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Subject: Revised Report Proposal: Greening The School Ground of Lynn Valley Elementary School

Introduction: Lynn Valley Elementary School (LVES) is a public school in the City of North Vancouver in a single-detached house neighborhood. As one of the oldest schools in the City of North Vancouver, it has a long historic connection as a hub for the Lynn Valley community. Now as a historic school with modern amenities, it is in close proximity to all kinds of community facilities, such as the new public library, Karen Magnussen Recreation Centre and the Ecology Center. Also, having the Hastings Creek in its proximity, which is a salmon-bearing riparian corridor, increases the ecological value of the school.

Statement of the Problem: Although Lynn Valley Elementary School is successful as an educational institution, the outdoor school ground needs renovations for three reasons:

- Six years ago, students in the Frome Elementary School (now called Braemar Elementary School (BES)) got transferred to LVES. The Parent Advisory Council (PAC) were upset about the transfer because LVES had lower green coverage than BES did. The parents were not, and they are still not, satisfied with the amount of outdoor nature play/outdoor classroom in LVES. To solve this problem, they raised and gathered enough funding for a school ground innovation.
- To meet with the need of rainwater management in urban areas, LVES needs to lower impervious coverage to reduce surface runoff. One way to lower impervious coverage on school ground is adding more green to it. In this way, we can encourage more natural infiltration (through soil profile) and consequently enhance the quality of water which runs into the salmon-bearing creek.
- Students need outdoor classrooms not only due to class sizes expansions, but also a world-wide trend of having outdoor playing/outdoor classroom. This trend started in North Europe and incredibly helped students' creativity and participation.

Proposed Solution: A potential solution to this problem can be an addition of outdoor natural play zone to substitute some of the constructed play structures (swings, slides and climbing nets). Hopefully, this addition can solve the stated problems after installation.

Scope: To assess the feasibility of this greening strategy, I plan to further explore the following questions:

- What is the volume of rainwater needs to be treated by natural infiltration?
- What kinds of devices can be installed as rainwater management tools?
- How do we budget and where to receive funding?
- What is the maintenance schedules for renovated green spaces?

Methods: As a practical design project, we need to propose a research- analysis - design process as every other design projects. The detailed processes are as below:

- Thorough researches on rainwater management strategies, children outdoor play theories, water balance model, watershed conservation and budget calculations;
- Site survey and site analysis;
- Charrette design;
- Getting suggestions from the School Board and the Advisors.

Qualifications: As a group of second-year graduate students in landscape architecture, we acquire rich experiences in proposing a research-based design. Also, we receive help from faculty members in our program and consultants in School District of North Vancouver.

Clarifications: This report will be a by-product of a directed study that a group of us three students are working on. This directed study focuses on the redesign of the school ground of the Lynn Valley Elementary School.

We are a group of design students, so we are not required to make any report regarding the reasons why we need to redesign it. We were only asked to design it and we are not required to provide a report to state why we need to redesign it. Thus, my report for this class will not replicate the deliverables of my directed study, because most of our deliverables of that project are drawings and graphics.

Conclusion: A school ground renovation has been a heated topic since risky play (also called natural play) became popular in Northern Europe. It will definitely push forward the understandings of children psychology and behaviour.

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