any information which indicates that any of the failure criteria described in 310 CMR 15.303 or in 310 CMR 15.304 exist. Any failure criteria not evaluated are indicated below.

Comments:

The system was in working order at the time of inspection.

2) System Conditionally Passes:

One or more system components as described in the "Conditional Pass" section need to be replaced or repaired. The system, upon completion of the replacement or repair, as approved by the Board of Health, will pass.

Check the box for "yes", "no" or "not determined" (Y, N, ND) for the following statements. If "not determined," please explain.

The septic tank is metal and over 20 years old* or the septic tank (whether metal or not) is structurally unsound, exhibits substantial infiltration or exfiltration or tank failure is imminent. System will pass inspection if the existing tank is replaced with a complying septic tank as approved by the Board of Health.

* A metal septic tank will pass inspection if it is structurally sound, not leaking and if a Certificate of Compliance indicating that the tank is less than 20 years old is available.

ND (Explain below): ΠΥ ΠN



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C. Inspection Summary (cont.)

2) System Conditionally Passes (cont.):

Pump Chamber pumps/alarms not operational. System will pass with Board of Health approval if pumps/alarms are repaired.

Observation of sewage backup or break out or high static water level in the distribution box due to broken or obstructed pipe(s) or due to a broken, settled or uneven distribution box. System will pass inspection if (with approval of Board of Health):

	broken pipe(s) are replaced	□ Y	🗌 N	ND (Explain below):
	obstruction is removed	🗌 Y	🗌 N	ND (Explain below):
	distribution box is leveled or replaced	□ Y	□ N :	ND (Explain below):
		· · · ·		
	stem required pumping more than 4 time will pass inspection if (with approval of t			en or obstructed pipe(s). The
	broken pipe(s) are replaced	🗌 Y	🗌 N	ND (Explain below):
	obstruction is removed	ΠY	🗌 N	ND (Explain below):
	Ŷ			

3) Further Evaluation is Required by the Board of Health:

Conditions exist which require further evaluation by the Board of Health in order to determine if the system is failing to protect public health, safety or the environment.

a. System will pass unless Board of Health determines in accordance with 310 CMR 15.303(1)(b) that the system is not functioning in a manner which will protect public health, safety and the environment:



Commonwealth of Massachusetts Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160 Clark Road			
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C. Inspection Summary (cont.)

 \Box Cesspool or privy is within 50 feet of a surface water

Π Cesspool or privy is within 50 feet of a bordering vegetated wetland or a salt marsh

b. System will fail unless the Board of Health (and Public Water Supplier, if any) determines that the system is functioning in a manner that protects the public health, safety and environment:

The system has a septic tank and soil absorption system (SAS) and the SAS is within 100 feet of a surface water supply or tributary to a surface water supply.

The system has a septic tank and SAS and the SAS is within a Zone 1 of a public water supply.

The system has a septic tank and SAS and the SAS is within 50 feet of a private water supply well.

The system has a septic tank and SAS and the SAS is less than 100 feet but 50 feet or more from a private water supply well**. Method used to determine distance:

** This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis must be attached to this form.

c. Other:

4) System Failure Criteria Applicable to All Systems:

You must indicate "Yes" or "No" to each of the following for all inspections:

Yes	No	
	X	Backup of sewage into facility or system component due to overloaded or clogged SAS or cesspool
	×	Discharge or ponding of effluent to the surface of the ground or surface waters due to an overloaded or clogged SAS or cesspool



Commonwealth of Massachusetts Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

Owner information is required for every page.	Sagamore Beach City/Town	Ma State	Zip Code	Date of Inspection	
	Owner's Name	Ма	02562	6-16-2023	
	Property Address Donald Doyle			•	
	160 Clark Road				

C. Inspection Summary (cont.)

4) System Failure Criteria Applicable to All Systems: (cont.)

Yes	No					
	X	Static liquid level in the distribution box above outlet invert due to an overloaded or clogged SAS or cesspool				
	x	Liquid depth in cesspool is less than 6" below invert or available volume is less than $\frac{1}{2}$ day flow				
	X	Required pumping more than 4 times in the last year NOT due to clogged or obstructed pipe(s). Number of times pumped:				
	X	Any portion of the SAS, cesspool or privy is below high ground water elevation.				
	X	Any portion of cesspool or privy is within 100 feet of a surface water supply or tributary to a surface water supply.				
	X	Any portion of a cesspool or privy is within a Zone 1 of a public water supply well.				
	X	Any portion of a cesspool or privy is within 50 feet of a private water supply well.				
	×	Any portion of a cesspool or privy is less than 100 feet but greater than 50 feet from a private water supply well with no acceptable water quality analysis. [This system passes if the well water analysis, performed at a DEP certified laboratory, for fecal coliform bacteria indicates absent and the presence of ammonia nitrogen and nitrate nitrogen is equal to or less than 5 ppm, provided that no other failure criteria are triggered. A copy of the analysis and chain of custody must be attached to this form.]				
	×	The system is a cesspool serving a facility with a design flow of 2000 gpd- 10,000 gpd.				
	×	The system <u>fails</u> . I have determined that one or more of the above failure criteria exist as described in 310 CMR 15.303, therefore the system fails. The system owner should contact the Board of Health to determine what will be necessary to correct the failure.				
arge Systems: To be considered a large system the system must serve a facility with a						

5) L design flow of 10,000 gpd to 15,000 gpd.

For large systems, you must indicate either "yes" or "no" to each of the following, in addition to the questions in Section C.4.

Yes	No	
		the system is within 400 feet of a surface drinking water supply
		the system is within 200 feet of a tributary to a surface drinking water supply
		the system is located in a nitrogen sensitive area (Interim Wellhead Protection Area – IWPA) or a mapped Zone II of a public water supply well



Commonwealth of Massachusetts Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

A A A A A A A A A A A A A A A A A A A	160 Clark Road				
~~~~	Property Address				
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Owner information is	Owner's Name				
	Sagamore Beach	Ma	02562	6-16-2023	
required for every page.	City/Town	State	Zip Code	Date of Inspection	

### C. Inspection Summary (cont.)

If you have answered "yes" to any question in Section C.5 the system is considered a significant threat, or answered "yes" to any question in Section C.4 above the large system has failed. The owner or operator of any large system considered a significant threat under Section C.5 or failed under Section C.4 shall upgrade the system in accordance with 310 CMR 15.304. The system owner should contact the appropriate regional office of the Department.

6. You must indicate "yes" or "no" for each of the following for all inspections:

Yes	No	
	X	Pumping information was provided by the owner, occupant, or Board of Health
	X	Were any of the system components pumped out in the previous two weeks?
	x	Has the system received normal flows in the previous two week period?
	X	Have large volumes of water been introduced to the system recently or as part of this inspection?
x		Were as built plans of the system obtained and examined? (If they were not available note as N/A)
	×	Was the facility or dwelling inspected for signs of sewage back up?
X		Was the site inspected for signs of break out?
X		Were all system components, excluding the SAS, located on site?
X		Were the septic tank manholes uncovered, opened, and the interior of the tank inspected for the condition of the baffles or tees, material of construction, dimensions, depth of liquid, depth of sludge and depth of scum?
	X	Was the facility owner (and occupants if different from owner) provided with information on the proper maintenance of subsurface sewage disposal systems? The <b>size and location of the Soil Absorption System (SAS)</b> on the site has been determined based on:
X		Existing information. For example, a plan at the Board of Health.
	X	Determined in the field (if any of the failure criteria related to Part C is at issue approximation of distance is unacceptable) [310 CMR 15.302(5)]



### **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

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0	Donald Doyle									
Owner information is	Owner's Name Sagamore Beach	Ma	02562	6-16-2023						
required for every	City/Town	State	Zip Code	Date of Inspection	on					
page.	D. System Information									
	1. Residential Flow Conditions:									
	Number of bedrooms (design):		Number of bedr	ooms (actual):	-	6				
	DESIGN flow based on 310 CMR 15.203 (	for exam	ple: 110 gpd x # o	of bedrooms):	667.5/GP		۶D			
	Description:									
	Per permit provided by local Board	Per permit provided by local Board of Health dated 3/20/2003								
						0				
	Number of current residents:				-	0				
	Does residence have a garbage grinder?					Yes [		No		
	Does residence have a water treatment un	it?				Yes [		No		
	If yes, discharges to:									
	Is laundry on a separate sewage system? information in this report.)	(Include I	aundry system in	spection		Yes [		No		
	Laundry system inspected?				٦ '	Yes [		No		
	Seasonal use?			Yes [ belo		No				
	Water meter readings, if available (last 2 years usage (gpd)):									
	Detail:									
	2021- 77,000gallo	ns 20	022- 104,000g	allons						
					,					
	Sump pump?					Yes [ /2023		No		
	Last date of occupancy:				Date					



### **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160	) Clark Road							
< <u>C</u> 22		perty Address nald Doyle							
Owner	-	ner's Name							
information is required for every		gamoro Boadin	Ма	0256		6-16-2023			
page.			State	Zip C	ode	Date of Inspe	ection		
	D.	D. System Information (cont.)							
	2.	Commercial/Industrial Flow Conditions:			NA				
		Type of Establishment:							
		Design flow (based on 310 CMR 15.203):			Gallons p	er day (gpd)			
		Basis of design flow (seats/persons/sq.ft., etc	c.):						
		Grease trap present?					Yes	D N	0
		Water treatment unit present?					Yes	D N	0
		If yes, discharges to: —							
		Industrial waste holding tank present?					🗌 Yes		0
		Non-sanitary waste discharged to the Title 5	system?				🗌 Yes		0
		Water meter readings, if available:							
		Last date of occupancy/use:			Date				
		Other (describe below):							
	3.	Pumping Records:	Owne	er- da	ite of la	st pump is	unknown		
		Source of information:				p p p			
		Was system pumped as part of the inspection	on?				]Yes 🔳 N	No	
		If yes, volume pumped:	gallons						
		How was quantity pumped determined?							
		Reason for pumping:							



### **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

required for every page.	City/Town	State	Zip Code	Date of Inspection	
Owner information is	Owner's Name Sagamore Beach	Ма	02562	6-16-2023	
	Property Address Donald Doyle				
	160 Clark Road				

### D. System Information (cont.)

4. Type of System

ype of Syster	n:
x	Septic tank, distribution box, soil absorption system
	Single cesspool
	Overflow cesspool
	Privy
	Shared system (yes or no) (if yes, attach previous inspection records, if any)
	Innovative/Alternative technology. Attach a copy of the current operation and maintenance contract (to be obtained from system owner) and a copy of latest inspection of the I/A system by system operator under contract
	Tight tank. Attach a copy of the DEP approval.
	Other (describe):

Approximate age of all components, date installed (if known) and source of information: 2003 per permit

	Were sewage odors detected when arriving at the site?	🗌 Yes 🔳 No
5.	Building Sewer (locate on site plan):	0
	Depth below grade:	2' feet
	Material of construction:	<i>x</i>
	□ cast iron ■ 40 PVC □ other (explain):	
	Distance from private water supply well or suction line:	Town water
	Distance non private water supply wen or suction and.	feet
	Comments (on condition of joints, venting, evidence of leakage,	



# Commonwealth of Massachusetts Title 5 Official Inspection Form

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160	) Clark Road						
1 <u>5</u> 2		perty Address nald Doyle						
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page.		/Town			Lip couc		F	
	D.	System Into	rmation (cont.)					
	6.	Septic Tank (loca	te on site plan):		1	ı		
		Depth below grad	e:		fe	et		
		Material of constru	uction:		-			
		concrete	🗌 metal	🗌 fiberglas	ss 🗌 po	lyethylene	other (explain)	
							1	
		If tank is metal, lis	st age:		ye	ears		
		Is age confirmed	by a Certificate of C	ach a copy of	certificate) 1500gallor	Yes No		
		Dimensions: Sludge depth:				3" 33"		
		Distance from top	of sludge to bottom	of outlet tee or	baffle	1"		
		Scum thickness				6"		
		Distance from top of scum to top of outlet tee or baffle Distance from bottom of scum to bottom of outlet tee or baffle			e	16"		
					or baffle			
						measur	ed	
			sions determined?				and the set of the second to the	
		Comments (on pi	umping recommend	ations, inlet and	l outlet tee or l	pattle condition	on, structural integrity,	

liquid levels as related to outlet invert, evidence of leakage, etc.):

The tank was in working order at the time of inspection. The tank is not in need of pumping

at this time but should be pumped every two years for maintenance.



### **Commonwealth of Massachusetts** Title 5 Official Inspection Form / Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

		0 Clark Road					
		perty Address nald Doyle					
Owner		ner's Name					
information is required for every		gamore Beach		Ма	02562	6-16-2023	
page.	-	r/Town		State	Zip Coc	le Date of Insp	pection
	D.	System Info	ormation (cont.	)			
	7.	Grease Trap (lo	cate on site plan):			NA	
		Depth below gra	de:			feet	
		Material of const	ruction:				
		concrete	metal	🗌 fiberglas	SS	polyethylene	other (explain):
		Dimensions:		r			
		Scum thickness					
		Distance from to	p of scum to top of o	utlet tee or baffle	)		9. U
		Distance from bo					
		Date of last pum					
				the second		Date	atmustured into arity
		liquid levels as r	oumping recommend elated to outlet invert	, evidence of lea	ikage, et	c.):	i, sudclurar integrity,
		·					
	8.	<b>Tight or Holdin</b> Depth below gra	<b>g Tank</b> (tank must b ide:	e pumped at time	e of inspe	ection) (locate on s NA	ite plan):
		Material of const					
			🗌 metal	🗌 fibergla	SS	polyethylene	other (explain):
		Dimensions:		-			
		Capacity:			gallons		
		Design Flow:			gallons pe	r day	

Title 5 Official Inspection Form: Subsurface Sewage Disposal System • Page 11 of 18



## **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160	) Clark Road							
		perty Address nald Doyle							
Owner		ner's Name		00500	C 1C	0000			
information is required for every		gamore Beach	Ma	02562	6-16-2				
page.		/Town	State	Zip Code	Date d	of Inspection			
	D.	System Information (cont.)							
	8.	Tight or Holding Tank (cont.)							
		Alarm present:		🗌 Yes 🗌	No				
		Alarm level:		Alarm in working	order:	🗌 Yes	🗌 No		
		Date of last pumping:		Date					
		Comments (condition of alarm and float switches, etc.):							
			1						
		V., v.,				Σ ₁ το			
		* Attach copy of current pumping contract	(require	d). Is copy attache	ed?	🗌 Yes	🗌 No		
	9.	Distribution Box (if present must be oper	ned) (loc	ate on site plan): 0"					
		Depth of liquid level above outlet invert							
	Comments (note if box is level and distribution to outlets equal, any evidence of solids carry evidence of leakage into or out of box, etc.):								
		The d-box was in working order at	the tim	e of inspection	•				



## **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160 Clark Road					
AND	Property Address					
0	Donald Doyle					
Owner information is	Owner's Name Sagamore Beac	<b>h</b>	Ма	02562	6-16-2023	
required for every	City/Town		State	Zip Code	Date of Inspe	ction
page.	-	Information (cont.)				
	10. Pump Cha	amber (locate on site plan):				
	Pumps in v	working order:			🗌 Yes	🔲 No*
	Alarms in v	working order:			🗌 Yes	No*
	Comments NA	s (note condition of pump chamb	er, conditi	ion of pumps ar	nd appurtenand	ces, etc.):
		- 				
	* If pumps	or alarms are not in working or	ler, systen	n is a condition	al pass.	
	11. Soil Abso	rption System (SAS) (locate or	n site plan,	, excavation no	t required):	
	If SAS not	located, explain why:				
	Type:					
		leaching pits		number:		(3) 500 gallon chambers
	x	leaching chambers		number:		
		leaching galleries		number:		
		leaching trenches		number,	length:	
		leaching fields			dimensions:	
		overflow cesspool		number:		
		innovative/alternative syste	m			
		Type/name of technology:				

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### **Commonwealth of Massachusetts Title 5 Official Inspection Form**

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

160 Clark Road			······································	
Property Address				
Donald Doyle				
Owner's Name				
Sagamore Beach	Ma	02562	6-16-2023	
	State	Zip Code	Date of Inspection	
	Property Address Donald Doyle	Property Address Donald Doyle Owner's Name Sagamore Beach Ma	Property Address Donald Doyle Owner's Name Sagamore Beach Ma 02562	Property Address Donald Doyle Owner's Name Sagamore Beach Ma 02562 6-16-2023 Data of leaseding

### D. System Information (cont.)

#### 11. Soil Absorption System (SAS) (cont.)

Comments (note condition of soil, signs of hydraulic failure, level of ponding, damp soil, condition of vegetation, etc.):

The SAS was in working order at the time of inspection. Leaching was dry when viewed

with I	no	evidence	of	past	backu	p.
--------	----	----------	----	------	-------	----

12. Cesspools (cesspool must be pumped as part of inspection) (locate on site plan):

	NA	
Number and configuration		
Depth – top of liquid to inlet invert		
Depth of solids layer		
Depth of scum layer		
Dimensions of cesspool		
Materials of construction		
Indication of groundwater inflow	🗌 Yes	🗌 No
Comments (note condition of soil, signs of hydraulic failure, level of potetc.):	nding, condi	tion of vegetation,



### **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160 Clark Road			
< <u>C</u> *	Property Address Donald Doyle			
Owner information is required for every	Owner's Name Sagamore Beach	Ma	02562 Zip Code	6-16-2023 Date of Inspection
page.	D. System Information (cont.)			
	13. Privy (locate on site plan):			
	Materials of construction:	NA		
	Dimensions			
	Depth of solids			
	Comments (note condition of soil, signs of etc.):	f hydraulic	failure, level of	ponding, condition of vegetation,



### **Commonwealth of Massachusetts Title 5 Official Inspection Form**

Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

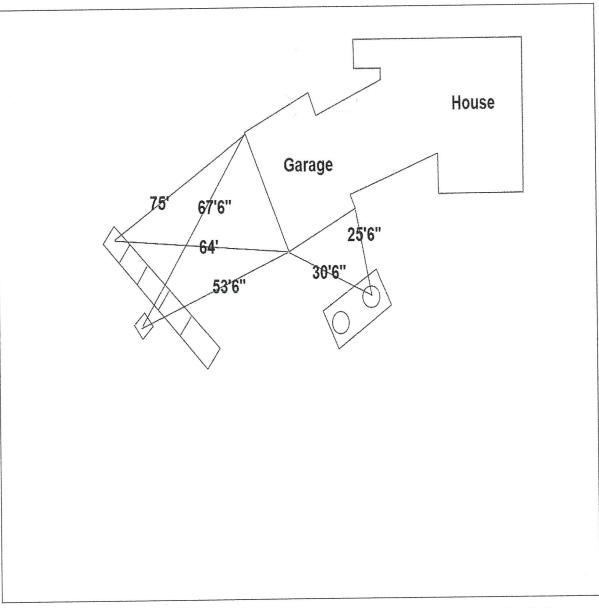
page.	City/Town	State	Zip Code	Date of Inspection	
Owner information is required for every	Sagamore Beach	Ма	02562	6-16-2023	
	Owner's Name		00500		
	Donald Doyle				
~	Property Address				
A CONTRACTOR OF A CONTRACTOR	160 Clark Road				

### D. System Information (cont.)

### 14. Sketch Of Sewage Disposal System:

Provide a view of the sewage disposal system, including ties to at least two permanent reference landmarks or benchmarks. Locate all wells within 100 feet. Locate where public water supply enters the building. Check one of the boxes below:

hand-sketch in the area below drawing attached separately Π





### **Commonwealth of Massachusetts** Title 5 Official Inspection Form Subsurface Sewage Disposal System Form - Not for Voluntary Assessments

	160 Clark Roa	ad					
	Property Addres Donald Doyle						
Owner information is required for every page.	Owner's Name Sagamore Beach City/Town		Ma State	02562 Zip Code	6-16-2023 Date of Inspection		
	D. System Information (cont.)						
	15. Site Exa	m:	ж.				
	🔳 Cheo	ck Slope					
	Surfa	ace water					
	Che	ck cellar					
	Shall	low wells		No C	NV @ 134"		
	Estimate	ed depth to high ground water:		No GW @ 134"			
	Please ii	ndicate all methods used to det	ermine the hi	igh ground wat	er elevation:		
	Obtained from system design plans on record						
		If checked, date of design plan reviewed: Date					
	Observed site (abutting property/observation hole within 150 feet of SAS)						
	Checked with local Board of Health - explain:						
		Checked with local excavators, installers - (attach documentation)					
	Accessed USGS database - explain:						
	You <b>mu</b> A plan	st describe how you establishe on file at the local Board o	d the high gro of Health w	ound water ele as used to d	vation: letermine high groundwater.		

Before filing this Inspection Report, please see Report Completeness Checklist on next page.



### **Commonwealth of Massachusetts Title 5 Official Inspection Form**

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	160 Clark Road			
	Property Address			
	Donald Doyle			
Owner information is required for every	Owner's Name			
	Sagamore Beach	Ma	02562	6-16-2023
page.	City/Town	State	Zip Code	Date of Inspection

### E. Report Completeness Checklist

Complete all applicable sections of this form inclusive of:

A. Inspector Information: Complete all fields in this section.

B. Certification: Signed & Dated and 1, 2, 3, or 4 checked

- C. Inspection Summary:
  - 1, 2, 3, or 5 completed as appropriate

4 (Failure Criteria) and 6 (Checklist) completed

D. System Information:

For 8: Tight/Holding Tank – Pumping contract attached

For 14: Sketch of Sewage Disposal System drawn on pg. 16 or attached

For 15: Explanation of estimated depth to high groundwater included

#### Bk 36264 Ps258 \$9597 03-15-2024 & 12:59p



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 5 – Order of Conditions Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP: SE7-2287 MassDEP File #

MassDEP File #

eDEP Transaction # Bourne City/Town

### A. General Information

Please note:	4 E	rom:	Bourne					2
this form has been modified	1. Г	10111.	Conservation Commis	sion				
with added space to accommodate	2. This issuance is for (check one):					ditions b. Amended Order of Conditions		
the Registry of Deeds Reguirements	3. T	o: App	olicant:					
rioqui onici ile		Richard	& Corinne			hittington Trust	ees	
Important:		a. First N	ame	-	b. I	_ast Name		
When filling								
out forms on	c. Organization							
the			nbriar Court					and any star for the star star star star star star star star
computer, use only the			g Address					00000
tab key to		Plymou		-				02360 g. Zip Code
move your		e. City/To	nwo		Ť.	State		g. Zip Code
cursor - do not use the <u>4. Property Owner (if different from applicant)</u> :								
return key.		. ,			,			
		SAME			h	Last Name		
1 tab		a. First N	lame		D.	Last Name		
	)	c. Organ	ization				-	
return								
<u> </u>		d. Mailin	g Address					*
		e. City/T	own		f.	State		g. Zip Code
	5. F	Project L	ocation:					
		160 Cla	ark Road		Bo	ourne		
		a. Street	Address	s.	b.	City/Town		
		4.2			4			
		c. Asses	sors Map/Plat Number			Parcel/Lot Numbe		
		Latitud	e and Longitude, if	known:	41d47m54	Ns	70d31 m	
					d. Latitude		e. Longitu	de



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

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### A. General Information (cont.)

Property recorded at the Registry of Deeds for (attach additional information if more than 6. one parcel):

red land)
16/2024
Date of Issuance
0

a. Plan Title		
Land Planning, Inc.	Norman G. Hill, PE	Ę
b. Prepared By	c. Signed and Stamped I	by
2/15/2024	1" =10'	
d. Final Revision Date	e. Scale	1
Wetland Delineation Report		9/16/2023
f. Additional Plan or Document Title		g. Date

### **B. Findings**

1. Findings pursuant to the Massachusetts Wetlands Protection Act:

Following the review of the above-referenced Notice of Intent and based on the information provided in this application and presented at the public hearing, this Commission finds that the areas in which work is proposed is significant to the following interests of the Wetlands Protection Act (the Act). Check all that apply:

- Prevention of C. Public Water Supply b. Land Containing Shellfish a. Pollution f. Protection of Private Water Supply e. Fisheries d. Wildlife Habitat Groundwater Supply h. Storm Damage Prevention i. Flood Control q.
- This Commission hereby finds the project, as proposed, is: (check one of the following boxes) 2.

### Approved subject to:

the following conditions which are necessary in accordance with the performance a. standards set forth in the wetlands regulations. This Commission orders that all work shall be performed in accordance with the Notice of Intent referenced above, the following General Conditions, and any other special conditions attached to this Order. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, these conditions shall control.



Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands

### WPA Form 5 – Order of Conditions

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### B. Findings (cont.)

Denied because:

- b. I the proposed work cannot be conditioned to meet the performance standards set forth in the wetland regulations. Therefore, work on this project may not go forward unless and until a new Notice of Intent is submitted which provides measures which are adequate to protect the interests of the Act, and a final Order of Conditions is issued. A description of the performance standards which the proposed work cannot meet is attached to this Order.
- c. I the information submitted by the applicant is not sufficient to describe the site, the work, or the effect of the work on the interests identified in the Wetlands Protection Act. Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides sufficient information and includes measures which are adequate to protect the Act's interests, and a final Order of Conditions is issued. A description of the specific information which is lacking and why it is necessary is attached to this Order as per 310 CMR 10.05(6)(c).
- Buffer Zone Impacts: Shortest distance between limit of project
   disturbance and the wetland resource area specified in 310 CMR 10.02(1)(a)

Inland Resource Area Impacts: Check all that apply below. (For Approvals Only)

Re	esource Area	Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
4.	Bank				Replacement
5.	Bordering	a. linear feet	b. linear feet	c. linear feet	d. linear feet
6.	Vegetated Wetland	a. square feet	b. square feet	c. square feet	d. square feet
	Waterbodies and Waterways	a. square feet	b. square feet	c. square feet	d. square feet
7.	D Pordering I and	e. c/y dredged	f. c/y dredged		
7.	Bordering Land Subject to Flooding	a. square feet	b. square feet	c. square feet	d. square feet
	Cubic Feet Flood Storage	e. cubic feet	f. cubic feet		
8.	Isolated Land Subject to Flooding	a. square feet	b. square feet	g. cubic feet	h. cubic feet
	Cubic Feet Flood Storage	c. cubic feet	d. cubic feet	e. cubic feet	f. cubic feet
9.	Riverfront Area	a. total sq. feet	b. total sq. feet		
	Sq ft within 100 ft	c. square feet	d oguere fest		
	Sq ft between 100-	o. square leet	d. square feet	e. square feet	f. square feet
	200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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### B. Findings (cont.)

Coastal Resource Area Impacts: Check all that apply below. (For Approvals Only)

		Proposed Alteration	Permitted Alteration	Proposed Replacement	Permitted Replacement
	] Designated Port eas ] Land Under the	Indicate size u	nder Land Unde	r the Ocean, belo	W
	cean	a. square feet	b. square feet		
		c. c/y dredged	d. c/y dredged		
12.	Barrier Beaches	Indicate size u below	nder Coastal Bea	aches and/or Coa	astal Dunes
13.	Coastal Beaches	a. square feet	b. square feet	cu yd c. nourishment	cu yd d. nourishment
14.	Coastal Dunes	a. square feet	b. square feet	cu yd c. nourishment	cu yd d. nourishment
15.	Coastal Banks	a. linear feet	b. linear feet	ja lainen disanen. Is	
16. 🛄 Sh	Rocky Intertidal ores	a. square feet	b. square feet		
17.	Salt Marshes	a. square feet	b. square feet	c. square feet	d. square feet
18. 🗌 Poi	Land Under Salt nds	a. square feet	b. square feet	·	
19. 🗌	Land Containing	c. c/y dredged	d. c/y dredged		
	ellfish	a. square feet	b. square feet	c. square feet	d. square feet
20.	Fish Runs	Indicate size un the Ocean, and Waterways, abo	/or inland Land l	iks, Inland Bank, Jnder Waterbodie	Land Under es and
21.	Land Subject to	a. c/y dredged	b. c/y dredged		
	astal Storm wage	a. square feet	b. square feet		
22.	Riverfront Area	a. total sq. feet	b. total sq. feet		
	Sq ft within 100 ft	c. square feet	d. square feet	e. square feet	f. square feet
	Sq ft between 100- 200 ft	g. square feet	h. square feet	i. square feet	j. square feet



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### B. Findings (cont.)

* #23. If the 23. project is for the purpose of restoring or enhancing a wetland in addition to the square footage that has been entered in Section B.5.c (BVW) or B.17.c (Salt Marsh) above, 1. please enter the additional amount here. 2.

Res	storation/Enhancement *:
-----	--------------------------

a. square feet of BVW

resource area 24. Stream Crossing(s):

b. square feet of salt marsh

a. number of new stream crossings

b. number of replacement stream crossings

### C. General Conditions Under Massachusetts Wetlands Protection Act

### The following conditions are only applicable to Approved projects.

- 1. Failure to comply with all conditions stated herein, and with all related statutes and other regulatory measures, shall be deemed cause to revoke or modify this Order.
- 2. The Order does not grant any property rights or any exclusive privileges; it does not authorize any injury to private property or invasion of private rights.
- 3. This Order does not relieve the permittee or any other person of the necessity of complying with all other applicable federal, state, or local statutes, ordinances, bylaws, or regulations.
- 4. The work authorized hereunder shall be completed within three years from the date of this Order unless either of the following apply:
  - a. The work is a maintenance dredging project as provided for in the Act; or
  - b. The time for completion has been extended to a specified date more than three years, but less than five years, from the date of issuance. If this Order is intended to be valid for more than three years, the extension date and the special circumstances warranting the extended time period are set forth as a special condition in this Order.
  - c. If the work is for a Test Project, this Order of Conditions shall be valid for no more than one year.
- 5. This Order may be extended by the issuing authority for one or more periods of up to three years each upon application to the issuing authority at least 30 days prior to the expiration date of the Order. An Order of Conditions for a Test Project may be extended for one additional year only upon written application by the applicant, subject to the provisions of 310 CMR 10.05(11)(f).
- If this Order constitutes an Amended Order of Conditions, this Amended Order of Conditions does not extend the issuance date of the original Final Order of Conditions and the Order will expire on _____ unless extended in writing by the Department.
- Any fill used in connection with this project shall be clean fill. Any fill shall contain no trash, refuse, rubbish, or debris, including but not limited to lumber, bricks, plaster, wire, lath, paper, cardboard, pipe, tires, ashes, refrigerators, motor vehicles, or parts of any of the foregoing.



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C. General Conditions Under Massachusetts Wetlands Protection Act

- This Order is not final until all administrative appeal periods from this Order have elapsed, or if such an appeal has been taken, until all proceedings before the Department have been completed.
- 9. No work shall be undertaken until the Order has become final and then has been recorded in the Registry of Deeds or the Land Court for the district in which the land is located, within the chain of title of the affected property. In the case of recorded land, the Final Order shall also be noted in the Registry's Grantor Index under the name of the owner of the land upon which the proposed work is to be done. In the case of the registered land, the Final Order shall also be noted on the Land Court Certificate of Title of the owner of the land upon which the proposed work is done. The recording information shall be submitted to the Conservation Commission on the form at the end of this Order, which form must be stamped by the Registry of Deeds, prior to the commencement of work.
- 10. A sign shall be displayed at the site not less then two square feet or more than three square feet in size bearing the words,

"Massachusetts Department of Environmental Protection" [or, "MassDEP"]

"File Number SE7-2287

- 11. Where the Department of Environmental Protection is requested to issue a Superseding Order, the Conservation Commission shall be a party to all agency proceedings and hearings before MassDEP.
- 12. Upon completion of the work described herein, the applicant shall submit a Request for Certificate of Compliance (WPA Form 8A) to the Conservation Commission.
- 13. The work shall conform to the plans and special conditions referenced in this order.
- 14. Any change to the plans identified in Condition #13 above shall require the applicant to inquire of the Conservation Commission in writing whether the change is significant enough to require the filing of a new Notice of Intent.
- 15. The Agent or members of the Conservation Commission and the Department of Environmental Protection shall have the right to enter and inspect the area subject to this Order at reasonable hours to evaluate compliance with the conditions stated in this Order, and may require the submittal of any data deemed necessary by the Conservation Commission or Department for that evaluation.
- 16. This Order of Conditions shall apply to any successor in interest or successor in control of the property subject to this Order and to any contractor or other person performing work conditioned by this Order.



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## C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- 17. Prior to the start of work, and if the project involves work adjacent to a Bordering Vegetated Wetland, the boundary of the wetland in the vicinity of the proposed work area shall be marked by wooden stakes or flagging. Once in place, the wetland boundary markers shall be maintained until a Certificate of Compliance has been issued by the Conservation Commission.
- 18. All sedimentation barriers shall be maintained in good repair until all disturbed areas have been fully stabilized with vegetation or other means. At no time shall sediments be deposited in a wetland or water body. During construction, the applicant or his/her designee shall inspect the erosion controls on a daily basis and shall remove accumulated sediments as needed. The applicant shall immediately control any erosion problems that occur at the site and shall also immediately notify the Conservation Commission, which reserves the right to require additional erosion and/or damage prevention controls it may deem necessary. Sedimentation barriers shall serve as the limit of work unless another limit of work line has been approved by this Order.
- 19. The work associated with this Order (the "Project")

(1) is subject to the Massachusetts Stormwater Standards

(2) is NOT subject to the Massachusetts Stormwater Standards

If the work is subject to the Stormwater Standards, then the project is subject to the following conditions:

a) All work, including site preparation, land disturbance, construction and redevelopment, shall be implemented in accordance with the construction period pollution prevention and erosion and sedimentation control plan and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Construction General Permit as required by Stormwater Condition 8. Construction period erosion, sedimentation and pollution control measures and best management practices (BMPs) shall remain in place until the site is fully stabilized.

b) No stormwater runoff may be discharged to the post-construction stormwater BMPs unless and until a Registered Professional Engineer provides a Certification that: *i*. all construction period BMPs have been removed or will be removed by a date certain specified in the Certification. For any construction period BMPs intended to be converted to post construction operation for stormwater attenuation, recharge, and/or treatment, the conversion is allowed by the MassDEP Stormwater Handbook BMP specifications and that the BMP has been properly cleaned or prepared for post construction operation, including removal of all construction period sediment trapped in inlet and outlet control structures; *ii.* as-built final construction BMP plans are included, signed and stamped by a Registered Professional Engineer, certifying the site is fully stabilized;

*iii.* any illicit discharges to the stormwater management system have been removed, as per the requirements of Stormwater Standard 10;



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#### C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

iv. all post-construction stormwater BMPs are installed in accordance with the plans (including all planting plans) approved by the issuing authority, and have been inspected to ensure that they are not damaged and that they are in proper working condition;

v. any vegetation associated with post-construction BMPs is suitably established to withstand erosion.

c) The landowner is responsible for BMP maintenance until the issuing authority is notified that another party has legally assumed responsibility for BMP maintenance. Prior to requesting a Certificate of Compliance, or Partial Certificate of Compliance, the responsible party (defined in General Condition 18(e)) shall execute and submit to the issuing authority an Operation and Maintenance Compliance Statement ("O&M Statement) for the Stormwater BMPs identifying the party responsible for implementing the stormwater BMP Operation and Maintenance Plan ("O&M Plan") and certifying the following:

i.) the O&M Plan is complete and will be implemented upon receipt of the Certificate of Compliance, and

ii.) the future responsible parties shall be notified in writing of their ongoing legal responsibility to operate and maintain the stormwater management BMPs and implement the Stormwater Pollution Prevention Plan.

d) Post-construction pollution prevention and source control shall be implemented in accordance with the long-term pollution prevention plan section of the approved Stormwater Report and, if applicable, the Stormwater Pollution Prevention Plan required by the National Pollution Discharge Elimination System Multi-Sector General Permit.

e) Unless and until another party accepts responsibility, the landowner, or owner of any drainage easement, assumes responsibility for maintaining each BMP. To overcome this presumption, the landowner of the property must submit to the issuing authority a legally binding agreement of record, acceptable to the issuing authority, evidencing that another entity has accepted responsibility for maintaining the BMP, and that the proposed responsible party shall be treated as a permittee for purposes of implementing the requirements of Conditions 18(f) through 18(k) with respect to that BMP. Any failure of the proposed responsible party to implement the requirements of Conditions 18(f) through 18(k) with respect to that BMP shall be a violation of the Order of Conditions or Certificate of Compliance. In the case of stormwater BMPs that are serving more than one lot, the legally binding agreement shall also identify the lots that will be serviced by the stormwater BMPs. A plan and easement deed that grants the responsible party access to perform the required operation and maintenance must be submitted along with the legally binding agreement.

f) The responsible party shall operate and maintain all stormwater BMPs in accordance with the design plans, the O&M Plan, and the requirements of the Massachusetts Stormwater Handbook



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C. General Conditions Under Massachusetts Wetlands Protection Act (cont.)

- g) The responsible party shall:
  - 1. Maintain an operation and maintenance log for the last three (3) consecutive calendar years of inspections, repairs, maintenance and/or replacement of the stormwater management system or any part thereof, and disposal (for disposal the log shall indicate the type of material and the disposal location);
  - 2. Make the maintenance log available to MassDEP and the Conservation Commission ("Commission") upon request; and
  - 3. Allow members and agents of the MassDEP and the Commission to enter and inspect the site to evaluate and ensure that the responsible party is in compliance with the requirements for each BMP established in the O&M Plan approved by the issuing authority.

h) All sediment or other contaminants removed from stormwater BMPs shall be disposed of in accordance with all applicable federal, state, and local laws and regulations.

i) Illicit discharges to the stormwater management system as defined in 310 CMR 10.04 are prohibited.

j) The stormwater management system approved in the Order of Conditions shall not be changed without the prior written approval of the issuing authority.

k) Areas designated as qualifying pervious areas for the purpose of the Low Impact Site Design Credit (as defined in the MassDEP Stormwater Handbook, Volume 3, Chapter 1, Low Impact Development Site Design Credits) shall not be altered without the prior written approval of the issuing authority.

I) Access for maintenance, repair, and/or replacement of BMPs shall not be withheld. Any fencing constructed around stormwater BMPs shall include access gates and shall be at least six inches above grade to allow for wildlife passage.

Special Conditions (if you need more space for additional conditions, please attach a text document):

#### See attached text

20. For Test Projects subject to 310 CMR 10.05(11), the applicant shall also implement the monitoring plan and the restoration plan submitted with the Notice of Intent. If the conservation commission or Department determines that the Test Project threatens the public health, safety or the environment, the applicant shall implement the removal plan submitted with the Notice of Intent or modify the project as directed by the conservation commission or the Department.

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### Massachusetts Department of Environmental Protection Bureau of Resource Protection - Wetlands WPA Form 5 – Order of Conditions

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## D. Findings Under Municipal Wetlands Bylaw or Ordinance

- 1. Is a municipal wetlands bylaw or ordinance applicable? X Yes I No
- 2. The Bourne hereby finds (check one that applies): Conservation Commission
  - a. I that the proposed work cannot be conditioned to meet the standards set forth in a municipal ordinance or bylaw, specifically:

1. Municipal Ordinance or Bylaw

Therefore, work on this project may not go forward unless and until a revised Notice of Intent is submitted which provides measures which are adequate to meet these standards, and a final Order of Conditions is issued.

 b. In that the following additional conditions are necessary to comply with a municipal ordinance or bylaw:

Bourne Wetland Protection Bylaw
1. Municipal Ordinance or Bylaw

Article 3.7 2. Citation

2. Citation

3. The Commission orders that all work shall be performed in accordance with the following conditions and with the Notice of Intent referenced above. To the extent that the following conditions modify or differ from the plans, specifications, or other proposals submitted with the Notice of Intent, the conditions shall control.

The special conditions relating to municipal ordinance or bylaw are as follows (if you need more space for additional conditions, attach a text document):

See attached text



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# E. Signatures

This Order is valid for three years, unless otherwise specified as a special condition pursuant to General Conditions #4, from the date of issuance.

2/16/2024 1. Date of Issuance Li

Please indicate the number of members who will sign this form. This Order must be signed by a majority of the Conservation Commission.

 This Order must be signed by a majority of the Conservation Commission.
 2. Number of Signers

 The Order must be mailed by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate Department of Environmental Protection Regional Office, if not filing electronically, and the property owner, if different from applicant.

Revert Aray Signature Signature Signature Signature Signature Signature	ROBERT M. GEBY Printed Name SARAH M. BUTLER Printed Name Toggh Socres Printed Name
Signature	Printed Name
Signature	Printed Name
Signature	Printed Name
by hand delivery on	by certified mail, return receipt requested, on
Date	Date 2110/2029



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### F. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate MassDEP Regional Office to issue a Superseding Order of Conditions. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order associated with this appeal will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order, or providing written information to the Department prior to issuance of a Superseding Order.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act (M.G.L. c. 131, § 40), and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal ordinance or bylaw, and not on the Massachusetts Wetlands Protection Act or regulations, the Department has no appellate jurisdiction.

This Order of Conditions is being issued based upon strict accordance with the information submitted in the Notice of Intent filed on 1/31/2024 and the Plan of Record dated 2/15/2024 and stamped by Norman G. Hill, PE. Additional materials reviewed included:

In addition to the GENERAL CONDITIONS referenced in the Order of Conditions, the Commission has found it necessary to impose the following Special Conditions pursuant to M.G.L. Ch. 131, s.40 and the Town of Bourne Natural Resources Protection Bylaw Article 3.7.

THE SPECIAL CONDITIONS AND BYLAW CONDITIONS CHECKED BELOW APPLY TO YOUR PROPOSAL. NOTE THAT THE ABOVE LISTED GENERAL CONDITIONS ARE AUTOMATICALLY PART OF THIS ORDER OF CONDITIONS.

### SPECIAL CONDITIONS Pursuant to M.G.L. C. 131, s. 40.

***(Pre-Construction)***

 $\mathbf{X}$ 

 $\boxtimes$ 

 $\boxtimes$ 

 $\boxtimes$ 

- 1. This Order of Conditions shall apply to any successor in interest or successor in control of the property.
  - NO WORK SHALL BEGIN until General Condition #9 has been complied with. The Commission must be in receipt of the Registry information certificate BEFORE work begins. An Enforcement Order will be issued if work is prematurely begun without compliance with this condition.
- 3. ALL CONSTRUCTION MUST COMPLY WITH THE ABOVE-REFERENCED PLANS AND THE CONDITIONS OF THIS ORDER. ANY CHANGES INTENDED TO BE MADE IN THE PLANS OR IN THE WORK, SHALL REQUIRE THE APPLICANT TO FILE A NEW NOTICE OF INTENT, OR TO INQUIRE OF THE COMMISSION IN WRITING WHETHER THE CHANGE IS SUBSTANTIAL ENOUGH TO REQUIRE A NEW FILING. NO CHANGE IN PLAN OR WORK, UNDER THIS FILING IS PERMISSIBLE WITHOUT A NEW NOTICE OF INTENT, OR PERMISSION FROM THE COMMISSION. FAILURE TO COMPLY WITH THIS CONDITION WILL RESULT IN THE ORDER OF CONDITIONS (PERMIT) BEING REVOKED.
  - 4. The Plan of Record shall be in full compliance with Appendix G of 780 CMR Massachusetts State Building Code and the requirements the Federal Emergency Management Agency (FEMA). Specific design requirements for construction in flood zones (A, A1-A30, AE, AC, AH, V1-V30, and VE) shall be determined by the Town of Bourne Building Inspector. The final foundation design APPROVED by the Building Inspector shall automatically become a part of the Plan of Record. Noncompliance with any of the requirements of Appendix G of 780 CMR or those of the Building Inspector shall constitute a violation of the Order of Conditions and will be grounds for Enforcement Action and/or the nonissuance of the Certificate of Compliance. Upon requesting a Certificate of Compliance the applicant must present PROOF that his/her project has been designed according to the Plan of Record and to the satisfaction of the Building Inspector.
    - 5. Prior to the installation of the subsurface sewage disposal system, you are advised of the necessity to comply with, or receive a variance from, the local Board of Health Regulations & Bylaws and obtain a valid health permit. The Order of Conditions re-emphasizes this requirement and prohibits any construction prior to obtaining a Board of Health permit. A leaching facility must be 150' from any wetland resource area (including the top of the coastal bank) unless a variance or other approval has been granted by the Board of Health.

- 6. Since the building was or is to be constructed after August 10, 1978, and is or will be within 100' of the top of an eroding coastal bank, (310 CMR, 10.30), this Order and the Certificate of Compliance incorporate 310 CMR 10.30(5) which states: "no coastal engineering structure, such as a bulkhead, revetment, or seawall shall be permitted on an eroding bank at any time in the future to protect the project allowed by this Order of Conditions."
- 7. The applicant as a condition of this Order, grants to the Commission members, and agents of the Commission the right to enter, inspect, and sample the premises to evaluate compliance with the conditions and performance standards stated in this Order, the Act, and 310 CMR 10.00 and the Town of Bourne Wetlands Protection Bylaw Article 3.7, and may require the submittal of any data deemed necessary by the Commission for that evaluation.
  - 8. An on-site pre-construction inspection meeting must be held between the Bourne Conservation Commission and/or agent, the contractor responsible for implementing the project, and if applicable, the outside consultant/representative responsible for permitting. The Bourne Conservation Commission must be contacted in writing at least two weeks prior to the scheduled meeting. All erosion controls must be installed at the location of the project prior to the preconstruction meeting, unless otherwise agreed upon by the applicant and the Bourne Conservation Commission.
  - 9. The landowner and/or his contractor will notify the Commission in writing 5 days prior to the start of work. The letter shall state the name, address, telephone number (business & home phone) of the project supervisor who will be responsible for insuring on-site compliance with this Order. All sedimentation/erosion control devices shall be installed BEFORE the start of work.
  - This document shall be included in all construction contracts and subcontracts dealing with the work proposed and shall supersede other contract requirements.
    - No underground petroleum product storage tanks are allowed within 100' of any wetland or within any velocity (V) floodzone as indicated on the most recent FEMA floodzone maps.
- ***(Construction)***

 $\boxtimes$ 

 $\boxtimes$ 

 $\square$ 

 $\square$ 

- 12. The project engineer and contractors (and all subcontractors) must be informed of the conditions of this Order. A copy of this Order of Conditions must be available at all times at the construction site for reference. The Applicant is held responsible for compliance with this Order of Conditions.
  - 13. Whatever erosion control measures are indicated on the plan, they shall consist of at least a double row of staked hay-bales and these must be maintained throughout the construction period. It is the applicant's responsibility to take additional appropriate measures to control sedimentation/erosion into the wetland areas.
  - 14. The Applicant must employ and maintain suitable erosion control measures such as staked hay bales, siltation curtains, bark mulch, jute netting, etc. as shown on the Plan of Record and/or addressed in the Notice of Intent. This siltation control shall be maintained until all disturbed areas are successfully revegetated. Additional erosion controls shall be kept on-site in order to respond to unforeseen circumstances.
- 15. The applicant, owner, successors or assignees shall be responsible for maintaining any on-site drainage structures and out falls, assuring the lasting integrity of vegetative cover on the site and site activities so as to prevent erosion, siltation, sedimentation, chemical contamination or other detrimental impact to the on-site wetland resource area(s) and/or off-site wetland resource area(s). The maintenance activities specified in this Order shall not expire with the issuance of the Certificate of Compliance and shall continue in perpetuity. It is the responsibility of the property owner of record to see that maintenance conditions are complied with as required by this Order.

- 16. Gutters, downspouts and drywell must be installed to collect all roof runoff.
- 17. All drainage must be directed into a leaching type catch basin before being discharged towards or into any wetland or surface water body. All catch basins must incorporate measures to insure the removal of pollutants such as oil and gas and must provide for adequate sediment retention. The basins and oil absorbent material shall be regularly cleaned and maintained.
- 18. Any refuse material generated through the project construction will be removed to an approved landfill, and in no case will these materials be allowed to be buried or disposed of on site or on abutting property. REMOVAL MUST BE DONE WEEKLY DURING THE CONSTRUCTION PHASE OF THE PROJECT. REFUSE MUST NOT BE ALLOWED TO ENTER ANY WETLAND AREAS.
  - 19. Used petroleum products from the operation or maintenance of construction equipment and construction debris shall be collected weekly and disposed of off-site at an approved landfill. No on-site disposal is permitted.
  - 20. Only rubber tired or tracked vehicles utilizing swamp mats/planks will be permitted to traverse the following resource areas: beaches, dunes, and saltmarshes.
  - 21. Use of heavy equipment shall be confined to inside the limit of work as shown on the Plan of Record. All work shall be accomplished from the UPLAND side of the limit of work line.
  - 22. The use of heavy equipment upon the saltmarsh, dunes or coastal beach is PROHIBITED. All work within these resource areas must be done by hand or with suitable equipment approved by the Commission
- 23. The proposed stairs shall be elevated ____feet above the existing grade. All pilings should be supported by SONO tube footings. Excavated materials shall be removed from the coastal bank.
- 24. Driveway must be constructed out of pervious material in perpetuity.
- 25. A landscaping plan including the size, quantity, species and location of plantings including square footage of lawn, mulch, etc. must be submitted and approved by the Conservation Agent and/or the Commission prior to receiving the occupancy permit.
- 26. All vegetation must be predominantly native and non-invasive. All plants must be allowed to grow to maturity before pruning. All plantings will be monitored for a minimum of two growing seasons and any plants that do not survive must be replaced.

***(Post Construction)***

X

X

 $\square$ 

- 27. Upon completion of your project you must apply for a Certificate of Compliance. This Order will not be considered complied with until the Certificate of Compliance has been requested, granted and RECORDED at the Registry of Deeds in Barnstable. To insure timely issuance of the Certificate of Compliance you must request the Certificate within 30 days of the completion of your project.
- 28. Prior to the issuance of a Certificate of Compliance, the project engineer or consultant shall certify that the project has been completed in compliance with this Order and the original Plan of Record. Any variations from the approved plan should be clearly noted and reasons given to justify the noncompliance. (see Bylaw condition/requirement also)

29. An as-built plan, signed and stamped by a registered professional engineer or land surveyor in the Commonwealth of Massachusetts shall be submitted to the Commission at the same time as a written request for a Certificate of Compliance and shall specify how the completed plan differs from that shown on the plans referred to in the Order of Conditions. The as-built plan shall include, but not be limited to the following:

All pipe/culvert inverts for inflow and outfalls, pipe slope, size and composition; location of other drainage structures; limits of fill or alteration; location of any structure and pavement within 100' of any wetland resource area (including the top of the coastal bank); the edge of each wetland resource area; the grade contours within 100' of the wetland resource areas

# SPECIAL CONDITIONS pursuant to the Bourne Wetland Protection By-Law Article 3.7

 $\boxtimes$ 

 $\boxtimes$ 

 $\boxtimes$ 

- The total lawn area for this lot shall not exceed _____s.f. Lawn fertilizer is a known source of nitrogen loading, which causes pollution of coastal waters. Phosphates are known causes of freshwater eutrophication.
  - All new habitable buildings, and accessories thereto, shall be setback at least fifty (50) feet from any wetland resource area as per Article 3.7 Town of Bourne Wetlands Protection By-Laws unless the Commission has specifically approved a lesser setback distance.
- 3. A Minimum distance of _____ feet of natural vegetation (buffer zone) must be maintained between any resource area and altered area.
- 4. No clear-cutting of standing trees, brush, or surface vegetation is allowed outside of the approved limit of work as shown on the approved Plan of Record. Any additional vista pruning or vegetation removal not identified on the Plan of Record will require additional coordination and/or filing with the Conservation Commission.
- 5. All excavation will immediately halt if any historical or archeological artifacts are uncovered and the Applicant will report this information immediately to the Commission, the Town of Bourne Historical Commission and the Massachusetts Historical Commission. Failure to report this information will be grounds to revoke this permit.
- 6. During construction for this project, an on-site foreman, directing engineer or designated construction manager and the excavating contractor shall have a copy of this Order at the site, shall familiarize him or herself with the conditions of this permit, and shall adhere to said conditions.
- To insure timely issuance of the Certificate of Compliance, requests should be made within 30 days of the completion of the project.
- 8. In order to determine whether or not the Order of Conditions (OOC) has been properly complied with, the Commission requires that you provide a copy of the foundation As-built. This is necessary to determine if you have complied with your original Plan of Record and Notice of Intent prior to the Commission issuing the Certificate of Compliance.
- 9. The installation of a garbage grinder is strictly PROHIBITED under this Order of Conditions and it is recommended that the applicant have the Septic System serviced (checked & pumped if necessary) every two years. This condition shall continue in perpetuity.
- This Order of Conditions (OOC) is not valid until the applicant applies for and receives a Section 10 and/or Section 404 Permit from the United States Army Corps of Engineers for the proposed project.
- 11. This Order of Conditions (OOC) is not valid until the applicant applies for and receives a Water

Quality Certificate from the DEP Division of Water Pollution Control relative to 401

12. This Order of Conditions (OOC) is not valid until the applicant applies for and receives a License from the DEP Division of Wetlands and Waterways relative to Chapter 91, The Public Waterfront Act & its regulations at 310 CMR 9.00.

ADDITIONAL SPECIAL CONDITIONS pursuant to the Bourne Wetland Protection By-Law Article 3.7

Special Condition Numbers **15 & 16** above shall continue in perpetuity beyond the limitations of this Order and with the sale of the property to others.

The Applicant is reminded of his/her right to Appeal this Order or any part herein. This Appeal must be a dual appeal to both DEP within 10 days and to Superior Court pursuant to M.G.L c. 249 s. 4 within 60 calendar days of the issuance of this Order of Conditions.



Michael Leitzel, Chairperson Ellen Doyle Sullivan, Clerk Donna Barakauskas, Member **TOWN OF BOURNE** 

Board of Assessors 24 Perry Avenue Buzzards Bay, MA 02532 (508) 759-0600 Ext. 1510



Rui Pereira, MAA Director of Assessing

March 18, 2024

Richard Whittington 8 Greenbrier Ct Plymouth, MA 02360

Re: Abutters List for Map 4.2 Parcel 4 Property address: 160 Clark Road

As required by the Bourne Board of Health, pursuant with section 310 CMR 15.411(1), this is to certify that the attached list of names and addresses constitutes all of the parties in interest as shown on the most recent tax list of the Town of Bourne.

Abutting properties are: Map 4 Parcel 14; Map 4.1 parcels 154 & 180; Map 4.2 Parcels 1, 3 & 5.

Your filing fee of \$25.00 has been received by the Bourne Assessor's Office.

Please be advised that this abutters list is only good for 30 days from the date on this letter. Expired abutters list can be recertified for an additional filing fee.

See enclosed for abutters mailing addresses.

Board of Assessors

Elin Den Sino -Dinne Brukausker Micha Beit

March 15, 2024

Ms. Judith Comeau 152 Clark Rd Sagamore Beach, MA 02562

**RE: Notice of Public Hearing** 

Dear Ms. Comeau:

In accordance with the State Environmental Code, Title 5: CMR 15.00, you are hereby notified that Richard and Corinne Whittington have requested a hearing before the Bourne Board of Health for a waiver from the Bourne Board of Health Regulations and a permit to connect a proposed new home to the existing sub-surface disposal system. The location of the property for this proposal is 160 Clark Road, Bourne, MA where you are listed as an abutter. At said hearing the Board will discuss and possibly vote on:

A portion of the existing leaching facility, installed in 2003, is within the 150' setback regulation from a wetland resource.

A permit to connect a proposed 5 bedroom home to the existing 6 bedroom septic system

This hearing is tentatively scheduled for March 27, 2024 at 5:30pm located in Conference Room 2 of the Bourne Veteran's Memorial Community Building, 239 Main Street, Buzzards Bay, MA. Information regarding the hearing may be available for your review one week prior to the meeting at the Bourne Health Department, 24 Perry Avenue, Buzzards Bay, Monday through Friday from 8:30am to 4:30pm.

Meeting agendas are posted on the Town of Bourne website, <u>https://www.townofbourne.com/health</u> no less than 48 hours in advance of the hearing. Please confirm the date, time, and location of the meeting with the Town in case of any changes. Should you have any questions or concerns, please do not hesitate to contact me or the Bourne Health Department at 508-759-0600 ext. 1513.

Sincerely,

Rich Whittington 617-592-3185 richw@whitmanhomes.com

**Corinne Whittington** 

	D	xtract: atábase: ilter; ort;	ABUTTERS LIST LIVE Key IN 351,551,575,601,602,604	Report #24: Owner Fiscal Yea		g Report			Bot	irne MA
	Key	Parcel ID	Owner	Location	LCI/CI	Bk-Pq(Cerl) /[	Dt Mailing Street	Mailing City	ST	Zip Cd/County
X	351	4.0+14-0	TOWN OF BOURNE	280 STANDISH RD	N 9320	845/1 6/18/1953	24 PERRY AVE	BUZZARDS BAY	MA	02532
	551	4.1-154-0	ADAMS JOHN M TR OF THE JOHN M ADAMS TRUST	4 SAGAMORE RD	N 1320	15258/171 6/13/2002	PO BOX 1298	SAGAMORE BEACH	MA	02562-1298
	575	4.1-180-0	COMEAU KEITH F ETUX JUDITHA COMEAU	152 CLARK RD	N 1010	29613/87 4/29/2016	152 CLARK RD	SAGAMORE BEACH	MA	02562
	601	4.2-1-0	SAGAMORE BEACH COLONY CLUB	150 CLARK RD	N 3250	482/517 8/18/1931	PO BOX 417	SAGAMORE BEACH	MA	02562-0417
Buttien	602	4.2-3-0	ADAMS JOHN M TR OF THE JOHN M ADAMS TRUST	165 CLARK RD	N 1010	15258/171 6/13/2002	PO BOX 1298	SAGAMORE BEACH	MA	02562-1298
	604	4.2-5-0	DOYLE TERRENCE M & ANN T DOYLE	225 STANDISH RD	N 1320	35522/188 12/5/2022	204 ARROWHEAD RD	MARSHFIELD	MA	02050

Total Records

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