MEMORANDUM

FORMAL ACTION: AGENDA ITEM II.1
APRIL 13, 2023 MEETING

To: **Conservation Commission**/Inland Wetlands and Watercourses Agency

From: Suzanne Simone, Environmental Planner

Date: April 5, 2023

Re: Recommendation to the Town Plan & Zoning Commission and Recommendation to the Water Pollution Control Authority for Capped Sewer Crosby Lane Subdivision (Crosby II Subdivision); 551 and 559 Manchester Rd.

Review Documents:

Plan Set, February 28, 2023
Engineering Department Review, April 4, 2023
Health Department Review, March 27, 2023
Loureiro Engineering, Solid Waste Investigation, March 7, 2023
Draft Recommendation to TPZ

Proposal

The applicant seeks a favorable recommendation from the Conservation Commission to the TPZ for the subdivision of land into seven lots (one with existing house) and construction of six single family residences and associated stormwater management and a favorable recommendation from the Conservation Commission to the WPCA for capped sewers.

Review

Site Description

Two parcels (referred to as 'property') totaling 10.31 acres are located within the Rural Residence Zone, with one containing a single family house. The proposed subdivision will require extension of the existing cul de sac. The property is not encumbered by a conservation easement. The field delineated wetland is consistent with the town soil map and locates wetland soil and a watercourse in the southwest corner of the property. Development is not proposed within the wetland or 100 foot upland review area. The proposal includes the creation of a conservation easement within the wetland and 100 foot upland review area. The property is forested, with steep slopes along the southern portion of the proposed lots.

State-Listed Species

The eastern portion of the property is identified as an area of interest in the December 2022 edition of the Natural Diversity Database. The applicant will need to submit a request to the CT DEEP NDDB.

Soils and Erosion Control

The proposed development area of the site is comprised of gravelly sandy-loam soil, with slight slope of 0 to 3 percent. The steeper slopes to the rear of lots 2, 3, 4 to the east and lots 4 and 5 to the west consist of gravelly sandy-loam with slopes between 3 and 15 percent. A portion or the entire septic system is proposed to be installed along the border of the steeper grades of lots 6, 5, and 2. Construction activity on site should not lead to sedimentation and erosion when employing erosion controls as shown on the proposed plan, which are consistent with the 2002 CT E&S Guidelines.

The steep slopes to the rear of lots 2, 3 and 4 will remain forested, therefore no erosion controls are sited in this area. Silt fence and staked hay bales will be installed at the limit of clearing to prevent exposed soil within the development envelope from eroding into the steep slope area. The erosion control plan (Sheet 6, Stormwater Pollution Control Plan) locates silt fence and staked haybales surrounding the development. The existing catch basins will be secured with filter fabric protection (silt sac) during site work.

The plan locates the required street trees to be planted along the Crosby Road frontage of each of the new lots.

Water Quality and Drainage

The stormwater will be directed to existing catch basins and deposited into an existing stormwater basin located on the existing lot, 7 Crosby Lane. The applicant indicates the existing basin is adequately sized to accommodate the increase in water. Roof leaders and driveway runoff will connect to subsurface chambers. The sandy soils on site are conducive for infiltration.

The plans locate 2' by 4' infiltration basins (Sheet 6) to be installed perpendicular to the proposed cul-de-sac extension on the six proposed development lots.

Landscape

The plan locates the required street trees to be planted along the Crosby Road frontage of each of the new lots.

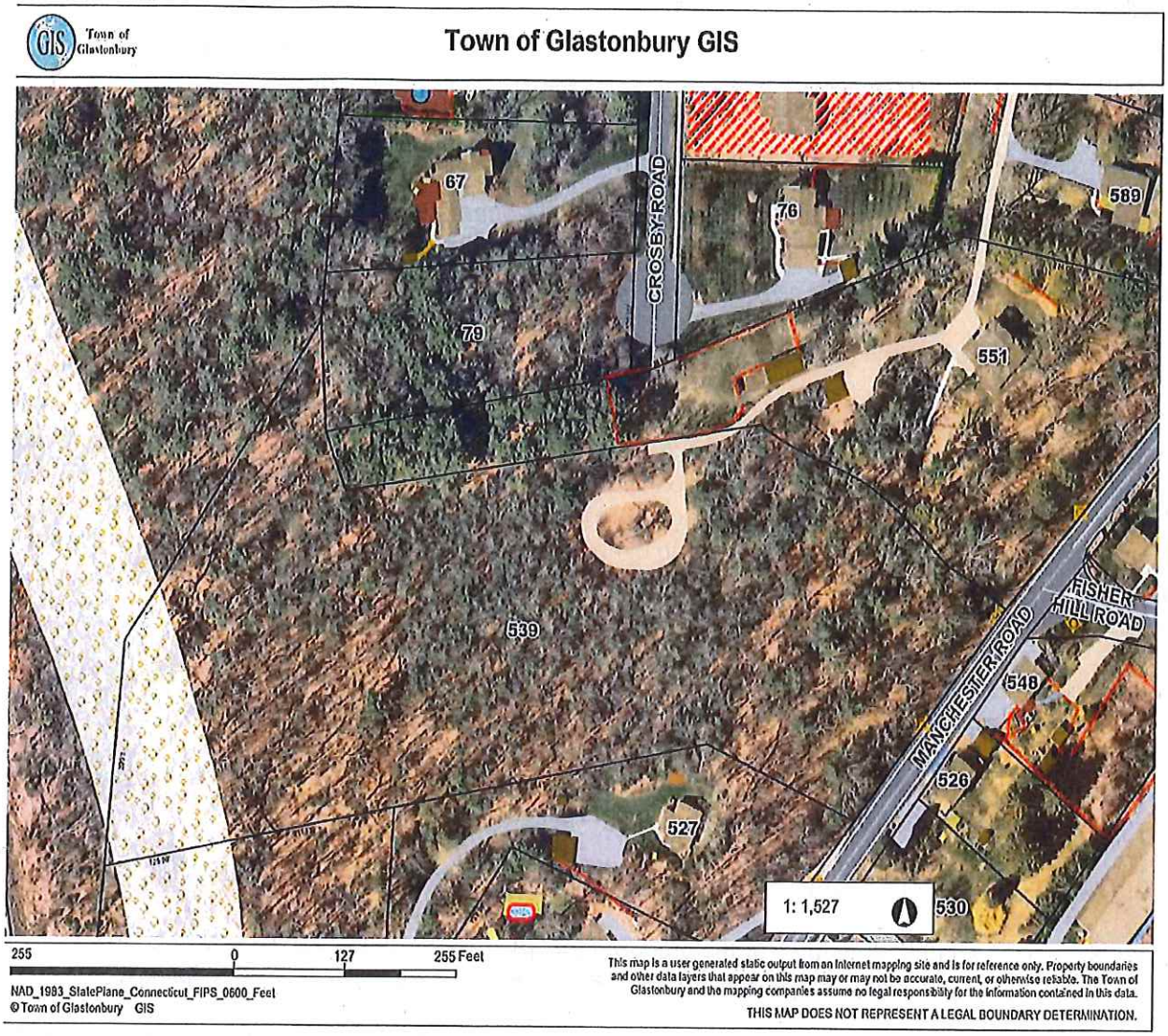
Capped Sewers

The Capped Sewer Guidelines and Procedures requires the Conservation Commission evaluate a capped sewer waiver request. Page 2 of the document identifies the basis for waiver denial by the WPCA which includes: "When the Conservation Commission reports that on-site sewage disposal may have adverse environmental impact, i.e. stream pollution, groundwater pollution, private well pollution."

The Health Department review does not identify a conflict of meeting town standards for installation of septic systems instead of sewer connection.

In 2005 the Conservation Commission issued a favorable recommendation for the waiver of capped sewers for the creation of the Crosby Lane Subdivision.

Town GIS 2022 aerial view: Two lots (551 and 539 Manchester Road), site of proposed subdivision.



Town of Glastonbury

Town of Glastonbury
Office of Community Development
Health Department
RECEIVED
MAR 2 8 2023

MEMORANDUM

Date: March 27, 2023

To: Town Planning & Zoning, Conservation & WPCA Commissions

From: Don Kendrick, R.S., Sanitarian DK

Re: Crosby II Subdivision prepared for Rejean Jacques

The Department has been involved in the investigation of this property since April 2021. Soil testing was conducted in April and May 2021 and March 2022. Groundwater monitoring was not required since the soil testing occurred during the spring. The soil in the area is described as Manchester gravelly sandy loam. Neither redoximorphic features nor ledge were encountered in any of the test holes. Percolation rates ranged from less than 1 minute per inch to 6.4 minutes per inch. Areas suitable for on-site sewage disposal systems were identified and are shown on plans prepared March 23, 2023 by Megson, Heagle & Friend Civil Engineers & Land Surveyors, LLC.

The Department recommends approval of this proposal using on-site sewage disposal with water supplied by private wells with the following requirements:

1. The sewage disposal systems for the proposed lots are to be designed by a professional engineer licensed in the State of Connecticut.

2. Leach fields will be permitted only in the locations shown on the approved subdivision plan.

3. Sanitary "as-built" drawings for the proposed lots prepared by a licensed surveyor are to be submitted to the Health Department prior to the issuance of a Certificate of Occupancy.

4. Result for the concentration of radon is to be included with the standard water potability report for each lot. Please note that as of October 1, 2022 the standard water potability report now includes uranium, arsenic and lead.

Revised 9-22-17

April 4, 2023

MEMORANDUM

To: Suzanne Simone, Environmental Planner
Conservation Commission

From: Daniel A. Pennington, P.E., Town Engineer / Manager of Physical Services

Re: Crosby II 7-Lot Subdivision
Extension of Crosby Road

The Engineering Division has reviewed the application materials for the proposed 7-lot Crosby II Subdivision prepared by Megson, Heagle and Friend, Civil Engineers and Land Surveyors, LLC including plans dated February 28, 2023 and a Hydrology and Hydraulics Report last revised October 2022 offers the following comments:

1. The Hydrology and Hydraulics Report successfully demonstrates that the proposed modifications to the existing detention pond will retain all stormwater run-off for all events analyzed up through the 100-year storm, which is consistent with the original design intent from Section 1 of this subdivision. Water quality treatment provided through detention pond storage, private roof infiltration systems and driveway infiltration trenches is consistent with Town Standards for stormwater management.

2. Footing drains for the proposed buildings should be depicted on the plans or a note should be added if footing drains are not intended to be installed based on soil type.

3. The Town drainage system should be extended up to the proposed cul-de-sac to provide a connection point for footing drains or surface drains from the lots if required in the future.

4. Provide spot grades on all proposed driveways to demonstrate cross slope needed to direct stormwater run-off into proposed infiltration trenches. Expand driveway infiltration trench detail to show driveway cross pitched into the trench.

5. A narrative for maintenance of the proposed driveway infiltration trenches should be added to the stormwater maintenance narrative on sheet 3 of 11.

6. Depict and label the Town Standard subdivision sign at the end of the existing cul-de-sac and add the appropriate detail for this sign to the detail sheet. This sign shall be installed as soon as construction begins.

7. Provide additional proposed spot grades to clarify grading on sheet 5 of 11 for the existing driveway serving #76 Crosby Road to be extended as part of the project.

8. The label for the proposed snow storage area in the cul-de-sac should be bolded for visibility and the hatch used should not extend over the proposed driveways.

9. Additional spot grades should be provided on sheet 4 of 11 for both sides of the sidewalk ramp at the top and bottom of the ramp to clarify grading intent.

10. The location of the proposed suction pipe, vent pipe, and pipe rail support for the fire tank should be depicted on the plans.

11. Excavation for the proposed fire tank will be approximately 10 feet deep and therefore may affect the abutting property at #79 Crosby Road depending on means of shoring. Proposed roadway grading on sheet 3 of 11 also shows grading extending into this same property. It is suggested that the tank be moved further from the property line and grading limits be adjusted or appropriate rights be obtained from the abutting property owner.

TOWN OF GLASTONBURY
GLASTONBURY, CONNECTICUT

CAPPED SEWER GUIDELINES AND PROCEDURES

Purpose:

One of the principal purposes of the Town's "Capped Sewer" Ordinance is to assure that whatever development occurs is undertaken with due regard for the future need for sanitary sewers. Where land is developed without consideration of future sewer needs, both the Town and individual property owners may have to bear the burden of the inadequate planning, often at considerable expense --- much of which may have been avoided by the proper advance "sewer sensitivity". Coupled with the need for prior planning is the fact that the construction of sewers contemporaneous with a property's development is generally simpler and more economical than subsequent construction, particularly where it is anticipated that live sewers will be extended to the development area within a reasonable period of time. With these purposes in mind, it should be understood that existing Ordinances require the design of sanitary sewers for all areas within the Master Sewer Plan area and the installation of all sewers within this area unless live sewers are not anticipated for more than ten years, except where such design and/or installations have been waived by the WPCA. To accomplish this purpose and to assist developers in complying with the applicable Ordinances, the following guidelines and procedures have been adopted.

Procedure:

At the time any request for a waiver is made pursuant to the provisions of Section 19-140 of the Glastonbury Code of Ordinances, the developer must submit to the WPCA a "Compatibility Sketch" or other materials showing at least the following information:

1. Name and general outline of the development.
2. All sill elevations.
3. Existing roads and new road elevations.
4. Simple profile.
5. Unusual grades and gravity flow from sills in relation to lot and subdivision lines.
6. Any boring reports.
7. Percolation and subsurface evaluation reports.
8. Such other information as may have been specifically requested by the WPCA or Superintendent of Sanitation.

Design Waiver:

Since design is critical to the accomplishment of the desired objectives, it is anticipated that design requirements will not be waived unless the "Compatibility Sketch" clearly demonstrates that no difficulty will be encountered in designing and building sewers within the development. Consequently, design waivers should only be requested where: (1) the subdivision is very small (2-4 lots, etc.) or located

entirely along existing Town roads to which lots may be gravity served, (2) the Sanitarian's reports or any Conservation reports are favorable, and (3) no easements across other lots or properties within the subdivision are required.

Construction Waivers:

A Permit Agreement between the developer and the Town calling for the construction of capped sewers will not normally be waived whenever:

1. The proposed development is within 5,000 feet of an existing live sewer or sewer under design or construction to which the developer might be connected.

2. The Sanitarian reports marginal conditions for on-site sewage disposal, i.e. marginal percolation, ledge conditions, or high water tables.

3. When the Conservation Commission reports that on-site sewage disposal may have adverse environmental impact, i.e. stream pollution, groundwater pollution, private well pollution.

4. Whenever conditions of slope, ledge, cuts, and road and lot layouts are such that future sewer extensions within the development would be difficult and costly.

NOTE: Where the facts do not warrant a design waiver, the WPCA will frequently need the proposed design before being able to act upon a request for a construction waiver.

The Engineering Division will have on file the location of those areas to which live sewers are not anticipated for a period of ten or more years.

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VIA E-Mail

March 7, 2023

Rejean Realty
PO Box 615
Glastonbury, CT 06073

Attn: Mr. Rejean Jacques

RE: Solid Waste Investigation
Crosby II Subdivision, Glastonbury, Connecticut

Dear Mr. Jacques,

On January 24th, 2023, Loureiro Engineering Associates (LEA) and Mark Friend from Megson, Heagle & Friend performed soil testing on-site at parcels on Crosby Road in Glastonbury, Connecticut associated with a proposed subdivision. The soil testing was performed to analyze the extents and makeup of two existing dumping areas associated with historical farming activities.

LEA oversaw, logged, and documented a total of 9 test pits. Of these 9, samples for lab analysis were taken at 3.

Household solid waste consisting of glass bottles, aluminum cans, cookware, and scrap metal was found predominantly within the first 2.5-feet of the test pits along the access path (TP-L1, TP-L2, TP-L9). This is likely due to waste being dumped out directly adjacent to a vehicle on the access path. Solid waste was found at other test pits within only the topsoil layer, indicating that waste likely moved down-gradient to these locations from the main dumping area. A secondary dumping area to the west exhibited this surface-level waste as well, with no solid waste found below the topsoil layer. See Attachment A for select photographs.

Dense solid waste was found to be approximately in a 2-foot wide by 2.5-foot deep "trench" between TP-L1 and TP-L9. Based on this, it is estimated that the combined volume of solid waste in the dumping areas is 6 cubic yards (CY). This is a conservative estimate that includes solid waste that can be found at the surface throughout the dumping areas. Locations of the test pits can be found on Drawing 1.

Soils analysis performed by Tunxis Laboratory, LLC show that the samples taken do not exceed RDEC or GA PMC requirements for metals, PCBs, VOCs, and Total Petroleum Hydrocarbons. SVOC constituents were also all under threshold requirements except for bis(2-ethylhexyl) Phthalate. The bis(2-ethylhexyl) Phthalate is a plasticizer that is likely remnant of some plastic particles that were associated with the waste. As such, this constituent is not of concern and is

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essentially expected in such a situation. See Attachment B for the full Soils Analytical Report and Table 1 for Soil Exceedances Report.

Therefore, due to the volume and inert quality of the solid waste present on site, the waste can be excavated, loaded, and hauled off site for disposal during subdivision construction. A cost estimate provided for disposal of solid waste mixed with soil is $150/ton. Due to the waste being embedded in soil, the total volume of disposal is estimated to be 10 CY. This volume translates to approximately 15 tons. This cost can vary between contractors and additional quotes may want to be sourced before disposal.

Since the volume of solid waste found on-site is under the amount defined as a solid waste disposal area as defined by Sec. 22a-207 of the Connecticut General Statutes (10 CY), an alternative to off-site disposal is keeping the waste on-site. Based on conversations with the Connecticut Department of Energy & Environmental Protection (DEEP), the waste should be managed in the following ways if kept on-site:

- Waste shall be sufficiently covered with topsoil for safety and to prevent further migration of solid waste.
- The solid waste areas may be documented on land records.
- No developments should be constructed on the solid waste areas. Based on Drawing 1, no structures or utilities are currently proposed to be built in the solid waste area. The proposed conservation easement and upland review area further reduce the likelihood of development occurring in the solid waste areas. Additionally, improvements such as gardens are unlikely to be developed in the solid waste areas due to the slope and wooded nature and distance from proposed house.
- No drinking water wells should be constructed in the solid waste areas. Currently, the closest proposed well is over 250-feet from the nearest solid waste area.
- The solid waste areas and information within this letter should be disclosed to local approval boards and may be subject to conditions of approval for the subdivision.
- If more solid waste is found on the site in areas not investigated by LEA, the volume of solid waste shall be added to the amount known to be on site (6 CY) and may then cause the site to be regulated under DEEP programs.

We hope this information proves useful, and should you have any questions regarding this letter or its attachments, please contact me at (860) 410-2906.

FORMAL ACTION: AGENDA ITEM #II.1
APRIL 13, 2023 MEETING

DRAFT RECOMMENDATION TO THE TOWN PLAN & ZONING COMMISSION

MOVED, that the Conservation Commission recommends to the Town Plan & Zoning Commission approval of a subdivision, in accordance with plans entitled "Crosby II Subdivision, 539 & 551 Manchester Road, Prepared for Rejean Jacques, Glastonbury CT, Dated February 28, 2023" 11 Sheets, with the following recommendations:

1. Permittee is responsible for the proper installation, maintenance and consistent monitoring of the sediment and erosion controls and stabilization measures. Permittee shall inspect the sediment and erosion controls and stabilization measures a minimum of once a week and within 24 hours prior to a forecasted rain event, and within 24 hours of the end of a weather event producing a rainfall amount of 0.5 inch or greater, to be conducted throughout the construction phase and until the site is vegetatively stabilized. The Environmental Planner is hereby authorized to require increased inspections and additional soil erosion and sediment controls and stabilization measures as warranted by field conditions.
2. The Construction Sequence shall be adhered to.
3. A private conservation easement shall be established as directed by the Conservation Commission/Inland Wetlands and Watercourses Agency and this area shall henceforth not be disturbed from the site condition as stated on the approved plan. The precise delineation shall be recorded by bearings and distances and shall be recorded on the land records prior to land clearing, excavation, or construction anywhere on the property. The recorded easement shall include the Town of Glastonbury Town Clerk's Office recorded subdivision map number. The field located conservation easement boundary shall be marked with oak stakes labeled "conservation easement" with waterproof ink and tied with red flags, prior to land clearing, excavation or construction. The stakes are to be located at each change of boundary direction and at every 100 foot intervals on straighaways. All conservation easement corners shall be permanently marked with iron pins.
4. The property is identified on the CT DEEP NDDB recent map edition. A request for reviews shall be submitted to the CT DEEP NDDB and the best management practices provided by the CT DEEP NDDB in support of species protection shall be stringently adhered to.
5. Prior to the issuance of a Certificate of Occupancy, certification from a landscape architect shall be required, confirming that the landscape plantings were installed in conformance with the approved landscape plan.

6. Prior to the issuance of a Certificate of Occupancy, certification from a professional engineer shall be required confirming that the stormwater management system was constructed in conformance with the approved design.

7. Trees to remain in the landscape, as shown on the approved plans, shall be protected with the use of high visibility construction fence during land clearing, excavation, and construction. Office of Community Development staff may require additional protection measures, as warranted by site conditions. The clearing limit shall be surveyed and flagged with high visibility tape prior to tree cutting.

DRAFT RECOMMENDATION TO
THE WASTE WATER POLLUTION AUTHORITY

MOVED, that the Conservation Commission recommends to the Water Pollution Control Authority approval of a waiver of capped sanitary sewers for the seven lot Crosby II Subdivision in accordance with the memorandum from the Glastonbury Health Department dated March 27, 2023