## Background:

The Langley Planning Board has proposed a new development on the site of the Pagoda Ridge Golf Course (see map in slides). The site is being developed into being redeveloped into a retirement suburb and small commercial area. The development will consist of relatively high-density townhouses, served by a small medical complex and several key shops. Your firm has decided to write a letter of intent (LOI) indicating your interest in competing for the contract to develop the area’s “stormwater management plan”.

Langley has the following specific concerns for this site:

1. Two streams drain the site to the Fraser River, and are known to contain spawning grounds for Coho Salmon. Recent research has shown stormwater runoff to be acutely toxic to Coho Salmon. How will your plan reduce the impact of stormwater on these salmon populations?
2. The developer is planning to build a select number of Riverfront Executive Estates on the NW corner of the lot. Langley is concerned that due to their proximity to a stream, they may be threatened by bank erosion. How will your plan protect these homes?
3. This site is intended to test the new Runoff Volume Control Target (RVCT) that Langley is considering introducing. The goal of this target will be that 90% of the volume of the 90th percentile rain event must not enter the receiving streams within 1 week. How will your plan achieve this?

The front side of this hand-out will guide your team through the ideation process for generating the core of your team’s pitch. On the back, you will compare with another team representing a different engineering philosophy and together generate the best potential stormwater management plan.

## Frontside – Each Group Independently

1. Give an overview of your team’s stormwater management plan. Will you focus on low-impact development technologies or “traditional” conveyance and storage technologies? What are some specific things that you will build?
2. How will your approach reduce the impact of stormwater runoff on Coho salmon?
3. How will your approach protect the proposed Riverfront Executive Estates?
4. How does your approach achieve the Runoff Volume Control Target?
5. What is one unique or showpiece aspect or technology in your plan? Why will it “wow” the client?

## Backside – Partner with another Group

1. Which aspects of the design were hardest for the “traditional” teams?
2. Which aspects of the design were hardest for the “LID” teams?
3. Overall, do you prefer one of the approaches?
4. Take a few minutes as a team and together come up with a single stormwater management plan. This can include aspects of both designs, reflect only one design, or be something completely novel. Then, give an overview of your combined stormwater management plan.
5. How will your combined approach reduce the impact of stormwater runoff on Coho salmon?
6. How will your combined approach protect the proposed Riverfront Executive Estates?
7. How does your combined approach achieve the Runoff Volume Control Target?
8. What is one unique or showpiece aspect or technology in your combined plan? Why will it “wow” the client?