



TOWN OF SOUTH KINGSTOWN, RI

509 Commodore Perry Highway
Wakefield, RI 02879
Tel. 401-789-9331
Fax: 401-782-8068

Public Services Department

September 12, 2023

Mr. Joseph T. Murphy, PE
100 Brookwood Rd
Wakefield, RI 02879

Subject: Sewer Feasibility Study
A.P.39-2, Lot 9
1279 South Road
South Kingstown, RI

Dear Mr. Murphy:

The Department of Public Services offers the following comments on the Murphy Subdivision, situated on Tax Assessor's Plat 39-2, Lot 9 as defined by the Town of South Kingstown. As proposed, the Murphy Subdivision is a single-family residential development on approximately 1.89 acres of land with two (2) total proposed lots. The site consists of an existing single-family home with a functioning OWTS. The proposal is to divide the parcel and add another single-family residence. The applicant has requested a waiver from the sewer system connection requirements of the Town through the use of Onsite Wastewater Treatment Systems (OWTS) for the proposed two (2) residential lots.

As required by Town Ordinance, Section 19-115(1)b2 (itemizing specific considerations for review by the Department of Public Services) the applicant offers the following *Comments* (*italic*) in a Feasibility Study dated August 29, 2023. The Department of Public Services **Response** is shown in **bold**.

(i) *Conformity to Town of South Kingstown Comprehensive Plan*

The use of ISDS for the proposed two lot subdivision is consistent with the town Comprehensive plan. While the land use element of the Comprehensive Plan encourages sewer service in R10, R20, MU and other high density districts, the proposed sub-division is within a medium density (R30) zoning district which is identified within the Comprehensive Plan as appropriate for individual on-site waste water systems.

It should be noted that the Comprehensive Plan map shows the proposed sub-division within the area for future sewer consideration. However it should also be noted that majority of this map is "general" in nature, containing a large area within the geographic center of South Kingstown. While this large area is made up primarily of high density zoning districts, it also contains individual areas zoned medium density, as well as open space and low density use G1, where the Comprehensive Plan discourages the expansion of sewers.

Specific to South Road, it is noted that northern and southern portions contain primarily high density R20 zoning districts which are substantially developed and already serviced by

existing sewers. The center portion of South Road however (where the proposed subdivision is located) is comprised of medium density residential zoning districts as well as Governmental and Institutional (GI) and Open Space (OS) zones. This center portion has very little additional development potential and existing properties are already serviced by OWTS systems.

For the reasons mentioned above it is believed that the use of OWTS within the proposed two lot sub-division is consistent with the town's Comprehensive Plan.

Response: The proposed land development project lies entirely within the Sewer Service Areas, which is depicted within Figure 6.1 of the Comprehensive Community Plan (CCP). Planning for sewer services addresses the need for service within the dense core of the Town (which is comprised of smaller acreage lots), whereas rural, less dense periphery areas (with larger acreage lots) will be supported by OWTS.

Because the proposed subdivision is fully within the future service area the proposal is not in conformance with the Town of South Kingstown Comprehensive Plan.

(ii) Areas of existing ISDS problems or failures

The subject parcel is comprised of Narragansett very stony slit loam (NbB) which is a gentle sloping well drained soil suitable for community development. The permeability of this soil is moderate in the surface layer and subsoil and moderately rapid to rapid in the substratum. The favorable soils and relatively large parcels of land make for favorable conditions for on-site wastewater treatment systems. The existing dwellings within the immediate area are currently serviced by On-Site Wastewater Treatment Systems. There are no known systematic or wide-spread existing OWTS problems or failures in the area. The proposed OWTS will approved by RIDEM.

Response: DPS agrees that this data does not represent an indication of significant problems with existing OWTS in the area of the proposed subdivision.

(iii) Soil conditions not suitable for ISDS placement

There are no soils or other related site characteristics that would deem this site unsuitable for an On-Site Wastewater Treatment System (OWTS). The proposed OWTS will obtain RIDEM approval.

Response: From general available data it appears that soil conditions are suitable for the proposal and future OWTS. Additionally, it is noted that the property has an existing functioning OWTS at the existing home.

(iv) Proximity to wetlands, coastal ponds, groundwater resources and other environmental sensitive areas

The subject parcel is well inland from any coastal features and not within identified environmentally sensitive areas. Neither the site, nor the surrounding sites, contain any wetlands. The closest wetlands appear to be approximately 800' to the east and approximately the same distance to the north. The distance to the nearest wetland is substantially greater than the required separation between an OWTS and wetlands resulting in no constraints on the location of the OWTS or building placement.

Response: DPS concurs with the findings.

(v) *Existing and/or planned municipal potable water line locations.*

The subject parcel, as well as the neighboring parcels, are currently serviced via a water main which runs within South Road. It is anticipated that the current curb stop and lateral serving the property would remain and one additional curb stop and lateral would be installed to service the additional lot. The Kingston Water district confirmed availability of water to this parcel and has provided construction and installation recommendations and requirements.

Response: DPS concurs with the findings.

(vi) *Economic Feasibility*

The closest available existing sewer is approximately 900' to the north in South Road. A sewer installation estimate was performed in January of 2021 (attached) which indicated the cost for hook up would exceed \$100,000. It is expected that given the cost increases in the last couple of years, it would now exceed \$120,000. The cost to extend and hook up to the existing sewer line is not feasible for the creation of one additional lot.

Response: As noted, the proposed 2-lot subdivision is located more than 900 lf from the nearest available sanitary conveyance system. As represented, a future sewer system at the site would require extensive work. Because there is already an OWTS at the existing home, the required conveyance to the nearest connection point would end up servicing a single new lot. DPS concurs with the findings that municipal sewer connection would be extremely expensive and cost prohibitive for one (1) new lot.

(vii) *Lot size*

The existing parcel of approximately 80,000Sf is proposed to be divided into two parcel of approximately the same areas (35,000sf to 40,000sf each). There are no wetlands, steep slopes or land otherwise considered not suitable for development. The large parcel combined with favorable soil conditions are appropriate for On-site Wastewater Treatment Facilities as well leaving an abundance of additional area to serve as an alternate OWTS sites (see attached site plans).

Response: DPS concurs with the findings.

(viii) *Impact on areas in the vicinity of the proposed main extension*

An expansion to the existing sewer on South Road would provide no benefit to the surrounding area. The properties in this area have previously been built out and there is very little future development capacity. An extension to the existing sewer would be extremely costly to the home owner, create significant traffic interruption during construction, result in additional upkeep cost to the sewer authority while at the same time only servicing one, or a couple, of homes.

Response: DPS concurs with the findings, the construction of a sewer main would be highly inconvenient for traffic in the area, although the general impact to the area would be positive by providing opportunity to a few other properties for future connections.

(ix) *Potential effect on private or municipal potable water groundwater wells within the future*

There is no anticipated impact on private or municipal ground water wells. The area is currently serviced by public water. The OWTS will be very limited in size, servicing one dwelling unit. The OWTS will be well removed from any private or public potable ground water well.

Response: DPS concurs with the findings.

Summary:

As stated above, Section 19-115(1)b2, requires that conformity to the Comprehensive Community Plan be considered for property within the existing and/or future sewer service area. The Services and Facilities Element of the South Kingstown Comprehensive Community Plan specifically addresses the connection of new developments within the sewer service area to municipal sewers.

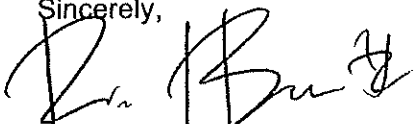
Furthermore, Figure 6.1 Sewer Service Areas of the Comprehensive Community Plan indicates certain areas in the central part of Town as being a Future Sewer Service Area. "Generally, it is the policy of the Town to encourage public sewer service to these areas in order to mitigate contamination to the ground and surface waters which may result from the cumulative impacts of septic systems in high density areas."

This office does not dispute the findings of Joseph Murphy's with regard to the project as represented and due to the potential level of intensity proposed and given the extensive distance to existing sewers, this office agrees that the use of OWTS is warranted.

Therefore, it is the finding and determination of this Office that the proposed two (2) lot development is approved with OWTS as requested. Please note, the OWTS will be subject to the applicable requirements of the Rhode Island Department of Environmental Management and all required permits will be necessary prior to the development of the individual lots.

Please feel free to contact me at 789-9331, extension 2250, should you have any additional questions relative to this matter.

Sincerely,



Richard J. Bourbonnais, II, PE
Public Services Director

Encl: Sewer Feasibility Study, prepared by Joseph Murphy

cc: Kathy Perez, Wastewater Superintendent
Mark Conboy, PE, Town Engineer
James Rabbitt, Director of Planning
Jay Parker, Principal Planner

8/29/2023

To: Rich Bourbonnais, Director of Public Services

From: Joseph T. Murphy, P.E.

Subj: Sewer Feasibility Study, 1279 South Road, South Kingstown RI

RECEIVED
AUG 29 2023
Town of South Kingstown
Public Services Department

Dear Mr. Bourbonnais:

Attached please find a Sewer Feasibility Study for 1279 South Road (AP Plat39-2, Lot 9) South Kingstown RI. The applicant wishes to subdivide an existing 84,000sf parcel into two lots using the flexible frontage provision in the South Kingstown subdivision regulations. The lot is located in an R-30 zoning district and will be serviced by public water. Sewers are not available in that section of South Road.

Please feel free to contact me with any questions or concerns.

Joseph Murphy

Phone: 401-932-9862

E-mail: murphyjac@verizon.net

**SEWER FEASIBILITY STUDY for
2 Lot Subdivision Located at
1279 South Road (AP Plat 39-2, Lot 9), South Kingstown RI**

The applicant wishes to subdivide an existing single 84,000sf parcel into two lots using the flexible frontage provision in the South Kingstown sub-division regulations. The lot is within an R-30 Zoning district, and the area is mostly developed. Water services have been confirmed by the Kingston Water district to be available for this additional lot. Existing properties within the area are serviced via individual on-site waste water treatment systems.

i) Conformity to the Town of South Kingstown Comprehensive Plan:

The use of ISDS for the proposed two lot subdivision is consistent with the town Comprehensive plan. While the land use element of the Comprehensive Plan encourages sewer service in R10, R20, MU and other high density districts, the proposed sub-division is within a medium density (R30) zoning district which is identified within the Comprehensive Plan as appropriate for individual on-site waste water systems.

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Specific to South Road, it is noted that northern and southern portions contain primarily high density R20 zoning districts which are substantially developed and already serviced by existing sewers. The center portion of South Road however (where the proposed sub-division is located) is comprised of medium density residential zoning districts as well as Governmental and Institutional (GI) and Open Space (OS) zones. This center portion has very little additional development potential and existing properties are already serviced by OWTS systems.

For the reasons mentioned above it is believed that the use of OWTS within the proposed two lot sub-division is consistent with the town's Comprehensive Plan.

ii) Areas of Existing OWTS Problems or Failures:

The subject parcel is comprised of Narragansett very stony slit loam (NbB) which is a gentle sloping well drained soil suitable for community development. The permeability of this soil is moderate in the surface layer and subsoil and moderately rapid to rapid in the substratum. The favorable soils and relatively large parcels of land make for favorable conditions for on-site waste water treatment systems. The existing dwellings within the immediate area are currently serviced by On-Site Waste Water Treatment Systems. There are no known systematic or wide-spread existing OWTS problems or failures in the area. The proposed OWTS will approved by RIDEM.

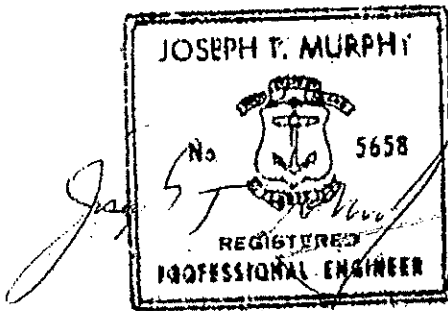
**SEWER FEASIBILITY STUDY for
2 Lot Subdivision Located at
1279 South Road (AP Plat 39-2, Lot 9), South Kingstown RI**

- iii) **Soil Conditions not suitable for OWTS placement**
There are no soils or other related site characteristics that would deem this site unsuitable for an On-Site Waste Water Treatment System (OWTS). The proposed OWTS will obtain RIDEM approval.
- iv) **Proximity to wetlands, coastal ponds, groundwater resources and other environmentally sensitive areas.**
The subject parcel is well inland from any coastal features and not within identified environmentally sensitive areas. Neither the site, nor the surrounding sites, contain any wetlands. The closest wetlands appear to be approximately 800' to the east and approximately the same distance to the north. The distance to the nearest wetland is substantially greater than the required separation between an OWTS and wetlands resulting in no constraints on the location of the OWTS or building placement.
- v) **Existing and/or planned municipal potable water line locations.**
The subject parcel, as well as the neighboring parcels, are currently serviced via a water main which runs within South Road. It is anticipated that the current curb stop and lateral serving the property would remain and one additional curb stop and lateral would be installed to service the additional lot. The Kingston Water district confirmed availability of water to this parcel and has provided construction and installation recommendations and requirements.
- vi) **Economic Feasibility:** The closest available existing sewer is approximately 900' to the north in South Road. A sewer installation estimate was performed in January of 2021 (attached) which indicated the cost for hook up would exceed \$100,000. It is expected that given the cost increases in the last couple of years, it would now exceed \$120,000. The cost to extend and hook up to the existing sewer line is not feasible for the creation of one additional lot.
- vii) **Lot Size:**
The existing parcel of approximately 80,000sf is proposed to be divided into two parcels of approximately the same areas (35,000sf to 40,000sf each). There are no wetlands, steep slopes or land otherwise considered not suitable for development. The large parcel combined with favorable soil conditions are appropriate for On-site waste water treatment facilities as well leaving an abundance of additional area to serve as an alternate OWTS sites (see attached site plans).
- viii) **Impact on areas in the vicinity of the proposed main extension**
An expansion to the existing sewer on South road would provide no benefit to the surrounding area. The properties in this area have previously been built out and there is very little future development capacity. An extension to the existing sewer would be extremely costly to the home owner, create significant traffic interruption during construction, result in additional upkeep cost to the sewer authority while at the same time only servicing one, or a couple, of homes.

SEWER FEASIBILITY STUDY for
2 Lot Subdivision Located at
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- ix) Potential effect on private or municipal potable water ground water wells within the future
There is no anticipated impact on private or municipal ground water wells. The area is currently serviced by public water. The OWTS will be very limited in size, servicing one dwelling unit. The OWTS will be well removed from any private or public potable ground water well.

Respectfully Submitted



8/29/2023

RICK NUNES CONSTRUCTION

1 COUNTRY LANE

HOPE, RI 02831

PHONE: 401-821-4038 FAX: 401-821-3458

Joe Murphy
Re.: 1279R South Rd.
South Kingstown, RI

January 9, 2021

ESTIMATE

Here is the requested estimate to connect to sewers at the above referenced property.

Install approximately 890' of 8" pipe on South Road from Windmill Rd. to the driveway entrance, including saw-cutting of pavement, police detail, as required, man-hole structures, as required, repaving of damaged area, as needed.

Total labor and material: \$80,100.00

440' of 2" pressure line sewer pipe from structure to South Road, while on private property.

Total labor and material: \$15,400.00

Installation of pump station, on private property, environmental one pump installed.

Total labor and material \$7,500.00

Total projected cost of sewer installation: \$103,000.00