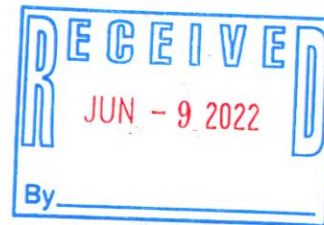




179 Pachaug River Drive
P.O. Box 184
Griswold, CT 06351
T 860.376.2006 | F 860.376.5899



www.boundariesllc.net

June 2, 2022

RE: **Drainage Narrative for Proposed Residential Subdivision**
East Lake Road and Fire Street
Applicant: SUNMAR/RAF Builders, LLC.
Boundaries Job I.D. No. 21-3036

This proposal involves the subdivision of an existing 47.7-acre parcel located southeasterly of the intersection of East Lake Road and Fire Street into eight (8) lots intended for new single-family residential development. The subject property is primarily wooded area. The property generally slopes from southwest to north, from East Lake Road to Fire Street. One set of existing catch basins collects runoff from the right-of-way of East Lake Road and discharges through a swale onto proposed Lot 7. The remainder of the runoff from the subject parcel sheet flows through the wooded areas from southwest to north.

According to the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey for the State of Connecticut, the soil types underlying the conceptual development areas of the subdivision lots are:

73C Charlton-Chatfield complex, 15-45% slopes, very rocky
Drainage Class = Moderately Well Drained
Hydrologic Soil Group = B

All proposed subdivision lots front East Lake Road and no public improvements (roadway or drainage) are proposed as a result of this subdivision. Runoff from East Lake Road is collected by a set of existing catch basins that drain to proposed Lot 7. A grassed swale will be constructed to divert the road drainage discharge around the development area of Lot 7. The existing culverts that carry runoff onto the subject property will not be modified as a result of this project. The only runoff contributed to the East Lake Road right-of-way will be from the proposed paved driveway aprons. All other runoff from the driveways and proposed residences will flow into the vegetated areas of the development.

The proposed development is intended to follow the design concepts listed Chapter 4.2 of the Connecticut Stormwater Quality Manual in order avoid negative impacts due to stormwater runoff:

- Designing the Development to Fit the Terrain: Proposed driveways generally follow the existing topography and maintain existing sheet flow runoff patterns. Houses are intended to be raised ranch style to work with the terrain of each individual lot.



- Limiting Land Disturbance Activities: Clearing and grubbing is limited to the development area of each lot and along the right-of-way of East Lake Road to achieve adequate sight distances. The lots are larger than the minimum required lot areas in the zone providing for more undisturbed areas surrounding each residence.
- Disconnecting Impervious Areas: The only impervious surface that will drain to Burton Road and the associated cross culverts are the paved driveway aprons. The remainder of the driveway surfaces are either below the road elevation or will be provided with adequate cross-pitch to maintain existing sheet flow runoff patterns. Roof drainage is intended to discharge to vegetated surfaces surrounding the proposed residences disconnecting the roof runoff from the driveway surfaces.
- Preserving and Utilizing Natural Drainage Systems: Stormwater runoff from the proposed development area is intended to follow the same sheet flow patterns as runoff from the existing wooded areas.
- Providing Setbacks and Vegetated Buffers: No direct discharges from impervious surfaces to wetlands/watercourses are proposed as part of this development. No land disturbing activities are proposed within the 50-foot upland review area of the delineated wetlands.
- Minimize the Creation of Steep Slopes: Minimal areas of 2H:1V slopes are proposed only to achieve required grading for the proposed subsurface sewage disposal systems.
- Maintaining Pre-Development Vegetation: Clearing and grubbing of wooded areas has been minimized to the maximum extent practicable. Less than 12% of the parent parcel will be disturbed in order to develop the proposed subdivision.

The proposed improvements are shown on plans entitled "Subdivision Plan, Wetland Crossing Plan, Prepared for SUNMAR/RAF Builders, LLC, Property of Walter Wainwright, Jr., East Lake Road and Fire Street – Montville (Oakdale), Connecticut, June 2022," prepared by Boundaries LLC.

Enclosures:

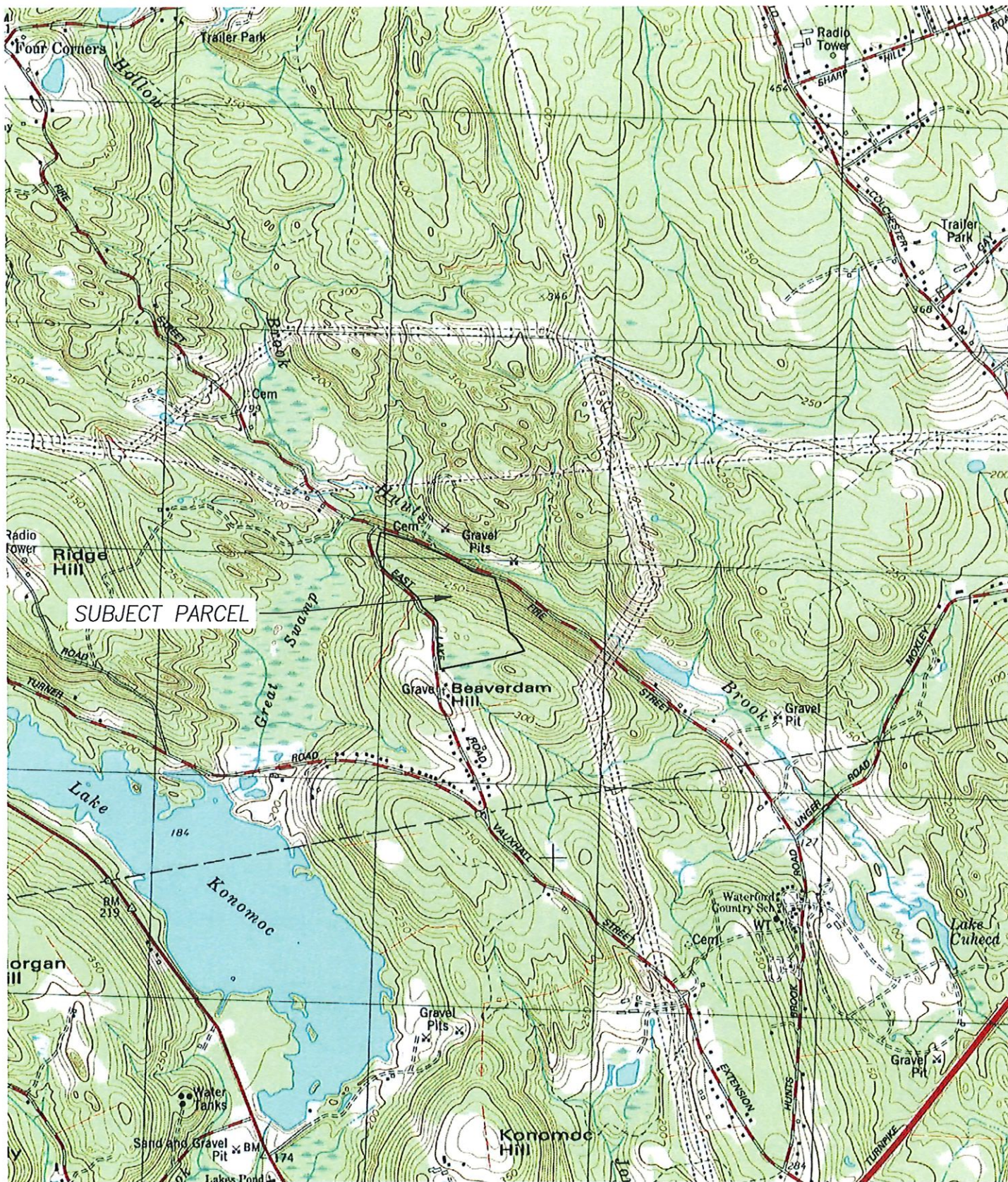
Appendix A – Location Map

Appendix B – Conceptual Development Plans



Appendix A

Location Map



BOUNDARIES

Boundaries LLC
1779 Pachaug River Drive, Groton, CT 06351
1860.376.2009 | www.boundariesllc.net



Location Map
(Montville Quad)
SUNMAR/RAF Builders, LLC
East Lake Road & Fire Street
Montville (Oakdale), Connecticut

SCALE: 1"=2,000'

DATE: June 2022

JOB NO. 21-3036

Appendix A

Appendix B

Conceptual Development Plan and Drainage Areas
