

March 28, 2025

Joel Upsdell, *Utility Engineering Program Manager*
District of Saanich | Engineering Department
3500 Blanshard Street
Victoria, BC, V8X 1W3

Re: 1331 & 1335 Roy Road - Request for Inclusion in the Sewer Service Area and Sewer Service Connection

Dear Joel,

The owners of the two dwelling residences located at 1331 and 1335 Roy Road are seeking to have their property included in the municipal Sewer Service Area to support a new Sewer Service Connection. Located within the Carey neighbourhood, the shared property sits outside of the Agricultural Land Reserve and is zoned as A-2.

According to the Carey Local Area Plan, Policy 6.2 indicates that Council will approve minor amendments to the Sewer Enterprise Boundary (Sewer Service Area), if the property can be connected by gravity to a sewer system without replacing or deepening the existing sewers. As seen in Figure 1, taken from SaanichMap, a portion of the existing 150 PVC sewer gravity main passes through the south side of the property and offers a convenient sewer service connection point.

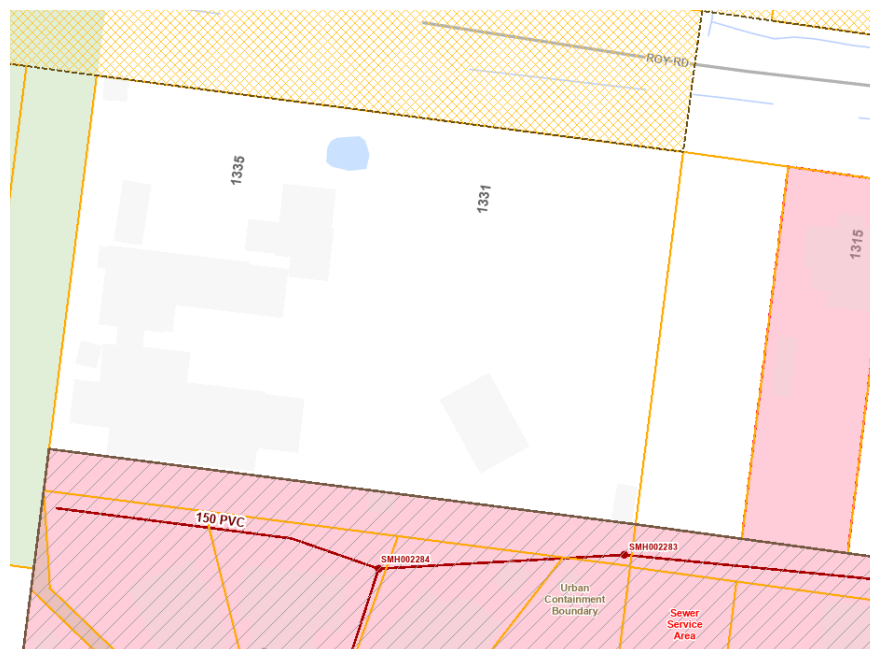


Figure 1. 1331 and 1335 Roy Road Relative to Existing Services According to SaanichMap.

The proposed inclusions and new sewer service connection are made on the basis of recent inspections of the existing onsite sewer disposal systems. Representatives from MSR Solutions visited the property in November 2023 and again in December 2025, in the capacity of being Authorized Persons under the Sewerage System Regulation, to assess the condition of the existing onsite disposal systems.

The existing septic tanks are currently functional, but noticeably aged and will need to be replaced with larger tanks in the future to be compliant with current regulations. The existing soils in the available disposal field areas are relatively shallow, with a vertical separation to the limiting layer of less than 60 cm from the surface. With an assumed lateral depth ranging from 15 cm to 25 cm, the existing system has less than 45 cm of vertical separation available for disposal, which is non-compliant with current requirements.

On February 18th, 2025, representatives from Island Health visited the property to conduct a dye test on the existing septic systems. Red dye was observed surfacing within 4 hours of being introduced into the system, suggesting that either the physical components of the system have failed or that the shallow soil conditions are not allowing adequate drainage. As result of the surfacing dye, Island Health has placed an Order for the homeowners to connect to the community sewer system no later than April 11th, 2025.

This Order is aligned with recommendations provided by MSR Solutions as the construction of new onsite wastewater treatment and disposal systems to serve the two existing residents is not considered feasible. There are two freshwater ponds on site that fluctuate seasonally, attenuating stormwater and attracting local birds, and are considered intermittent freshwater bodies for the purposes of designing a new disposal system. According to the Sewerage System Standard Practice Manual Version 3 (SPM), disposal systems require a 15 m setback from intermittent freshwater bodies. A new disposal system must also consider 3 m setbacks from property lines, 1 m setbacks from all buildings, 6 m setbacks from other disposal systems, and 3 m setbacks from tanks.

Shallow and poorly draining soils observed onsite would require the construction of a special type of sand mound referred to as a sand mantle sand mound, seen in Figure 2 below, to serve the two existing homes.

Figure III- 24. Sand mantle sand mound

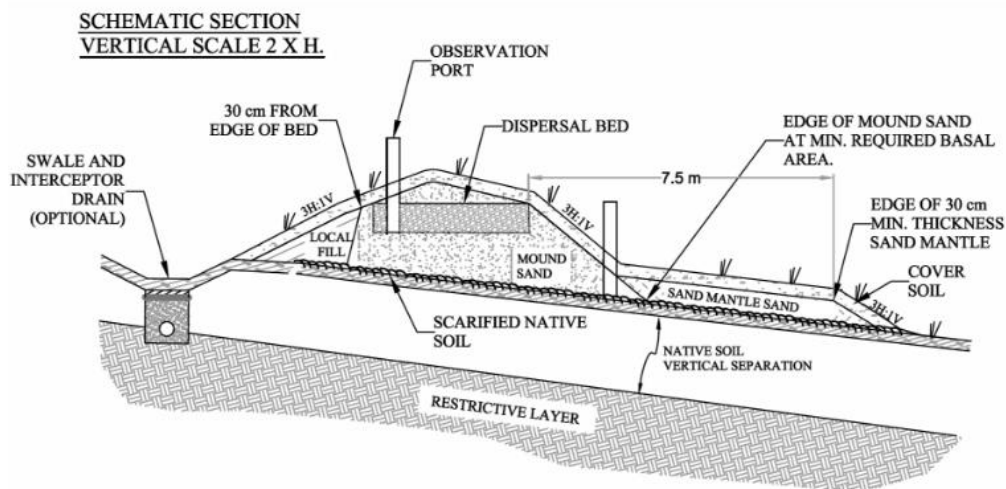


Figure 2. Sand mantle sand mound as per SPM V3.

The sand mantle sand mound is constructed like a typical sand mound but requires a greater thickness of sand with a minimum mound sand thickness of 75 cm below the infiltrative surface and minimum mantle sand thickness of 30 cm plus 10 cm of cover. The imported sand would be placed on top of the existing native ground. With a Hydraulic Loading Rate (HLR) of 30 L/day/m², the required Area of Infiltrative Surface (AIS) for a disposal bed is 77 m², resulting in a basal area of approximately 86 m². With the additional 7.5 m mantle extending from the dispersal

bed, the total footprint of the sand mantle sand mound would be approximately 165 m². Considered alongside the approximate 10 m² footprint required for a new septic tank and pump tank, and the associated 3 m setback between tankage and the new field, there is simply not enough space on the property to accommodate a new onsite wastewater treatment and disposal system that satisfies the criteria of the SPM.

Refer to the attached Site Plan for a visual of the required footprint of the sand mound and required tanks. A footprint sketch on the south side of the property is included to provide general context for space requirements; however, the south side of the property, or even a central location, are not advisable locations for a field for several reasons.

Installation at the southern location would require removal or relocation of an existing shed, while a central location would restrict access to various out buildings on the property. Both locations require driveway reconfiguration including removal of existing and construction of new. This is financially burdensome and anticipated to have negative impacts on the rest of the property as areas used for food production, beekeeping, and housing chickens would have to be relocated to accommodate a new driveway route. Removing portions of the existing driveway and attempting to restore the ground in preparation for a new sand mound provides no guarantees of creating a suitable area for a new disposal area – instead, it places a substantial financial burden on the homeowner with increased risk.

When evaluating the southern and central portions of the lot, we must consider that these areas have been heavily compacted over decades of use as driveways for vehicles and farm equipment. As a result, we anticipate reduced vertical separation (VS) to the restrictive layer and a lower hydraulic loading rate (HLR) compared to the soils in the north. Reductions in both VS and HLR would require increased sand depth and a larger basal area, resulting in an even greater system footprint.

Even with these design adjustments, we expect the risk of breakout in this location to remain high. Continued compaction from adjacent driveway use will further inhibit lateral water movement over time, increasing the risk to human health and the environment – acting contrary to the objectives outlined in the Order from Island Health.

Financial considerations are not always at the forefront of discussions surrounding feasibility; however, they are a critical factor when considering reasonability. Costs well beyond typical expectations would be incurred to attempt to create a viable solution within the constraints described above. Estimated costs for driveway reconfiguration are in the range of \$10,000 to \$15,000 but the viability and overall scope of work are unknown at this time. Estimated costs for construction and installation of a new onsite wastewater treatment system are in the range of \$60,000, in addition to \$15,000 in engineering.

Inclusion of this property in the Sewer Service Area is recommended as the most practical and feasible solution to minimize environmental impacts and to ensure long-term protection of human health and the environment. Once a new service connection is complete, it is recommended to decommission the existing system and abandon in place. A new sewer pump tank will be installed, and a sewer force main will convey flows to the sanitary sewer service connection, complete with inspection chamber, as per MCCD S7, allowing flows to transition to gravity conveyance into the existing PVC sewer gravity main. Attached to this letter is a Site Plan detailing the proposed connection, a Site Plan illustrating the setback restrictions of the property and the required footprint for a new field and tanks, and the Order received from Island Health.

In summary, a recent inspection conducted by Island Health has demonstrated that the existing sewer systems on 1331 and 1335 Roy Road are inadequate, resulting in a health Order to connect to the community sewer system. Analysis conducted by MSR Solutions has determined that the construction of a new onsite system is not feasible, demonstrating that connection to the community sewer system is the best option for protecting human health and the environment.

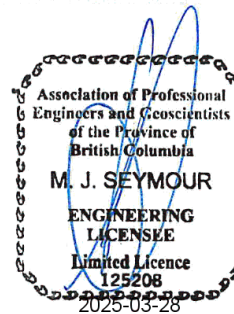
As such, the property owners wish to be included in Saanich's Sewer Service Area and would like to have a new Sewer Service Connection installed. The property owners understand that they are responsible for all costs associated with the connection. Should you have any questions or require further information please do not hesitate to contact the undersigned below.

Prepared By:



Justin Allen, EIT
Project Engineer
justin@msrsolutions.ca

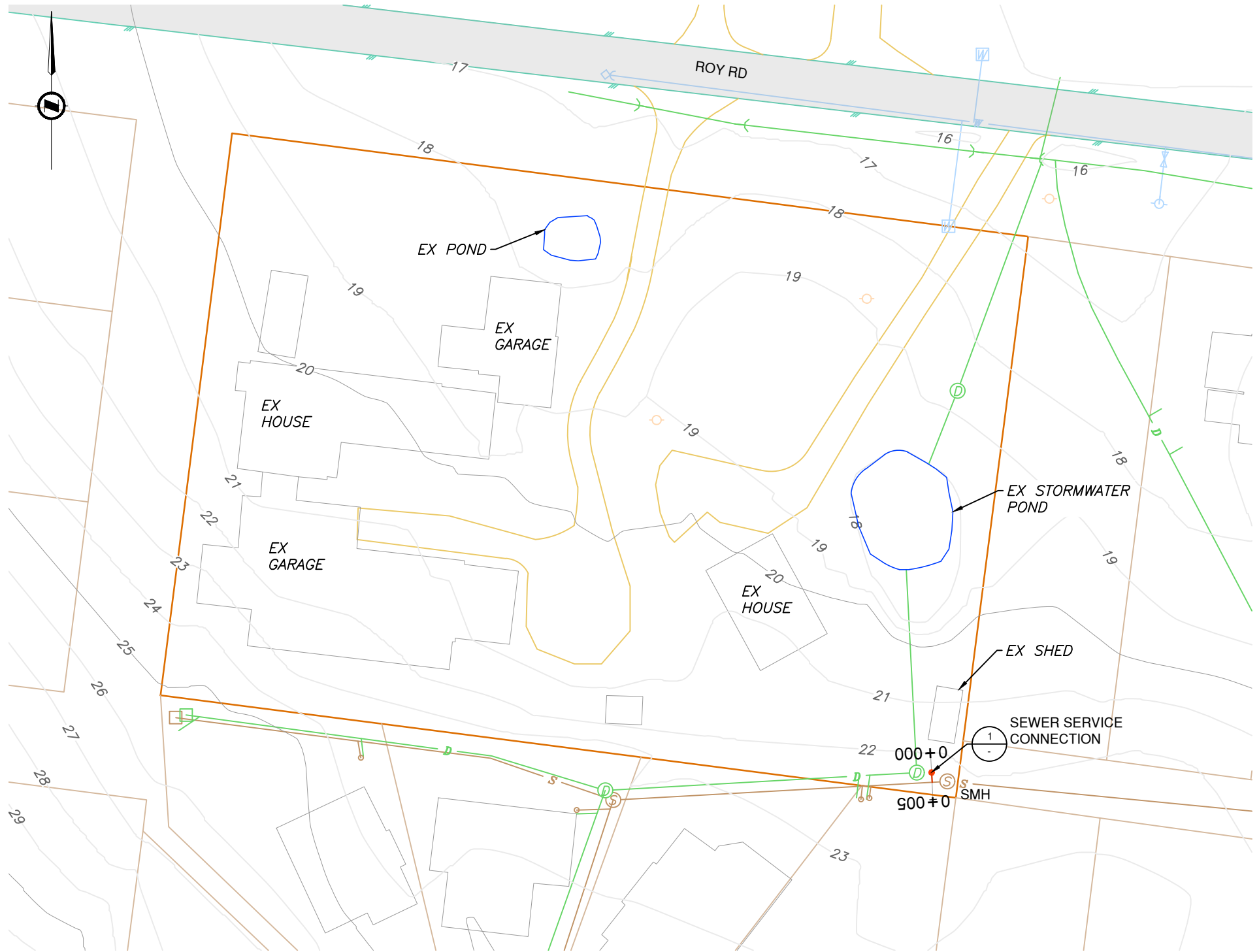
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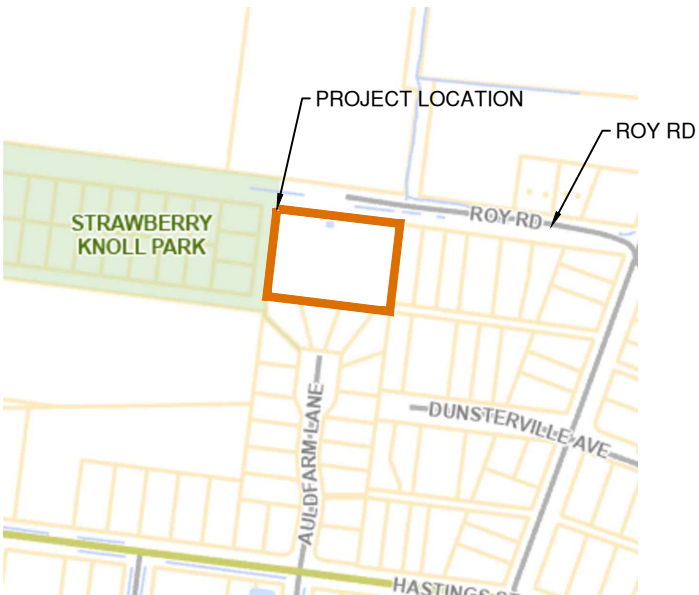
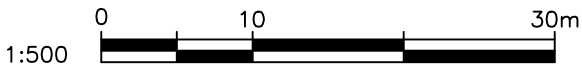
Mike Seymour, P.L. Eng.
Principal
mike@msrsolutions.ca

Attachments:

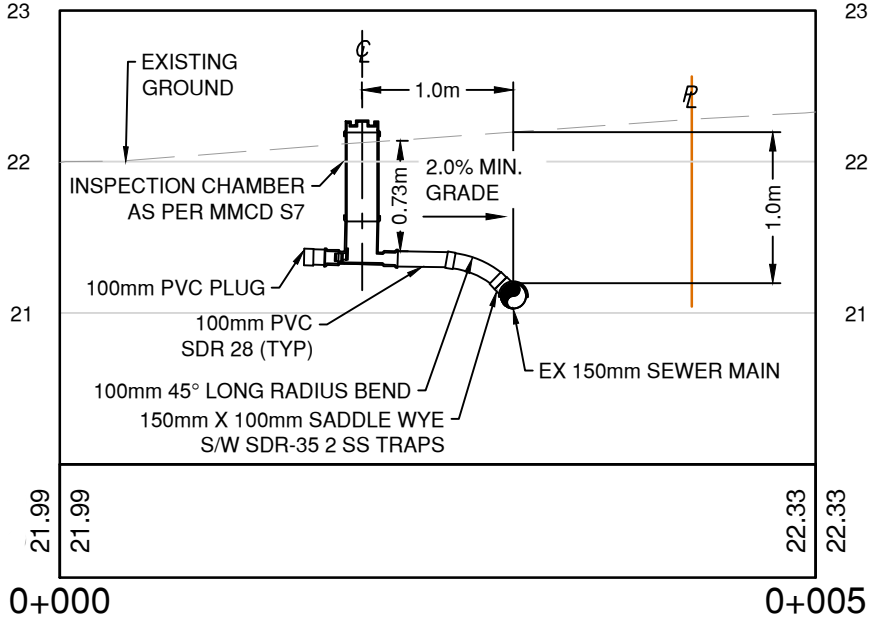
Drawing C01 – Service Connection Site Plan; Drawing C02 – Disposal Field Setbacks; Island Health Order



SITE PLAN
SCALE: 1:500

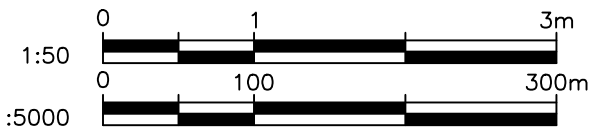


LOCATION PLAN
SCALE: 1:5000



SEWER SERVICE CONNECTION DETAIL 1
SCALE: 1:50

PRELIMINARY –
FOR DISCUSSION
PURPOSES ONLY
MARCH 2025



DISTRICT OF SAANICH

BC 1C

CALL BEFORE YOU DIG!

1-800-474-6886

THE CONTRACTOR IS TO CALL BC ONE CALL AND HAVE EXISTING UG SERVICES STAKED PRIOR TO ANY CONSTRUCTION

ISSUED					
1	PRELIMINARY	2025.03.12.	AM	JA	MS
REV.	DESCRIPTION	DATE	DRAWN	CHECKED	APPR

MSR

Innovative Engineering Solutions

PERMIT TO PRACTICE #1001876

MSR SOLUTIONS INC.

INNOVATIVE ENGINEERING SOLUTIONS

125 - 662 GOLDSTREAM AVENUE, LANGFORD

B.C. V9B 0N8

OFFICE: (250) 479 - 5164

admin@msrsolutions.ca

STAMP

SCALE: AS SHOWN

DESIGN: JA

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CLIENT

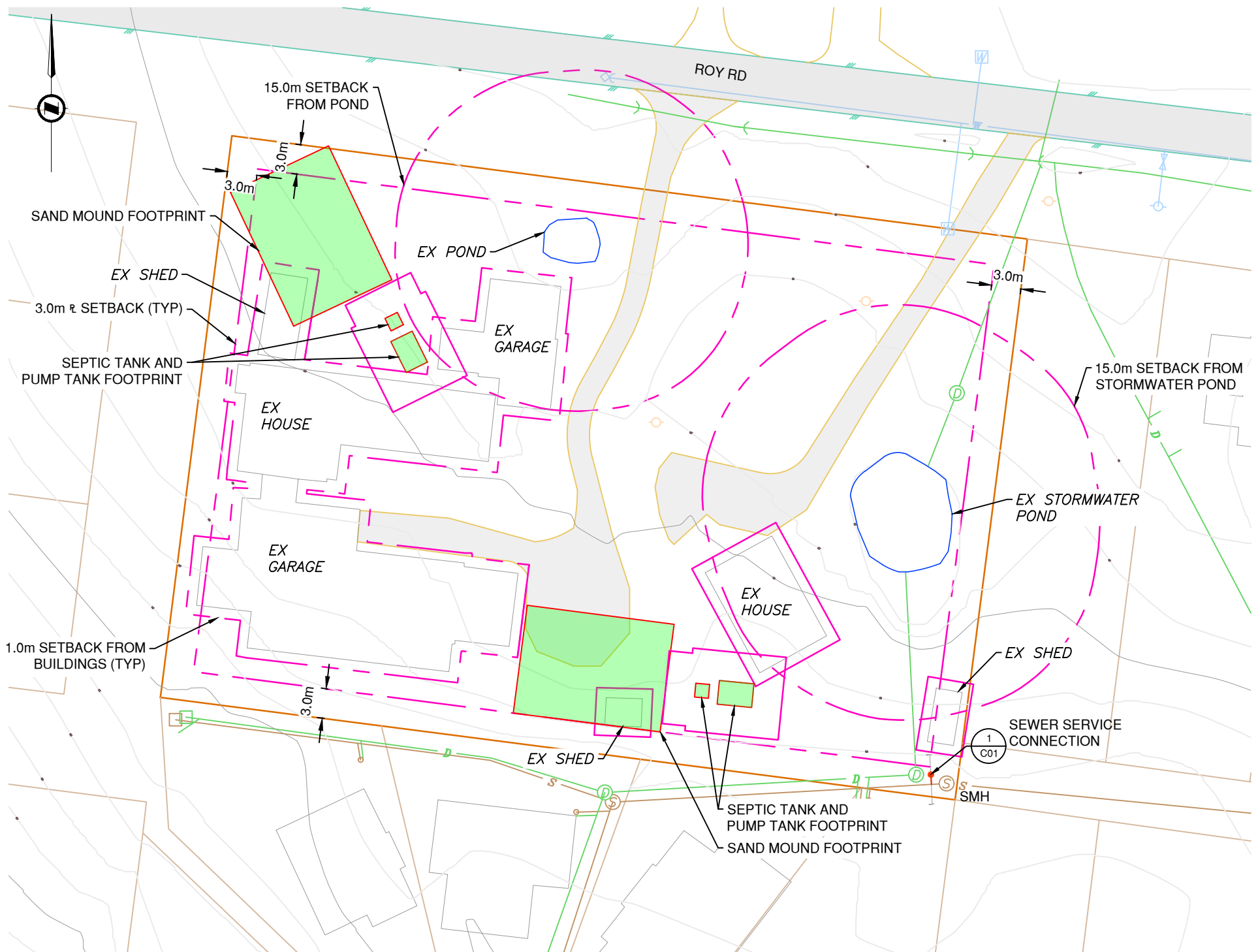
CHRISTOPHER PAGE

PROJECT

1335 ROY RD

1335 ROY RD SITE PLAN

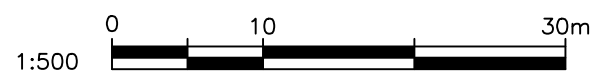
PROJECT NO.	SHEET NO.	DRAWING NO.	REVISION NO.
24-931	1 OF 2	C01	1



SITE PLAN
SCALE: 1:500

PRELIMINARY –
FOR DISCUSSION
PURPOSES ONLY
MARCH 2025

DISTRICT OF SAANICH



<div><div><div>BC1C</div><div>CALL BEFORE YOU DIG!</div><div>1-800-474-6886</div><div>THE CONTRACTOR IS TO CALL BC ONE CALL AND HAVE EXISTING U/G SERVICES STAKED PRIOR TO ANY CONSTRUCTION</div></div></div>	ISSUED					<div><div><div><div>MSR</div><div>Innovative Engineering Solutions</div></div><div>MSR SOLUTIONS INC.</div><div>INNOVATIVE ENGINEERING SOLUTIONS</div><div>125 - 662 GOLDSTREAM AVENUE, LANGFORD</div><div>B.C. V9B 0N8</div><div>OFFICE: (250) 479 - 5164</div><div>admin@msrsolutions.ca</div></div><div>PERMIT TO PRACTICE #1001876</div></div>	STAMP		SCALE: H: 1:500		CLIENT CHRISTOPHER PAGE			
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ORDER

Section 31, *Public Health Act*, S.B.C. 2008, Chapter 28 & Section 11 of the Sewerage System Regulation, BC Reg. 326/04

To: Jeannie Page, Christopher Page, and Suzanne Marion Page
1335 Roy Road
Victoria, BC V8Z 2Y3

Pursuant to Section 25 of the British Columbia *Public Health Act*, I Rachel Sabourin, Environmental Health Officer, of the Vancouver Island Health Authority, on February 28th, 2025, conducted a site visit to your property located at 1335 Roy Road and legally described as: Lot 5 Sections 1 And 13 Lake District Plan VIP62435 hereafter referred to as the "Property". The Property is owned by Jeannie Page, Christopher Page, and Suzanne Marion Page.

As a result of my site visit, I have reasonable and probable grounds to believe and do believe that you are in contravention of the Sewerage System Regulation (BC Regulation 326/2004) hereafter referred to as the "Regulation". This opinion is based on the following:

At the time of the inspection on February 28th, 2025, the following was observed:

- A dye test was performed on February 28th, 2025, at 10:23 AM by placing red fluorescent dye into a basement toilet located on the property. Red dye was observed surfacing onto the property at 1335 Roy Rd, Victoria, BC V8Z 2Y3, on March 3rd, 2025, at 2:27 PM. The presence of this dye on the ground confirms the health hazard.

According to Section 3(1) (b) of the Regulation, it is the duty of the owner of every parcel on which a structure is constructed or located to ensure that all domestic sewage originating from the structure does not cause or contribute to a health hazard.

Whereas you have violated that duty, effective upon receipt of this Order, I exercise my authority under Section 31 of the *Public Health Act* and Section 11 of the Regulation and hereby order you to:

1. Cease and desist the discharge of sewage onto the ground.
2. Connect the structure to a community sewer system, to be completed no later than April 11th, 2025. Submit confirmation in a form acceptable to the Health Officer that this has been completed.

Gateway Village Health Unit

201 - 771 Vernon Avenue | Victoria, BC V8X 5A7
Email: Gateway_office@viha.ca

Tel: 250.519.3401 | Fax: 250.519.3402
www.islandhealth.ca

Excellent health and care, for everyone, everywhere, every time.

It is an offence under Section 99(1) (k) of the *Public Health Act* to fail to comply with an order of a Health Officer, such as this Order.

Section 43 of the *Public Health Act* gives you the right to request the issuing Health Officer to reconsider the Order.

I request your cooperation with this Order.

Dated at Victoria, BC this 3rd day of March 2025.

A handwritten signature in black ink that reads "Rachel Sabourin". The signature is written in a cursive, flowing style.

Rachel Sabourin, CPHI(C)
Environmental Health Officer

RS/ksd

cc: Joanne Lum, Senior Environmental Health Officer
Rory Beise, Land Use/Drinking Water Consultant