Our File: 2233-01173-00

TECHNICAL MEMO

To	From
Mark Holland Westplan Consulting Ltd.	Mark DeGagne, PEng McElhanney
Re	**Date**
Easter Seals Conceptual Stormwater Management Plan	October 24, 2023

1. Introduction

McElhanney Ltd. was tasked to complete a stormwater management plan for discussion purposes by Easter Seals BC-Yukon wants to redevelop the Shawnigan Lake Summer Camp. Any redevelopment plans need to meet the requirements of the Cowichan Valley Regional District (CVRD) zoning and planning bylaws. Part of those requirements is ensuring that the redevelopment plans have no negative impacts on existing systems and receiving environments, in this case Shawnigan Lake. This conceptual stormwater management plan provides the basis for planning detailed stormwater system designs to ensure stormwater impacts are mitigated and meet the requirements of the CVRD. This stormwater management plan is accompanied by drawings labeled Easter Seals Camp Shawnigan Lake Stormwater Management Plan – Preliminary.

This plan is intended to be a basis for the Cowichan Valley Regional District's requirement to establish a drainage collection and disposal system that is designed and constructed in accordance with MMCD standards. As per section 9.2 of bylaw 4331, the CVRD may also require a detailed drainage management plan that includes the following determinations:

a. Drainage characteristics of the site;
b. Hydrological analysis to determine projected flows into the system;
c. Hydraulic analysis to determine capacity of the system;
d. Impact analysis of residual flow;
e. Design options;
f. Impact of eventual discharge of the water from the subdivision;
g. Analysis of project residual flows with development and mitigative measures in place;

h. Assessment of projected environmental and physical impacts post development; and
i. Operations and maintenance recommendations.

This plan is intended as a first step in ensuring the redevelopment of the site adheres to the above requirements and provides guidance for moving forward through the rezoning process so that the designs for the final development plans will meet the requirements for a development permit. The site is located at the Easter Seals Camp at 2180 Shawnigan Lake Rd within the CVRD. Due to it's location, CVRD development bylaw 4331 – Electoral Areas Works and Servicing Bylaw and CVRD bylaw no. 4348 are both applicable to this development.

2. Site Characteristics

2.1. OVERVIEW OF EXISTING SITE

The majority of structures are located in the Southwest lots, parcels 8 and 9 between Shawnigan Lake Road and the lake itself. A previous report on stormwater flows in the existing camp area by McElhanney in 2022 was examined and applied to this assessment and plan.

The hydrological setting of the Camp is defined by its position within the Shawnigan Lake watershed (see Figure 1), which contains numerous small catchments whose geometries are largely influenced by their underlying surficial and structural geological characteristics. Regionally, the camp is situated adjacent to the East side of Shawnigan Lake on a gently west-sloping hillside at the base of Old Baldy Mountain. Locally, the Camp is situated on the South Side of a minor, west-draining sub-catchment that contains at least two intermittent watercourses that flow west towards Shawnigan Lake.

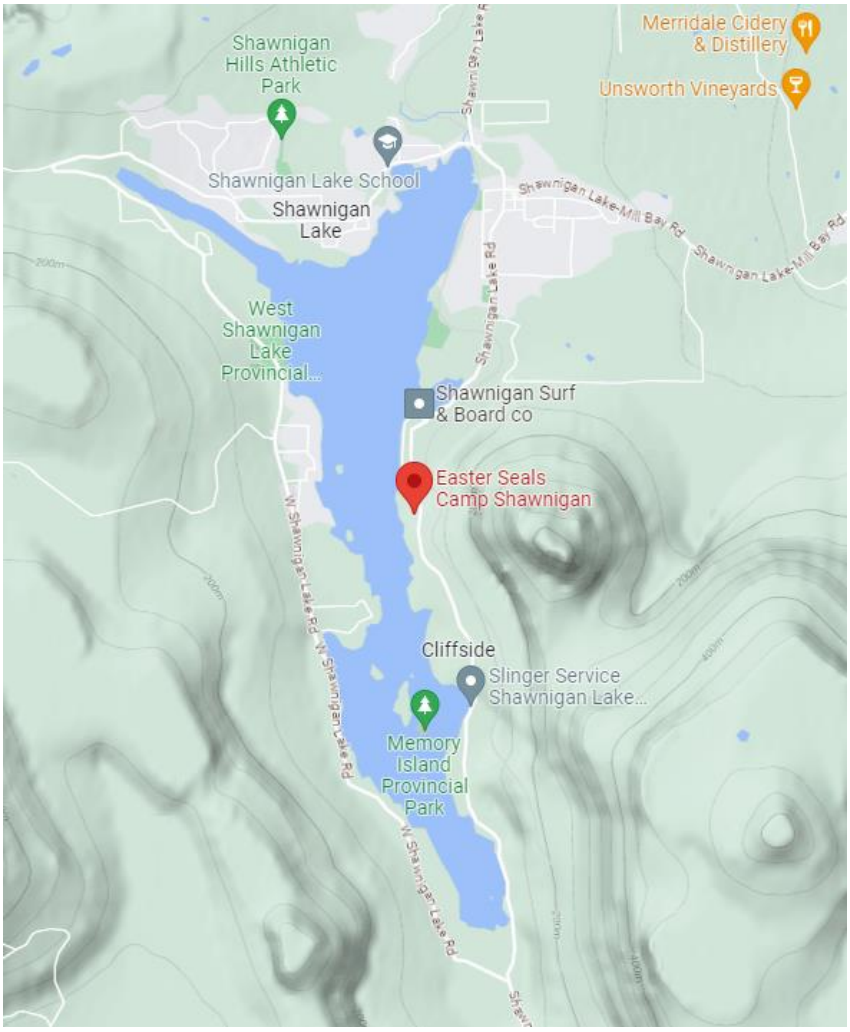

Figure 1: Topographic plan of Easter Seals Camp Shawnigan location

Existing surface drainage patterns on Lots and 9 are largely a function of their natural topography and developed impermeable surfaces. The ground surface within lots 8 and 9 is largely rolling to hummocky and dominated by a North-South trending series of bedrock knolls within the west parts of lots 8 and 9 that form a hydrological divide. The generalized subcatchment boundaries are identified on Figure 2 and shows that the parcel of land between the road and the lake is generally bi-sected by the rock ridge in the middle of the lot, forcing rainfall runoff to the north through natural surface water features toward the lake. This eastern half of the property is also the lowest lying and is generally influenced by lake levels, especially as it relates to seasonal subsurface groundwater levels. There is a small area on the northside that is within the Lake's 1:200 year flood level, which should be considered in all redevelopment plans.

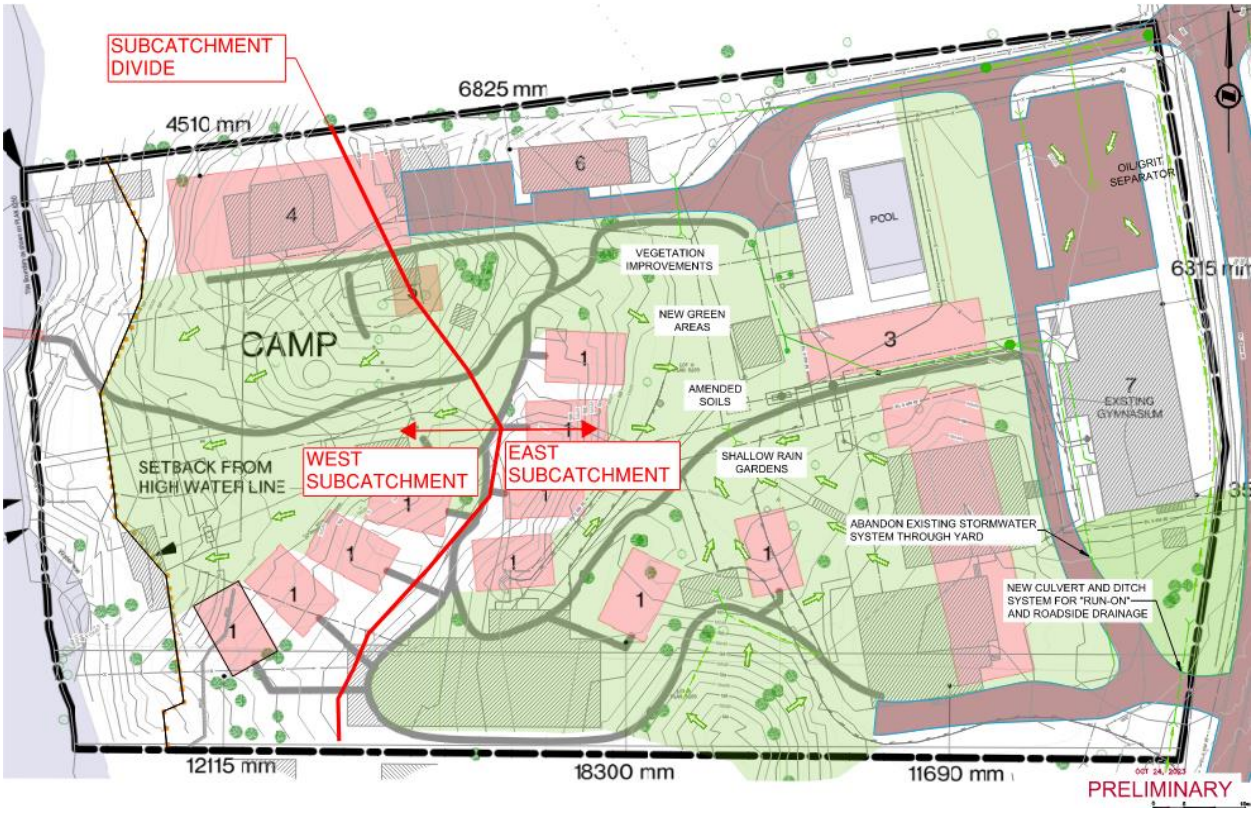

Figure 2: Lots 8 and 9 subcatchments overlain on proposed development plans

The ridge fronting the lake generally consists of shallow and exposed bedrock shedding rainfall directly to the lake with little pervious soils to attenuate the runoff.

2.2. EXISTING STORMWATER MANAGEMENT WORKS

There is a 2.65-hectare catchment of land to the southeast (across the road and uphill) of the lower parcel of land that directs stormwater runoff across the road to the existing 600mm CMP culvert near the South camp gate. Runoff flows through this culvert onto the Easter Seals property and through its existing storm system, discharging to the neighbouring property to the north near the existing workshop building. The discharge point is a natural watercourse which flows in a northwesterly direction to the Lake. Off-site stormwater runoff from Shawnigan Lake Road also flows directly onto the East sides of Lots 8 and 9 from an area of approximately 0.15 ha. Total “run-on” from adjacent lands and rights-of-way equates to a peak discharge of 200 l/s (1:200-year storm flow). This flow must be accommodated by the storm system running through the Easter Seals property to prevent flooding of any existing or future buildings.

As shown on Figure 2, the parcel of land west of the road (lots 8 and 9) is further divided into two subareas: The east portion where the cafeteria, gymnasium and pool are located, and the west portion fronting the lake with the dorm, arts and crafts building, picnic shelter and caretaker residence buildings.

The total area of impervious surfaces[1] within the east subarea of the main campsite is 10,125 m^2, which is equivalent to 66.2% of the sub-catchment's total area of 15,300 m^2.

Stormwater routinely ponds in the areas of the east sub-catchment's catchbasins in the tennis court area east of the Pool / Washroom building and east of the Gymnasium building following periods of intense and/or prolonged precipitation, which suggests that the existing stormwater management works within this sub-catchment are inadequate to effectively manage peak surface runoff volumes

The main Camp's west sub catchment has a total impervious surface area of 2,595 m^2, which is equivalent to 41.4% of the sub-catchment's total area of 6,250 m^2. Rainfall runoff generally flows west directly towards Shawnigan Lake, sheeting overland with no need for a formal stormwater conveyance system.

The North and South fields, located East of Shawnigan Lake road are within the camp property boundaries and are primarily greenspace. There is a single watercourse and minimal infrastructure. These areas have been graded to serve as sports fields with drainage routing towards the natural watercourse that drains at the Northwest corner of the North field. The existing infrastructure includes a cooking shelter, washrooms, and five campout huts, all within the South field. A septic field exists within the North Field which services the camp. Access to the fields is through a roadway branching off Shawnigan Lake Road that bisects the North and South fields. These lots have a total impervious area of 563 m^2, which is equivalent to 2% of the combined lots' total of 36,800 m^2.

2.3. EXISTING STORMWATER CONCERNS

The photos below show that there is significant ponding around the perimeter of the gymnasium which is caused by a lack of positive drainage around the building, and encroachment of the adjacent high, which has no formal ditching on the public right-of-way. The last photo shows the groundwater table in the area experienced during the recent installation of a sewage lift station.

The high groundwater levels and surface water ponding will influence the stormwater system design for the re-development which must provide positive drainage for both the water running onto the site from off property and the adjacent road, as well as the internal yard drainage. An efficient storm system will convey water past the site to the receiving environment which is ultimately the lake. On this basis, the volume and peak rate of runoff should be less of a concern, as the lake is a considerable body of water and can attenuate the flows effectively, but water quality of the runoff from the site should be considered to ensure that there is minimal impact to the natural lake environment.

[1] (includes on-site and off-site paved roads and walks, tennis court, playground, building roofs and decks, and exposed bedrock)

Figure 3: Ponding discovered on North side of gym adjacent the tennis court.

Figure 4: Ponding discovered in park area East of tennis courts.

Figure 5: Ponding during rain event North of Gymnasium adjacent Shawnigan Lake Road that has no formal roadside ditch along this length of the road

Figure 6: Ponding water discovered South of Gymnasium.

Figure 7: View of excavation in camp area showing shallow water table.

Figure 8: Water flowing into 600mm culvert located near South camp gate

3. Site Hydrology

To assess the impacts of the re-development the hydrologic response to rainfall for the existing condition must compared to that of the site once it is redeveloped. The intent of this hydrologic comparison is to ensure that there is no significant difference in the hydrologic response, and thus no negative impacts to the neighbouring properties or the receiving environment. These negative impacts include changes to water quality, as well as water quantity.

The comparison starts with an assessment of the change to land use, which is illustrated by Figure ZZ, displaying overlapping of the re-development concept on the existing land use picture. The main camp area west of the road shows removal and re-construction of all buildings except the gymnasium, providing greater accessibility of all buildings, which is the intent of the summer camp for people with physical disabilities and special needs. The lands east of the road will remain relatively unchanged, except for the potential for new residential lots along the eastern edge of the property, which is primarily forested lands. These six proposed large rural residential lots will require individual attention at the time that they are built

upon and are assessed herewith based on the generalised expectations for development based on typical resident building sizes and access road requirements.

3.1. CURRENT DEVELOPMENT STORMWATER RUNOFF

Rainfall runoff, both in terms of volume and rate of discharge, for the existing development were calculated using the PC-SWMM (Storm Water Management Model), which provides dynamic simulations for rainfall infiltration and runoff from hydrologic data based on designs storms or actual rainfall data. In this stormwater management plan, it was utilized to compare potential runoff from the existing site in different rainfall scenarios to that which is predicted for the revised development scenario based on the latest concepts for redevelopment. Design storms were based on the North Cowichan rainfall gauge provided by Environment and Climate Change Canada. This database provides climate change adjusted intensity-duration-frequency (IDF) curves for future rainfall planning. In this study, a 2021-2050 climate change adjusted IDF curve was applied to the PC-SWMM model.

The hydrologic characteristics of the site were determined based on the land use of the current site whether that is forested or cleared, impervious or pervious calculated impervious areas. For this study, the 2-year, 24 hour and the 5-year, 24-hour SCS 1A design storms were applied to each sub catchment of the property. These design rain events represent the typical rainfall pattern of the pacific northwest, which is characterized by less intense storms of greater duration. From this data, PC-SWMM provided total runoff volumes and peak runoff discharges for each subcatchment of the site. The results are displayed on the table below.

Table 1: Existing Development Runoff Characteristics

Parameter	Catchment			
	West Lots	South Offsite Run-on	East Lots	Total
Contributing Area (Ha)	1.98	2.65	3.68	
% Impervious existing development	51%	6%	2%	
Peak Runoff (l/s)				
2 Year – 24 Hour Storm	71.9	70.7	85.4	228
5 Year - 24 Hour Storm	90.0	91.4	111.7	293.2
Runoff Volume (m^3)				
2 Year - 24 Hour Storm	1102	1291	1751	4144
5 Year - 24 Hour Storm	1385	1661	2262	5308

3.2. REDEVELOPMENT STORMWATER RUNOFF

Redevelopment plans were provided by HCMA Architecture and provide the basis in determining the land use, rainfall runoff rates and volumes, and recommendations for stormwater conveyance works. The development plan provided by HCMA Architecture shows detailed plans for the West lots, including ten individual cabins, a yoga studio, staff housing, pool building, dining hall, workshop, a new parking lot, and inclusion of the existing gym building. The plan shows potential for future subdivision of the lots East of Shawnigan Lake Road. This subdivision plan shows additional parking areas, roadways to the new lots, a washroom block, showers and ten campout huts.

At the current stage of planning, the bulk of structures will be within lots and 8 and 9 in the Southwest property, therefore this area was reviewed most extensively. This camp area can be bisected into two sub-catchments by their drainage patterns, split into East and West sections, where the Western section drains directly into Shawnigan Lake and the Eastern section drains to the recessed area West of the pool before draining behind the workshop. Due to the density of development in the East sub-catchment, the stormwater design will be concentrated in this area.

Figure 9: HCMA Development plans for Easter Seals Camp Shawnigan.

Impervious area values were calculated from the development plans provided by HCMA. Currently, lesser is known about the potential development in the lots East of Shawnigan Lake Road. Impervious area was calculated based on the roadways, washroom buildings and campout huts proposed by HCMA. Additionally, approximately 20% of impervious area was included for each subdivided lot to ensure the inclusion of driveways, homes, and patios. The overall result is a reduction in the impervious area for the West catchment, and a predicted increase in impervious area for the East catchment. The offsite run-on South of the main camp area was left with the same impervious percentage as no development of these lots is known at this time.

These values were used to determine the peak runoff from each catchment of the site. The results from PC-SWMM simulations for the redevelopment scenario are provided on the table below.

Table 2: Re-Development Runoff Characteristics

Parameter	Catchment			
	West Lots	South Offsite Run-on	East Lots	Total
Contributing Area (Ha)	1.98	2.65	3.68	
% Impervious from proposed development	42.6%	6%	21%	
Peak Runoff (l/s)				
2 Year – 24 Hour Storm	0.69.6	0.70.7	102.0	242.2
5 Year - 24 Hour Storm	87.3	91.4	130.8	309.5
Runoff Volume (m^3)				
2 Year - 24 Hour Storm	1078	1291	1864	4233
5 Year - 24 Hour Storm	1360	1661	2380	5401

The proposed development shows a new total impermeable area of the West lots of 8,461.49 m^2. This is a decrease from the existing 10,125m^2 of impermeable area in the existing camp. This is advantageous to stormwater management as reduced impervious areas typically result in lower peak runoffs, as displayed in the modelling results. In the lots East of Shawnigan Lake Road, there is an expected increase from 2% impervious area to 21% impervious area with the current development plans. This shows an increase in the peak runoff and total runoff volume from this catchment area.

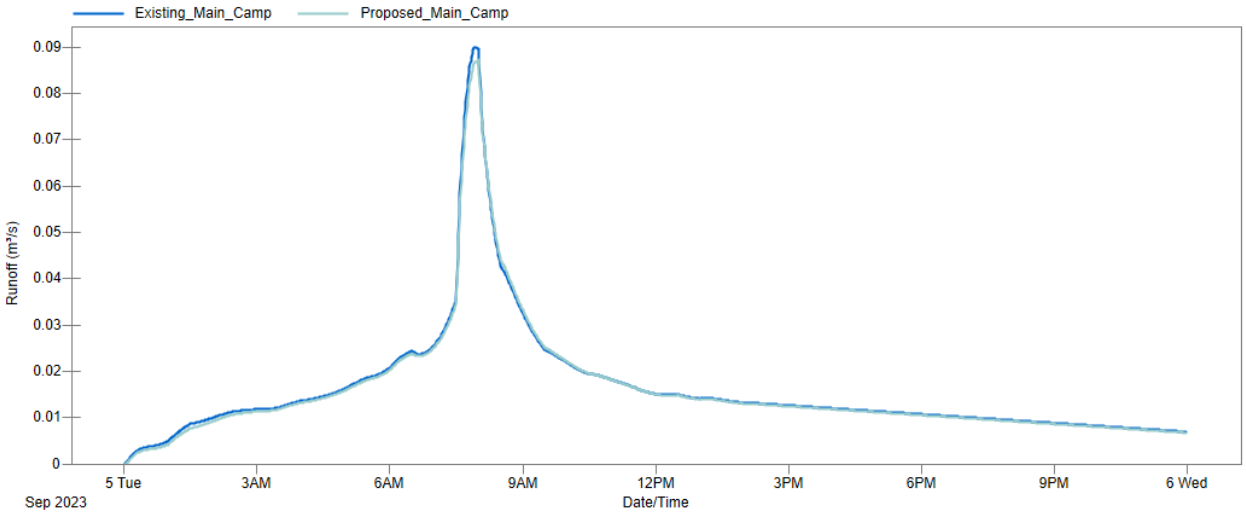

Figure 10: 24-hour, 5-year rain event showing site runoff for existing and proposed main camp site characteristics.

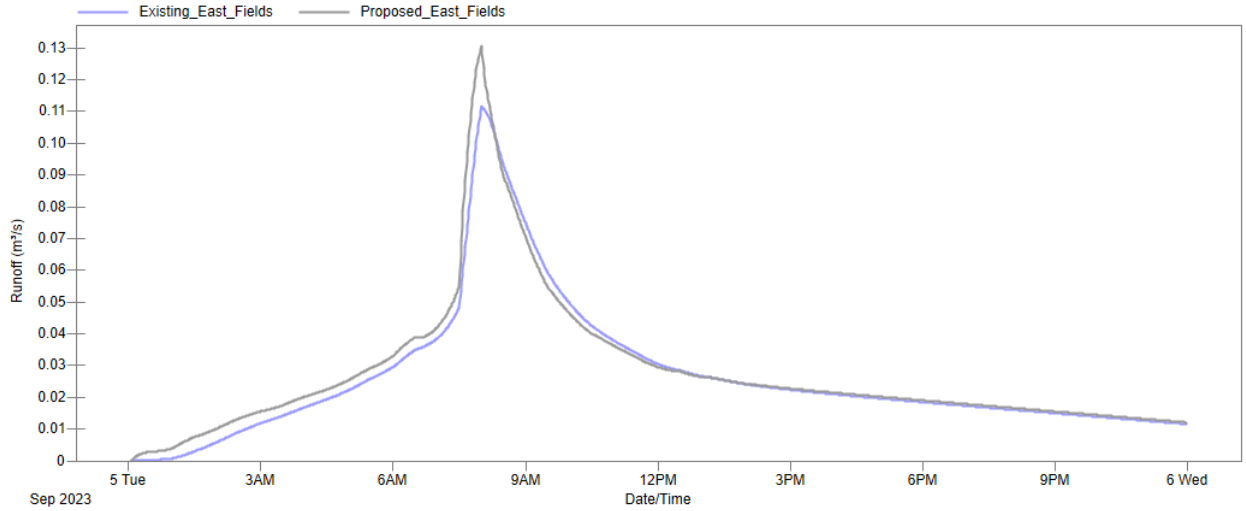

Figure 11: 24-hour, 5-year rain event showing site runoff for existing and proposed East fields site characteristics.

Comparative runoff hydrographs are provided for the two design storm events, showing the changes in peak discharges and runoff volumes for the two catchments. Both the increase in the upper area and the decrease in the lower area are not significant in terms of both peak discharge and volume with an overall balance of discharge volumes to the lake less than 2%. When considering the storage volume in the lake, this increase in volume is negligible. Thus, the emphasis for stormwater management becomes focused on water quality rather than water quantity. Best Management recommendations follow in the next section.

4. Preliminary Stormwater Management Plan Recommendations

After assessing the comparative analysis of the proposed redevelopment to existing land use conditions at the camp several best management strategies are recommended for mitigating the impacts of stormwater on the receiving environment and to protect the overall development from flooding during those rare events of greater peaks and volumes. The recommendations are separated into two sections, recommendations for the Main Camp area (Lots 8 and 9, West of Shawnigan Lake Road) and for the East Fields (Lot 6, East of Shawnigan Lake Road).

4.1. THE PRELIMINARY STORMWATER PLAN FOR THE MAIN CAMP

Analysis of the development plan shows an increase in the permeable area for the main camp when compared to the existing conditions. This results in decreased peak runoff values and decreased runoff volumes. These reduced values allow for more effective stormwater management. Even with the expectation that rainfall runoff may decrease even under a climate change scenario, the stormwater system for the lower main camp must provide effective control of both the “run-on’ to the site and the runoff from new buildings and hardened surfaces. The Lake provides an effective basin to receive the water without impact to adjacent properties or infrastructure, but it is a sensitive ecosystem and water quality of the runoff becomes a priority in the management of the stormwater. To this end the recommendation below provide sound guidance for implementation of the new storm system as the site is re-developed.

Figure BB shows the recommended storm routing and key system elements to address the need for safe conveyance of rainfall runoff onto and throughout the main camp area. To address the ponding East of the Gymnasium, positive drainage around the building is required especially on the south and east sides, where the topography forces roadside and yard drainage against the building foundation. A proposed example of this, outlined on the attached figure, utilizes the ditch West of Shawnigan Lake Road as a drainage path. This ditch should be designed to provide relief for the incoming offsite stormwater through the property and to convey surface runoff from Shawnigan Lake Road and a new parking lot area. The collected water would then be transported under the main camp driveway along the North perimeter of the property into the existing creek to Shawnigan Lake at the point where it discharges now. This is a natural low point on the site and will allow for natural drainage. The benefits of this recommendation include keeping the “run-on” to the site separate from the internal site drainage, and allows for overland conveyance via purpose built ditching. By sloping the land away from the building foundation, the gymnasium area will be protected from ponding and frequent flooding. It is likely that a new culvert across the south driveway entrance will need to be installed in bedrock requiring some blasting, but this is viewed as necessary.

A significant area in the Main camp is within the 120m flood construction level. These low-lying areas should be largely landscaped areas and must not contain habitable or critical infrastructure, as required by the CVRD. Additionally, transportation routes, including paths and roadways within this area, must be designed with adequate drainage and grading to promote runoff without ponding. This includes the replacement of undersized culverts and stormwater piping, expected to be found in the existing

infrastructure. Detailed design work for sizing of pipe infrastructure must include the consideration of an increase in frequency of severe weather events, as outlined in the CVRD Climate Projections and Impacts Analysis.

To maintain water quality from the site to the lake, roof leaders should not be directly plumbed to underground system, but rather should be discharged to vegetated areas, which aid in the removal of suspended sediments and other detritus materials before entering the drainage system discharging to the Lake. Vegetated areas should be rebuilt with an additional layer of soil amendments to enhance infiltration, aid in attenuating runoff, and provide more robust water quality screening of roof runoff and runoff from adjacent hardened surfaces. Additionally, a constructed rain garden or wetland on site to retain stormwater within the landscaped areas of the eastern portion of the main camp area could be constructed. The intent of the facility is not necessarily the attenuation, detention or retention of runoff, but an additional protection for water quality enhancement prior to releasing runoff toward the lake.

All parking lots and catchbasin units should be equipped with oil/grit separators with appropriate overflows for higher discharge events. Additionally, the use of permeable paving stones in low volume traffic areas could be employed to allow for the infiltration of water while providing a safe road surface alternative to asphalt.

4.2. EAST FIELDS

The proposed plans for the East lots show the construction of access roadways, parking, camp infrastructure and 6 new residential lots, increasing the impermeable area of the site and, in turn, rainfall runoff. Since the development plans for the proposed lots 1-6 are unknown, the exact amount of impervious area is uncertain. A conservative estimate for these lots was used in determining the runoff volumes. To ensure adequate stormwater management, each lot will need to show a balanced runoff from pre-development to post-development. This can be achieved with on-site controls such as rock pits and infiltration basins, green roofs, amended soils and/or rain gardens It is recommended that each property be looked at independently at the time of building permit to ensure that each property has a definitive and responsible plan for managing their own stormwater in accordance with CVRD requirements. Since these are large rural lots, there should be plenty of opportunities on remaining undeveloped property to employ the many BMPs available to attenuate peak runoff and infiltrate otherwise increases in stormwater runoff before leaving each lot.

Access roads and parking lots will also require detailed stormwater management design taking advantage of the infiltration capacity of the South Field. Care will need to be taken to avoid conflict with the existing septic treatment system housed within the North Field, and positive drainage away from this field is recommended.

Additional runoff from the adjacent parkland East of the property must be considered when calculating flows through the site. This area is likely to contribute large flows into the creek running along the Northeast edge of property towards Shawnigan Lake Road. Detailed design must consider future rainfall events when assessing the sizing of culverts and drainage in the area.

5. Closure

The preliminary stormwater management plan is intended to demonstrate key issues within the site that require a plan for the management of the stormwater that originates on and off the property. The plan demonstrates that the redeveloped main camp area will actually reduce the imperviousness of the site and rainfall runoff will improve. On this basis, the emphasis for the management of the stormwater is placed on water quality and the recommendations provide several options for enhancing the quality of the water leaving the site as it discharges to Shawnigan Lake.

Increases in expected runoff from increased land use east of Shawnigan Lake road will result in increases in runoff without proper management of the stormwater. The greatest increases will result from the development of 6 proposed residential lots on the upper hillside of the eastern property. Recommended best management practices to mitigate increases from individual lots should be planned and defined at the building permit stage, once exact development impacts are known.

Given the expected small increases in peak runoff discharges and volumes, stormwater can be effectively managed through the redevelopment of this property if infrastructure upgrades are completed along with the utilization of on-site stormwater control methods.

Sincerely,
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APPENDIX A

Statement of Limitations

Statement of Limitations

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Information from Client and Third Parties. McElhanney has relied in good faith on information provided by the Client and third parties noted in this report and has assumed such information to be accurate, complete, reliable, non-fringing, and fit for the intended purpose without independent verification. McElhanney accepts no responsibility for any deficiency, misstatements or inaccuracy contained in this report as a result of omissions or errors in information provided by third parties or for omissions, misstatements or fraudulent acts of persons interviewed.

Effect of Changes. All evaluations and conclusions stated in this report are based on facts, observations, site-specific details, legislation and regulations as they existed at the time of the site assessment/report preparation. Some conditions are subject to change over time and the Client recognizes that the passage of time, natural occurrences, and direct or indirect human intervention at or near the site may substantially alter such evaluations and conclusions. Construction activities can significantly alter soil, rock and other geologic conditions on the site. McElhanney should be requested to re-evaluate the conclusions of this report and to provide amendments as required prior to any reliance upon the information presented herein upon any of the following events: a) any changes (or possible changes) as to the site, purpose, or development plans upon which this report was based, b) any changes to applicable laws subsequent to the issuance of the report, c) new information is discovered in the future during site excavations, construction, building demolition or other activities, or d) additional subsurface assessments or testing conducted by others.

Independent Judgments. McElhanney will not be responsible for the independent conclusions, interpretations, interpolations and/or decisions of the Client, or others, who may come into possession of this report, or any part thereof. This restriction of liability includes decisions made to purchase, finance or sell land or with respect to public offerings for the sale of securities.

APPENDIX B

PC-SWMM RESULTS

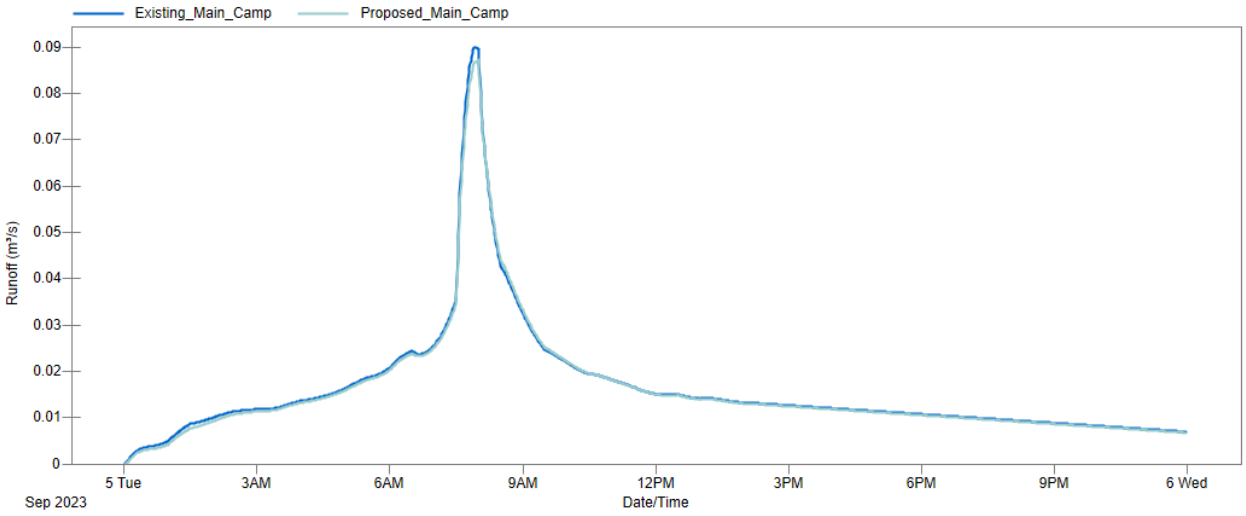

Figure 12: 24-hour, 5-year rain event showing site runoff for existing and proposed main camp site characteristics.

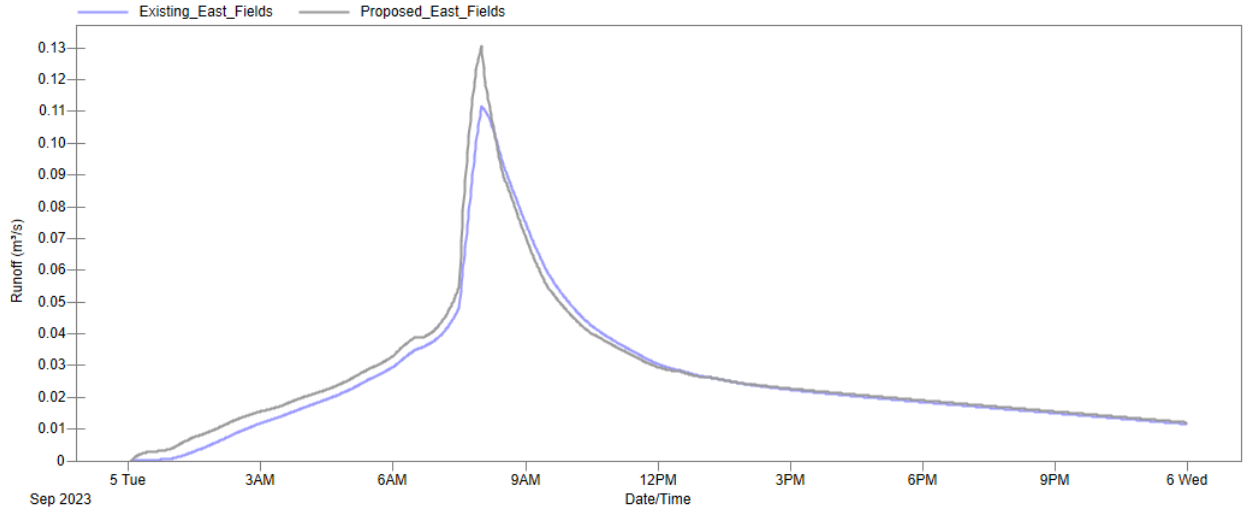

Figure 13: 24-hour, 5-year rain event showing site runoff for existing and proposed East fields site characteristics.

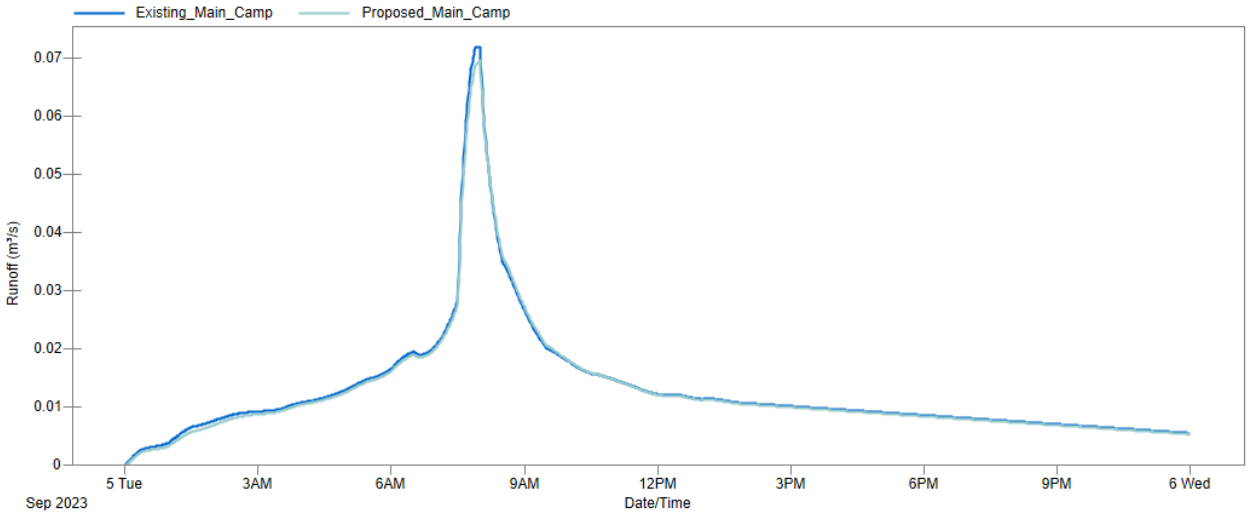

Figure 14: 24-hour, 2-year rain event showing site runoff for existing and proposed main camp site characteristics.

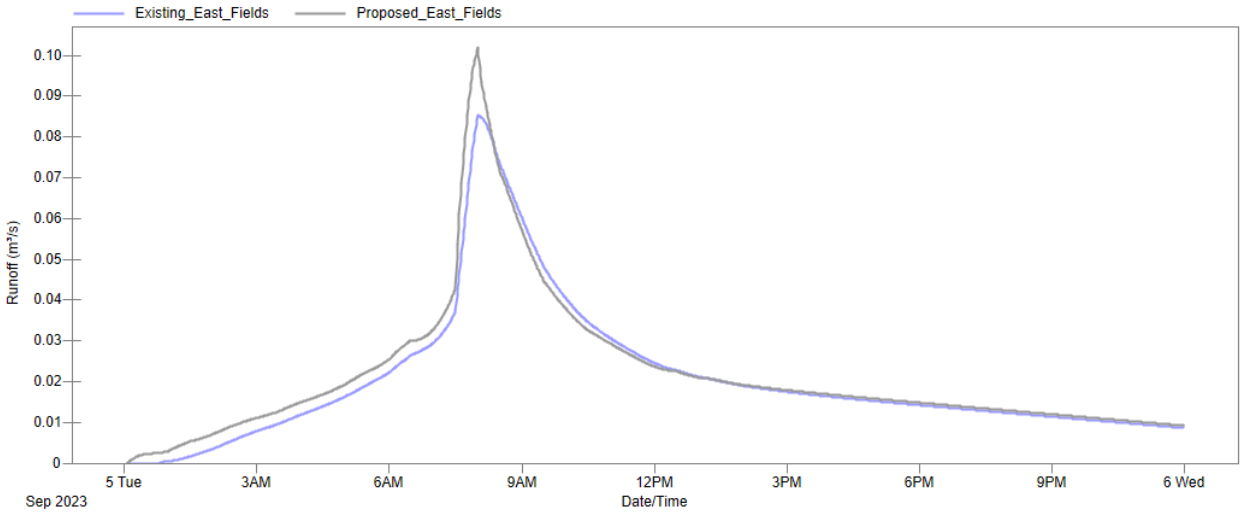

Figure 15: 24-hour, 2-year rain event showing site runoff for existing and proposed East fields site characteristics.

APPENDIX C

SUPPLEMENTARY DRAWINGS

PROPOSED SUBDIVISION AREAS

	Hectares	Acres
LOT 1	0.405 ha	1.00 ac
LOT 2	0.406 ha	1.00 ac
LOT 3	0.405 ha	1.00 ac
LOT 4	0.405 ha	1.00 ac
LOT 5	0.405 ha	1.00 ac
LOT 6	0.405 ha	1.00 ac
NON RESIDENTIAL LOT AREA	2.516 ha	6.22 ac
TOTAL SITE AREA	4.947 ha	12.22 ac

OCT 24, 2023

PRELIMINARY

1:750 0 15 45m

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NO.	DATE	BY	ISSUED
NO.	2023-10-24	NE	PRELIMINARY

NO.	DATE	BY	REVISIONS

McElhanney
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VICTORIA, BC V8X 4A3 PH (250) 370-9221

SEAL

PROJECT: EASTER SEALS CAMP SHAWNIGAN

SCALE HORIZ: 1:750 VERT: N/A

PROJECT NO. 2233-01173-00

ISSUED/REVISION

TITLE: REDEVELOPMENT PLAN– SWMP NOTES

APPROVING AUTHORITY FILE NO.

DRAWING NO. 01173-00-C101

K:\2233\2233-01173-00 EASTER SEALS CAMP\10.0 DRAWINGS\1 – ACTIVE\10.1.4 MODELS\EASTER SEALS STORMWATER MANAGEMENT PLAN\2233-01173-00-CVX – VP.DWG 10/24/2023 9:44 AM C101 (ENTIRE CS KEY PLAN)

6825 mm

4510 mm

6315 mm

4

6

5

CAMP

1

1

1

1

1

1

1

1

3

POOL

OIL/GRIT SEPARATOR

VEGETATION IMPROVEMENTS

NEW GREEN AREAS

AMENDED SOILS

SHALLOW RAIN GARDENS

7 EXISTING GYMNASIUM

35

ABANDON EXISTING STORMWATER SYSTEM THROUGH YARD

NEW CULVERT AND DITCH SYSTEM FOR "RUN-ON" AND ROADSIDE DRAINAGE

SETBACK FROM HIGH WATER LINE

Title Boundary as shown on PLAN 8250

Water line

12115 mm

18300 mm

11690 mm

OCT 24, 2023

PRELIMINARY

1:250 0 5 15m

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McElhanney
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SEAL

PROJECT: EASTER SEALS CAMP SHAWNIGAN

TITLE: REDEVELOPMENT PLAN – SWMP NOTES

SCALE HORIZ: 1:250 VERT: N/A

PROJECT NO. 2233-01173-00

ISSUED/REVISION

APPROVING AUTHORITY FILE NO.

DRAWING NO. 01173-00-C102

X:\2233\2233-01173-00 EASTER SEALS CAMP\10.0 DRAWINGS\1 – ACTIVE\10.1.4 MODELS\EASTER SEALS STORMWATER MANAGEMENT PLAN\2233-01173-00-CXX – VP.DWG 10/24/2023 9:44 AM C102 (SW OS KEY PLAN)