

National Bank Tower 5<sup>th</sup> Floor, 134 Kent St.

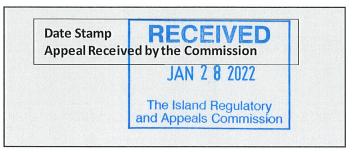
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appealinquiries@irac.pe.ca

Commission Case Number (Commission Office Use Only



## **Notice of Appeal**

(Pursuant to Section 28 of the Planning Act)

Under Section 28. (6) of the *Planning Act*, the Appellant must, within seven days of filing an appeal with the Commission serve a copy of the notice of appeal on the municipal council or the Minister as the case may be. In addition, the Commission requires the Appellant to provide the Notice of Appeal to any parties directly affected by the Notice of Appeal on the same date the municipal council or Minister is notified.

Please review each section of the form carefully and fill out all relevant sections. Kindly note that if a Notice of Appeal is deficient it may not be accepted for filing.

Information on this Form is collected pursuant to the *Planning Act* and will be used by the Commission in processing this appeal. For additional information, contact the Commission at 902-892-3501 or by email at appealinguiries@irac.pe.ca.

## Section 1 – Contact Information

NOTE: Fill out a separate contact information sheet for each individual appellant if applicable

Appellant Information			
Last Name: Scott		First Name: Shelia	
Company Name or Association Name (if applical			
Company Name of Association	on Name (ii applica	Die).	
Email address: sheilads	cott@hotmail.com		
Daytime Telephone Number: 902-393-1620		Alternative Telephone Number:	
Mailing Address			
Unit Number:	Street Number: 118	Street Name: Royalty Road	P.O. Box:
City / Town / Community Charlottetown	Province: PE	Country Canada	Postal Code C1E 3E1
Signature of Appellant/Lega	al Counsel (if applica	able): Sheila Scott	
<b>L</b>			
Representative Information	(Ifapplicable)		
☐ I hereby authorize th	ne named individua	l(s) to represent me.	
Last Name:		First Name:	
Company Name or Association	on Name (if applica	ble):	
Email address:			
Daytime Telephone Number:		Alternative Telephone Number:	
Mailing Address			
Unit Number:	Street Number:	Street Name:	P.O. Box:
City / Town / Community	Province:	Country	Postal Code
provided my writter	n authorization (att	resentative is not licensed under the Legal Proferached) to my representative to act on my behal tative may be asked to produce this authorization	f with respect to this
Signature of Appellant:	, , , , , , , , , , , , , , , , , , , ,	, and an	
		A CONTRACTOR OF THE CONTRACTOR	
Signature of Representative	:		

# Section 2 – Appeal Information

Appeal Reasons and Specific Information
Municipal Reference Number(s) (if applicable):
List the reasons for your appeal in accordance with the provisions of Section 28.(5) of the <i>Planning Act</i> (if more space
is required, kindly fill out a separate sheet and attach it to this form):
We are appealing the Occupancy Permit issued for Civic # 11-13 Essex Crescent under City of Charlottetown File No.
1127984. The permit was issued January 7, 2022 for "Occupancy Permit: New Semi-detached dwelling"
The semi-detached dwellings on Lots 1B to 9B Essex Crescent are in various states of construction and the rain water from the development is flowing into our property and our neighbours and causing significant damage.
Under the various steps of the development process, the City is to ensure that excess waters are not to flow onto adjacent properties.
I have reached out to the City on numerous occasions and have received nothing to indicate that the storm water will not continue to flow into our lands.
We have been left with no alternative, other than to higher a professional to review the issues and provide advice, and to appeal of occupancy permit, that has been issued contrary to city bylaw 3.7 (Occupancy Permits)
We have attached a report prepared by David Morris, P.Eng, to assist in this matter.
Has a public meeting been held by the municipality?   ☐ Yes  ☐ No
Did you apply for a development permit, occupancy permit, subdivision approval, change of use amendment or bylaw
amendment?   Yes   No
Oral / Written Submissions to Council
Did you make your opinion regarding this matter known to council / the Minister?
🖄 Oral Submissions at a public meeting of council / the Minister? Emailed and phoned city
☐ Written Submissions to council
□ Not Applicable
Related Matters
Are there other appeals not yet filed with the Commission?
☐ Yes ☒ No
Are there other matters related to this appeal? (For example: <i>An Environmental Protection Act</i> Appeal)
□ Yes □ No
If yes, please provide the Commission Appeal Number(s) and / or Municipal File Number(s) and / or the Provincial File

#### Section 3 - Relief Sought

#### **Relief Sought and Specific Information**

List or describe the relief sought in accordance with the provisions of Section 28.(5) of the *Planning Act* (if more space is required, kindly fill out a separate sheet and attach it to this form):

- 1. The storm water from the Essex Crescent development be appropriately managed through engineered design drawings and construction to ensure that all waters from the development are directed to a storm water system within a public right of way.
- 2. The City of Charlottetown take appropriate measures during to ensure that precipitation that falls during the winter months will not back up and flood our basement, through temporary measures such as a swale or ditch
- 3. The City of Charlottetown put in place a bylaw, policy or manual to manage storm water and in particular storm water from ne development.
- 4. The City of Charlottetown reinstate the provisions of the bylaw (September 2018), regarding the grading of lots, and certification associated with the stage of development.,

I have reached out multiple times to the City calling and emailing everyone I could possibly call in the late fall (late November – December) seeking help with the flooding before snow came and the ground froze. I received no action or help to prevent or even reduce the flooding. It is clear to see that the water from the rear facing downspouts are running into my property (I have photos if needed). Nothing was done when it could have easily been done before the ground froze.

I am extremely worried about the now frozen ground, snow melting and spring rain contributing to more heavy flooding of my property from the Essex Drive properties. I am trying desperately to avoid my basement flooding from this water. I am asking that something also be done in the interim (until the long term solutions are done) to avoid this flooding and damage to my property and house.

I have lived here for 14 years, doesn't the city have a responsibility to ensure my home and largest financial asset not be damaged by new development they have approved?

This has been an extremely stressful time and it has costs me personally thousands of dollars already. Why are in a place where I as a homeowner, has to spend thousands of dollars and file appeals in order for the City to help me and avoid damage and flooding caused by a City approved development? How is that just or fair?

#### Section 4 – Declaration

#### Declaration

I solemnly declare that all the statements and the information provided, as well as any supporting documents, are true, correct and complete.

By signing this appeal form below, I consent to the collection of my personal information.

Name of Appellant	Signature of Appellant or Legal Counsel	Date (yyyy/mm/dd)
Sheila Scott	Shrila Scott	2022/01/28
Name of Representative (if applicable)	Signature of Representative	Date (yyyy/mm/dd)

Personal information or documentation requested on this form is collected under the authority of the *Island Regulatory and Appeals Commission Act* and the legislation under which the proceeding is commenced. All information collected is included in the IRAC case file and the public record in this proceeding. In accordance with the *Freedom of Information and Protection of Privacy Act*, some of the information collected herein may be available to the public subject to exceptions.

**Important:** Under Section 28.(6) of the *Planning Act*, the Appellant must, within seven days of filing an appeal with the Commission serve a copy of the notice of appeal on the municipal council, the Minister or the third party(ies) as the case may be. *Service of the Notice of Appeal is the responsibility of the Appellant*.



January 27, 2022

Shelia Scott 118 Royalty Road Charlottetown PE

#### RE: PROJECT 21185 | 118 Royalty Road | Surface Water Drainage

Dear Ms. Scott,

As per our meetings and correspondence we have undertaken a boundary survey to delimit the extents of your property at 118 Royalty Road, and a topographic survey and site analysis as part of a review for storm water management of your property and the associated watershed.

The management of storm water is a difficult task and is influenced by numerous variables that require assumption when modelling. Storm events can occur that fall outside the norm, and outside the parameters used to design the control of water and during these events flooding can occur.

While the Province maintains a manual of design guidelines that establishes the parameters to be used in the design for the management of storm water for land development within provincial jurisdiction, the City of Charlottetown (City) does not. Historically, however the city has required storm water infrastructure to be designed to a 1 in 10-year event plus 10%. This was an un-written rule.

Within the City Zoning and Development Bylaw, where a subdivision creates a new street, or more than 4 lots, a provision is provided for an overall surface water plan (46.3.7.). Amongst items required on to be shown on the plan are <u>areas subject to flooding</u>. The section of the bylaw however does not provide any guidance or parameters to be followed for design. The bylaw also stipulates a requirement for a surface drainage plan as part of the development permit submission. Under the City website section for "Business and Development" exists a heading entitled "Lot Grading Guidelines and Certificate", while documents are published within the section, the Manager for Planning and Development has stated that the documents are not referenced in the permitting process. They are however a document that can be applied for Best Management Practises (BMP) within the City.

Lacking a formal guideline within the City, our firm has adopted BMP's from other jurisdictions together with guidelines, set criteria and parameters for the development of Storm Water Management Plans, Subdivision Grading Control Plans, and Individual Lot Grading Plans.

Morris Geomatics & Engineering Ltd. P.O. Box 21016 Charlottetown, PE, C1A 8Z3 eel: (902)-213-0487 email: info@morrisgeomatics.ca morrisgeomatics.ca



Typically, when analyzing and designing where storm water issues exist, a review of current plans adopted by the jurisdiction would be used. Many times, an issue can be resolved with correction of a deficiency in the final as built when comparison is made to the approved design drawing. Numerous requests have been made to the city for record drawings to assist in the review, however the City has failed to provide any record, including the publically registered development agreement engineering drawing attachments. Where the city has failed to provide record drawings, we are left to rely on the current condition as observed in the field as the soul means of our review.

### 1.0 PRE-2018 DEVELOPMENT REVIEW

Prior to the first phase of Royalty Heights Subdivision (now known as Windsor Park), under Morris Land and Engineering Surveys, a comprehensive topographic survey and storm water analysis was carried out on the existing water shed including the improved lots on Royalty Road, Alderwood Avenue, Windsor Park, and the undeveloped lands now part of Mullache Properties Inc. (Mullache)

In the analysis pre-development, the lots fronting on Royalty Road situated between Alder brook Avenue and the extension of Upton Road had overland sheet flow through a low catchment area in the rear yard of 118 Royalty Road that was followed by a low catchment area in now under Essex Crescent. The low catchment area in the rear yard of 118 Royalty Road received no surface waters from the undeveloped lands of Mullache and during storm events would have released its waters into a lower catchment area within Essex Crescent, before flowing downhill to the creek.

It should be noted, that obstructing the existing sheet flow from the Royalty Road lots onto the undeveloped lands is within the rights of Mullache, however, Mullache and its successors is not provided with a right to release its waters onto the adjacent Royalty Road lots.

#### 2.0 WINDSOR PARK PHASE III DEVELOPMENT

#### 2.1 2020 SUBDIVISION APPROVAL

A Subdivision Road and Services Agreement (SRSA) was entered into between Mullache and the City on June 12,2020 and filed in the Land Registry Office (LRO) November 23, 2020, as Document 9664 that sets the requirements for the subdivision. Items of note:

1. Schedule "A" the Master Plan, being the Plan of Subdivision approved by the City of Charlottetown, June 2,2020 and filed in the LRO as Number 41983 depicts no drainage easements. Under the SRSA s.7c, the developer is required to submit drainage easements where



- required. It would appear the developer did not foresee a need for any drainage easements along the southern boundary of the lots fronting on Essex Crescent.
- 2. Under the SRSA s. 10 b. appropriate siltation/ mulching measures are to be in place to avoid excess surface water run-off during this period". No erosion control measurements were found in place on the rear boundary of the lots fronting of Royalty Road. The plan set making up Schedule C" of the SRSA does not depict an Erosion and Sediment Control Plan, or a Storm Water Management Plan.

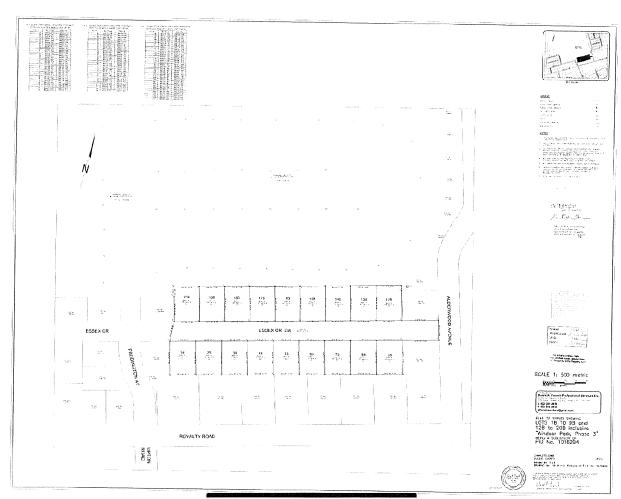


Figure 1 – Plan 41983. LRO, Windsor Park Subdivision Phase 3 dated October 9, 2019



#### 2.2 INDIVIDUAL LOT GRADING PLANS

#### 2.2.1 GRADE OF SITE REQUIREMENTS

Under the Charlottetown Zoning and Development Bylaw 3.3.5.c, a development permit requires

"a surface drainage plan showing existing and proposed Grade elevations and proposed drainage flow patterns in relation to adjacent properties"

For an individual to review the relation of flow patterns and elevations on adjacent properties, it would imply that the information be shown on the plan for both properties.

Under the Charlottetown Zoning and Development Bylaw 3.3.14.d , the Development Officer shall give consideration to:

"the adequacy of storm water drainage systems, both surface and underground."

Under the Charlottetown Zoning and Development Bylaw 6.4.1, a Surface Drainage Plan shall be:

"Designed to ensure that surface water runoff on the Lot will not cause damage or water runoff onto the adjoining Lots; and

Prepared by a qualified engineer or landscape architect."

#### 2.2.2 REVIEW OF DESIGN RECORDS

Morris was provided by the Mullache with three (3) design drawings for the proposed grading of Lot 4B, Lot 5B and Lot 6B, located directly behind 118 Royalty Road. It is assumed that similar procedures were carried out on other lots developed by Mullache (on Essex Crescent. Morris also received a final as-built for Lot 1B. Lots 4B through 5B are directly behind 118 Royalty Road.

Some comments on the French Plan 21046 for Lot 4B as certified February 23, 2021

- The grade break provided on the plan along each side boundary would suggest that the grade was designed to take all water from the roof via the down spouts to the front of the lot and to the street. This is good design considering road has been built higher than the rear boundary of the lots.
- A drainage swale is depicted along the rear boundary of the Lot and would take the surface water from the rear of the lot (not including the roof) to a dry well having a holding capacity of 0.45 cubic metres or 450 litres.
- > Drainage patterns on adjacent lots are not provided for the approval authority's review
- > Existing grades along the boundaries, and in particular the rear boundary is not provided.



- Note 8 on the plan for the design of the Dry well is contrary to BMP's in particular
  - o 600mm of Class "A" gravel is to be placed in the bottom rather than washed stone. This would inhibit infiltration rates
  - And open grate is provided that will allow for surface sediment to flow into dry well and inhibit infiltration rates
  - o Filter fabric is not mentioned as part of design.
- > Proposed drainage swale to handle storm water discharge in times of heavy storms is not provided for in the design.
- > The design drawing is sealed by a Land Surveyor and not a Professional Engineer or Architect as stipulated in the Bylaw. Note a Land Surveyors seal and certification is limited through the Land Surveyors Act, and does not include surface design.

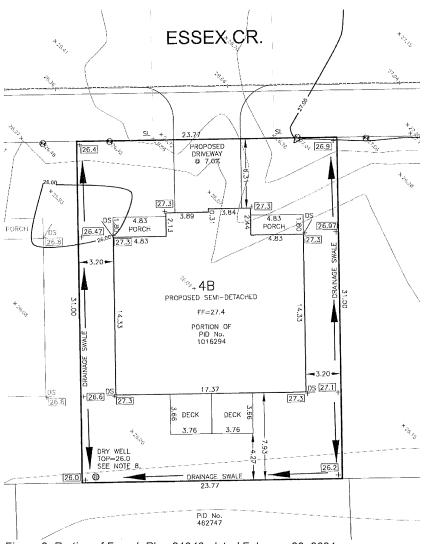


Figure 2- Portion of French Plan 21046, dated February 23, 2021



#### 2.2.3 SITE INVESTIGATION

A Site survey and investigation was made of the properties on Royalty Road and Essex Crescent. A topographic survey was performed as well as a visual inspection of the properties. The following represents the results of the investigation.

- A typical rain event of 16mm/day was observed on December 3, 2021 This is not considered an extreme event.
- A review of the rear downspouts for the semi-detached dwellings on <u>all</u> Lots 1B to 9B Essex drive as constructed indicated that ½ the total roof structure for each building discharged to the rear of the property contrary to the design drawings as provided and contrary to Bylaw 6.4.1
- A review of the front downspouts for the semi-detached dwellings on Lots 2B thru 9B are directed to the sidelines, perpendicular with the side of the building. The grade on most of the Lots directs the water to the rear of the lots.
- ➤ The calculated roof discharge (rear only for the rain event of December 3, 2021 was 2.58 cubic metres or 2580 litres, well in excess of the 0.45 design capacity of the dry well.
- > No surface route was provided to take the surcharge back to Essex Street and it flowed onto the lots fronting Royalty Road with no route of escape

Lot 1B, 2B, 3B, 4B and 9B, received an occupancy permit prior to the investigation taking place. As-built grading and downspout outlet are contrary to design drawings provided and a occupancy permit should not have been provided.



## 2.2.4 PHOTOGRAPHIC EVIDENCE OF GRADING FAILURE

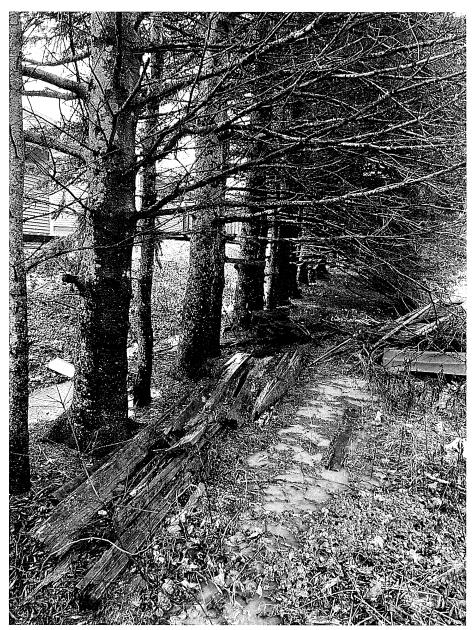


Photo 1 Water flowing from Lot 6B onto PID 462440

Surface water flowing downslope through rear yard of PID 462440. Water originating from high lots on Essex Drive. Water collects in rear yard of PID 462457





Photo 2 Water Flowing from Lot 5B onto PID 462457



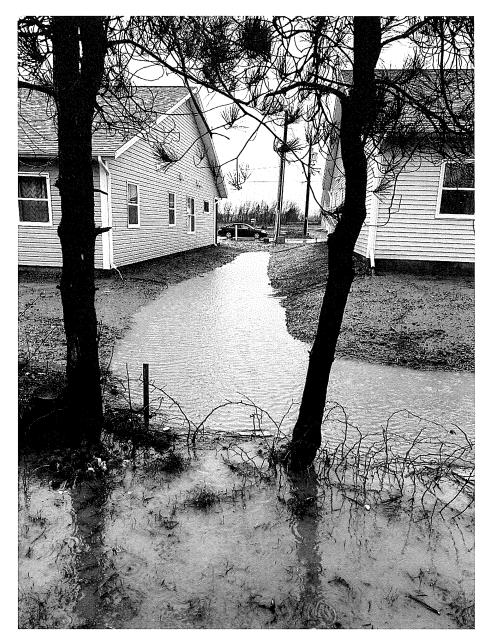


Photo 3 Division Line between Lot 4B and Lot 3B

Image of swale between Lot 3B and Lot 4B. Road is higher than swale, and water is flowing away from the road

Grading of Lot is contrary to Lot grading plan (See Figure 2), however an occupancy permit has been issued for each building.





Photo 4 Rear boundary of Lot 4B



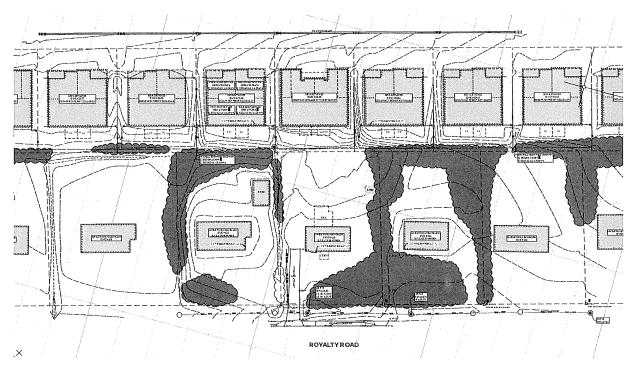


Figure 3 As-found elevation plan with contours and drainage patterns

In the initial design and review process for the subdivision, it should have been observed that the rear of the properties being approved had an elevation below the final design of the road. The road and existing development created a barrier from which water could be free to flow ultimately to the creek at the bottom of the hill. No path was provided in the design to allow for the dispersal of surface waters during high storm events.

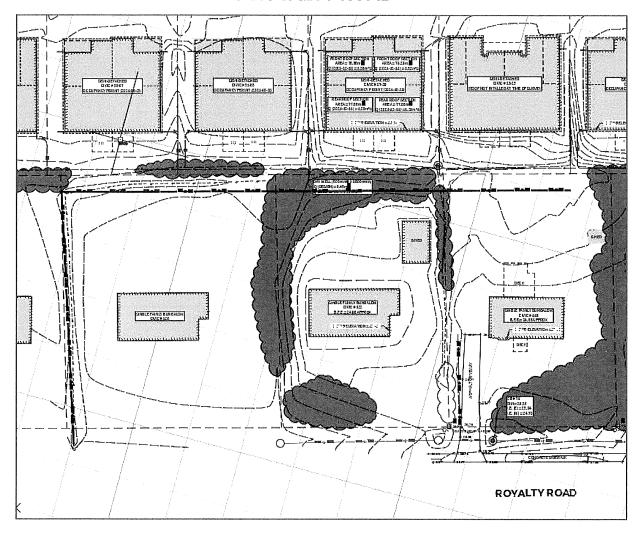
During the approval of the individual lot grading plans, the viability of dry wells should have been questioned. Best Management Practices, suggest creating dry wells, that can handle the largest of storms and that can disperse of the water collected, in no less than 72 hours. This requires proper analysis of soil for hydraulic capacity. Best Management Practices, also suggest providing g routes for the surcharge from the drywell to get to a storm system downhill. The individual plans provide no such mechanism.



### 3.0 SOLUTIONS

Upon review of the situation of the lands, 3 possible solutions exist to remove the excess surface waters from the area.

## 3.1 STORM SYSTEM TO ROYALTY ROAD

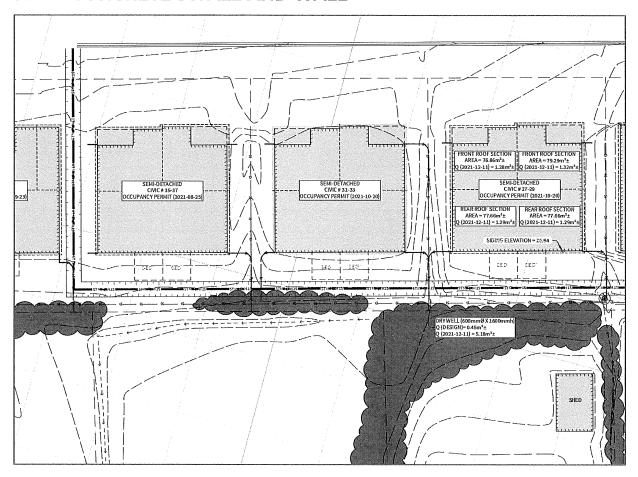


Solution 1 would consist of a piped storm system collecting water through catch-basins in the rear yards of the lots fronting on Royalty Roads. The system would consist of approximately 250 metres of storm pipe, collection tees and surface swales.



Significant grades occur of some lots. It would be suggested that the downspouts for the rear lots on Essex Drive be connect to the storm system underground to minimize surface erosion. Easements would be required.

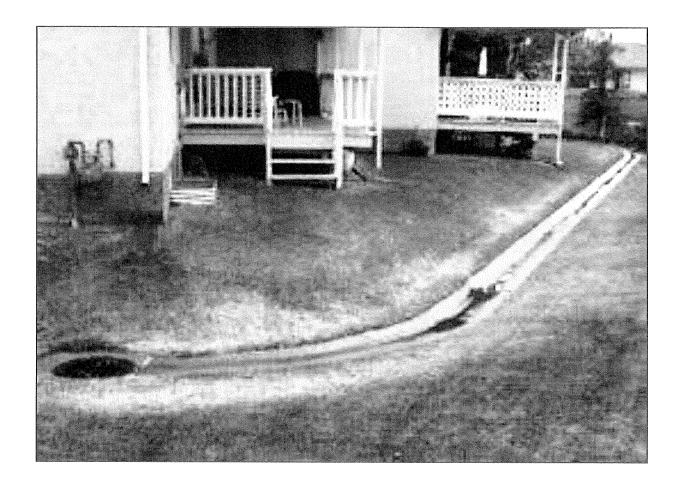
### 3.2 CONCRETE SWALE AND WALL



Solution 2 would require the construction of a concrete swale along the rear boundary of the Lots 1B to 9B and then direct the water to Essex Crescent. Dependent on the grade from the topside of the slope a block wall may be required to build up the rear of the lot to accommodate swale

Easements would be required.



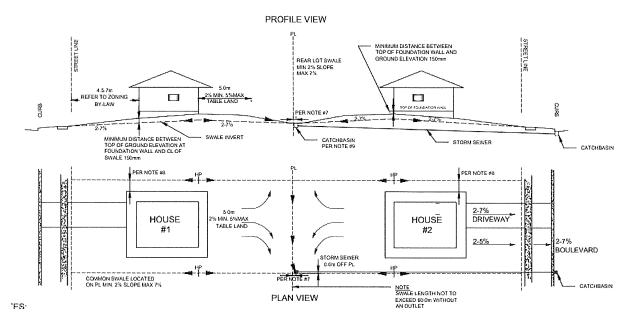


## 3.3 REAR YARD CATCH BASIN

Solution 3 would require the construction and installation of a rear yard catch basin, for every second lot with a properly constructed swale to direct the surface water to the catch basin. This system is limited by the depth of the storm system on Essex Crescent.

Of the three options, option 2 can be carried out with small equipment and is mostly a landscaping exercise to reshape the lots, rather than excavation for placement of pipe and structure.





#### 4.0 CONCLUSIONS AND RECOMMENDATIONS

It is difficult to determine how occupancy permits have been approved with final as-built conditions exist contrary to approved design drawings for the subdivision and individual lot grading plans. The city would not allow a review of any approved document as part of our review for the failure. The facts however are clear.

- 1. The as-built elevation of Essex Crescent is higher than the rear boundary of the lots fronting on Royalty Road.
- 2. The as-built elevations created a barrier that eliminated the natural flow of surface water downhill. Water from the lots on Royalty Road, had no route to discharge in the event of a major storm.
- 3. The City of Charlottetown approved subdivision plans and engineering design drawings that created a barrier to the natural flow of surface water.
- 4. Mullache's surface water on the south side of Essex Crescent was deprived of a route to discharge from the lands and be appropriate managed and is now directed into the rear yards of the Royalty Road Lots.
- 5. As the lots were developed the natural area for surface waters to infiltrate into the ground were diminished. Impervious surfaces were increased resulting in more surface water.



- 6. Individual Lot grading certified drawings provided suggested that it was intended that all water from the impervious roof surface was to be directed to Essex Crescent.
- 7. As-built elevations and down spout locations indicate that surface water and water from the impervious roof surface was directed to the rear of the building lots and onto the Royalty Road Lots contrary to the design drawing. Occupancy Permits have been issued approving waters flowing onto adjacent lands contrary to the bylaw..
- 8. Photography indicates a catastrophic failure of the dry well system placed on each lot. Each dry well has a capacity 450 litres, and during the storm event of December 3, 2021 (a typical event) received a minimum of 2580 litres. Where the front downspouts discharged rearward, the volume was increased.
- 9. The City of Charlottetown approved the final grading plans and issued occupancy permits on lots that were clearly in non conformance with design drawing and directed surface water onto the Royalty Road Lots.
- 10. Design drawings provided to Morris were stamped by a Land Surveyor and not an Engineer. A land Surveyor is not qualified to design and underground storm water detention system such as a drywell.

A land Surveyors stamp is limited. Did the city approve surface drainage plans without an engineer's stamp, it would appear they did? I would think if such was the case that the city would ultimately be responsible for anything that happened as a result

Yours truly,

Morris Geomatics & Engineering Ltd.

David R. J. Morris, P.Eng, PEILS, CLS

President