VERIFIED NOTICE OF INTERVENTION

TO: Town of Ledyard Planning and Zoning Commission

RE: Application for 26 lot, Section 8-30g Affordable Housing Development on Stoddard's Wharf Road (the "Proceeding")

APPLICANT: Avery Brook Homes, LLC

PREMISES: Assessor's Map 65, Lots 94, 96, 98 & 100, Ledyard, Connecticut (collectively, the "Subject Premises")

The City of Groton (the "Intervenor") is a municipal corporation with an address at 295 Meridian Street, Groton, CT 06340. The Intervenor owns and operates a public drinking water supply reservoir (the "Billings-Avery Reservoir") on approximately 144 acres of land at 70 Stoddards Wharf Road which adjoins the Subject Property. The Intervenor hereby intervenes in the above referenced Proceeding pursuant to Section 22a-19 of the Connecticut General Statutes and represents as follows:

1. The Intervenor, through its Department of Utilities ("Groton Utilities") is a water company as defined in CGS § 25-32a providing public drinking water to various municipalities in southern Connecticut, including Ledyard.

2. The northerly property line of the Subject Premises is approximately 100 ft. from the high-water line of the Billings-Avery Reservoir, and inland wetlands situated on, or adjacent to, the Subject Property connect directly to the Billings-Avery Reservoir.

3. Section 22a-19 of the Connecticut General Statutes states, in pertinent part, that "[i]n any administrative...proceeding, and in any judicial review thereof made available by law,...any person,...corporation...or other legal entity may intervene as a party on the filing of a verified pleading asserting that the proceeding or action for judicial review involves conduct which has, or which is reasonably likely to have, the effect of unreasonably polluting, impairing or destroying the public trust in the air, water or other natural resources of the state." *Conn. Gen. Stat. § 22a-19.*

4. The Intervenor has submitted information from Karl F. Acimovic, a professional engineer licensed in Connecticut with extensive experience in watershed protection and management. A copy of Mr. Acimovic's current report is attached to this Verified Notice of Intervention. Upon information and belief, the Application is missing critical information and analysis without which the Intervenor believes the activities presently proposed to be conducted by the Applicant are reasonably likely to have one or more of the following results:

   a. The Application, with its significant increase in intensity of use on the Subject Premises (including the proposed addition of 26 new single family building lots, 26 new drinking water wells and 26 new underground sanitary septic systems) and inadequate management, treatment and detention of stormwater runoff from 26 proposed new homes, roadway and other impervious surfaces, is reasonably likely to have the effect of unreasonably polluting and impairing the Billings-Avery Reservoir, and associated wetlands, which are a source of public drinking water, including, without limitation, a diminution of existing water quality (i) through the loss of existing wooded areas on the Subject Premises (ii) through the discharge and introduction of insufficiently treated septic effluent and bacteria, and (iii) through the discharge and introduction of lawn chemicals, and salt from roadways, driveways and home sites on the Subject Premises;

b. The Application, with its significant increase in intensity of use on the Subject Premises and inadequate management and detention of stormwater runoff, is reasonably likely to unreasonably contribute to, and exacerbate, downgradient flooding within the Intervenor's water-supply watershed during increasingly frequent major storm events;

c. The Application, with its significant increase in intensity of use on the Subject Premises, including 26 proposed new sanitary septic systems, and the use of fertilizers, herbicides and pesticides on 26 proposed single-family building lots of approximately 1/3 acre each, is reasonably likely to unreasonably pollute and impair the shallow ground water on the Subject Premises and to pollute and adversely impact the water quality of the Billings-Avery Reservoir and its associated wetlands;

d. The Application, with its significant increase in the intensity of use of the Subject Premises and inadequate management, detention and treatment of stormwater runoff is reasonably likely to unreasonably pollute and impair the public drinking water supply, including associated wetlands, on the Intervenor's property through the discharge and introduction of sediments, salts and other non-point sources of pollutants from proposed roadways, driveways and home sites on the Subject Premises.

5. The activities proposed to be conducted by the Applicant upon the Subject Premises, as described above and in its application to this agency, are reasonably likely to have the effect of unreasonably polluting, impairing and/or destroying the public trust in the ground water, surface water, wetlands and watercourses on both the Subject Premises and on the Intervenor's adjacent land or other natural resources of the State of Connecticut.

6. There are feasible and prudent alternatives to the proposed development including a significantly smaller development which incorporates and preserves more of the existing woodlands on the Subject Premises, with fewer proposed on-site drinking water wells, fewer on-site sanitary septic systems, less impervious surface, a more efficient and effective system for the treatment, management and detention of stormwater runoff and less total site disturbance.

7. The Intervenor, pursuant to Section 1-227 of the Connecticut General Statutes, also requests written notice by mail of all meetings and/or hearings to be held, conducted or issued in connection with the Proceeding. Such notices should be sent to counsel for the Intervenor: Stephen W. Studer Esq., Berchem Moses PC, 75 Broad Street, Milford, CT 06460, sstuder@berchemmoses.com and Peter Gelderman, Esq., 1221 Post Road East, Suite 301, Westport, CT 06880, pgelderman@berchemmoses.com.

WHEREFORE, on this 6th day of December, 2022, the Intervenor hereby intervenes in this Proceeding pursuant to this Verified Notice of Intervention and requests notice of any and all meetings and/or hearings conducted in connection with this Proceeding.

THE INTERVENOR,
CITY OF GROTON

By: _____
Stephen W. Studer, Esq.
Berchem Moses PC
75 Broad Street
Milford, CT 06460
Telephone No.: (203) 783-1200
Email: sstuder@berchemmoses.com

Verification

STATE OF CONNECTICUT :

: ss: Groton

COUNTY OF NEW LONDON :

I, Ron Gaudet, being duly sworn, do depose and say that:

1. I am the Director of the City of Groton, Department of Utilities (aka Groton Utilities).

2. The City of Groton owns the premises located at 70 Stoddards Wharf Road, Ledyard, Connecticut and operates it as part of its public drinking water supply watershed.

3. I have read the foregoing Verified Notice of Intervention and the allegations contained therein are true to the best of my knowledge, information and belief.

Ron Gaudet, Director

Subscribed and sworn to before me this 16th day of December, 2022

Notary Public
Commissioner of the Superior Court

NOEMI LYNN WALENCEWICZ
NOTARY PUBLIC
MY COMMISSION EXPIRES JAN. 31, 2025

{01687060.DOCX Ver. 1}

KARL F. ACIMOVIC, P.E. & L.S.

CONSULTING ENGINEER

588 Stonehouse Road · Coventry, CT 06238-3138 · TEL (860) 742-9019 · e-Mail: karl26535@outlook.com

Groton Utilities / Statement on Proposed Avery Brook Subdivision
December 2, 2022

==========

Re: Application of Avery Brook Homes, LLC for a permit to conduct regulated activities in upland review areas with respect to properties located at 94, 96, 98 and 100 Stoddards Wharf Road, Ledyard, Connecticut

---

To date, Groton Utilities has prepared review comments pertinent to the above project. These review comments were originally prepared for a proposed subdivision of 36 lots with a private road, individual septic systems, individual wells and no provision for stormwater management. To date these plans have been revised to a 26-lot subdivision with a proposed Town-owned road and partial stormwater facilities, but still with individual septic systems and individual wells. While downsized in scope, our concerns remain the same, in that there is insufficient data provided by the applicant to ensure that this subdivision, with its density of housing, its individual on-site subsurface sewage disposal systems, its individual well layout and the limited stormwater treatment will not have a deleterious impact on the quality of water to the directly adjacent drinking water supply reservoir.

To reiterate our previous points, to which additional reference and inclusion is hereby made:

(1) **Soils** – The data provided on the plans indicates a high degree of permeability for soils throughout the site, as evidenced by the test pit data and percolation rates for the site of each proposed lot. This points to a relatively rapid discharge and migration of effluent to the underlying water table and to areas immediately surrounding the subsurface sewage disposal system, resulting in significant nutrient loadings detrimental to a safe drinking water supply.

(2) **Water Supply** – A study had been previously prepared by GEI Consultants examining the adequacy of water supply for the number of lots and the anticipated number of individuals expected to inhabit the area. This study was prepared for greater than 30 lots, the previous submittals, but no revised report has been submitted with respect to the current proposal. The study did point out that the amount of required water for supply could not be met from onsite groundwater alone, but would have to rely on drawdown from properties adjacent to this site. Since Groton Utilities is a major abutter to the site, we assume that, without more specificity, the drawdown would impact the Groton property as well as other abutting and nearby landowners. Again, it is important to note that the study addressed only adequacy of supply, but not

the quality of existing groundwater, nor the potential impact of drawdown from multiple wells in close proximity to other lots and to the adjacent neighborhood. Nor does it address, as previously pointed out, the potential issue of drawing water from a water table that has significant effluent dispersal from multiple subsurface sewage disposal systems in close proximity to each other.

(3) **Subsurface Sewage Disposal Systems** – The concentration of the proposed subsurface sewage disposal systems, although less in number than the previous proposal, still represents a dense layout with a hydraulic profile that includes effluent discharge from multiple systems combined along the same slope and outflow directions. All effluent is discharged toward Groton Utilities property from these systems, with wetlands and open water in close proximity to a drinking water supply reservoir. **We ask that an in-depth study of the water table's hydraulics and the ability of the soils to treat or renovate the wastewaters prior to dispersal onto Groton Utilities property be provided.** Though lots have been tested, designed and reviewed on an individual basis, it is critical to consider this type of dense layout as a cumulative impact that must meet certain standards at the property line – particularly because that property line and underlying groundwater and surrounding wetlands are directly linked to a drinking water supply that affects adjacent towns[1] as well as the Town of Ledyard.

(4) **Stormwater** – This issue has been partially addressed with the proposed stormwater quality basin, but still maintains runoff without pretreatment or detention before reaching the Groton Utilities' reservoir area. We find this unacceptable, particularly with respect to the high percolation rates and the gravelly soils encountered and documented in the test hole information included with this latest proposal. With such high permeability, we feel that the proposal has not adequately addressed the potential impact of directing non-treated stormwater runoff to our reservoir system.

In addition, due to the increase in paved and landscaped (lawn) areas, there is a risk of increased runoff of pollutants and nutrients that could directly impact the adjacent wetlands and open water areas. The applicant has indicated that sheet flow over pervious areas would decrease or, in this case, eliminate the need for any detention facilities and referred to a Town Ordinance that implies runoff without detention to the Groton Utilities reservoir system. We have addressed this ordinance in previous reviews and are in disagreement with the concept. We know that runoff water will reach us in any case, but we ask that it be as clean as possible when it reaches us. Our wetlands and open bodies of surface waters, where adjacent to residential or commercial lands, should not be regarded as pretreatment for a drinking water supply.

(5) Town Road – The change has been made to now consider the interior road as a Town road, in which case we presume that it will be given to and maintained by the Town in the future. As the treatment of roads for wintertime maintenance has now changed, it is our understanding that the road will be treated only with sodium related

1 Note that Groton Utilities is a regional supplier to other area towns, in addition to Groton and Ledyard.

products. We have been tracking both sodium and chlorides in our reservoir system for many years and have analyses that indicate an increase in sodium levels since 2013, the year that Connecticut DOT, as well as most Towns, changed over to the use of sodium products rather than using sand or a combination of the two. Our processes at the Water Treatment Plant, as with most drinking water purveyors in the State, are not set up for the treatment of sodium. As such, any increase in the amount of sodium detected in the raw water supply must be considered as a potential treatment issue that could incur additional costs to the consumers within the surrounding communities.

(6) CDR Maguire 2014 Report – A sample issue identified in the CDR Maguire report included a reference to the Avery Hill and Aljen Heights areas of the Town of Ledyard, approximately 2 to 3 miles west of the currently proposed location, where lots were in the range of 0.25 to 1.0 acre in size. These areas required a public water supply in order to address "..... *groundwater contamination and limitations in capacity of private wells and small community systems*". We feel this is an apt comparison due to the density of the housing and the proximity of the sewage disposal systems and wells to each other without further analysis.

In summary, there is no question of the certainty of the direction of both surface and groundwater flows, in that it will reach our reservoir surface and groundwater within a short distance and short period of time. We have previously asked for and now reiterate the need, based on the above points and the previously submitted comments, to prepare a study, a renovation analysis, to ascertain the impact of the proposed development to our drinking water supply reservoir. This should include, specifically because of the density of the proposed lots, the guidelines for renovation and hydraulic analysis found in the DEEP's "*GUIDANCE FOR DESIGN OF LARGE-SCALE ON-SITE WASTEWATER RENOVATION SYSTEMS*" and the DPH's "*Design Manual - Subsurface Sewage Disposal Systems for Households and Small Commercial Buildings*". We feel strongly that this type of analysis is necessary to make an informed decision as to the impact to our reservoir system, as well as to the impact on lots adjacent to each other within the proposed subdivision.

Karl F. Acimovic

Prepared by Karl F. Acimovic, P.E. & L.S.
Dec. 2, 2022