

The Topsoil Law and Policy and Technical Primer Set

**Bowker Creek Forum
February 23, 2010**

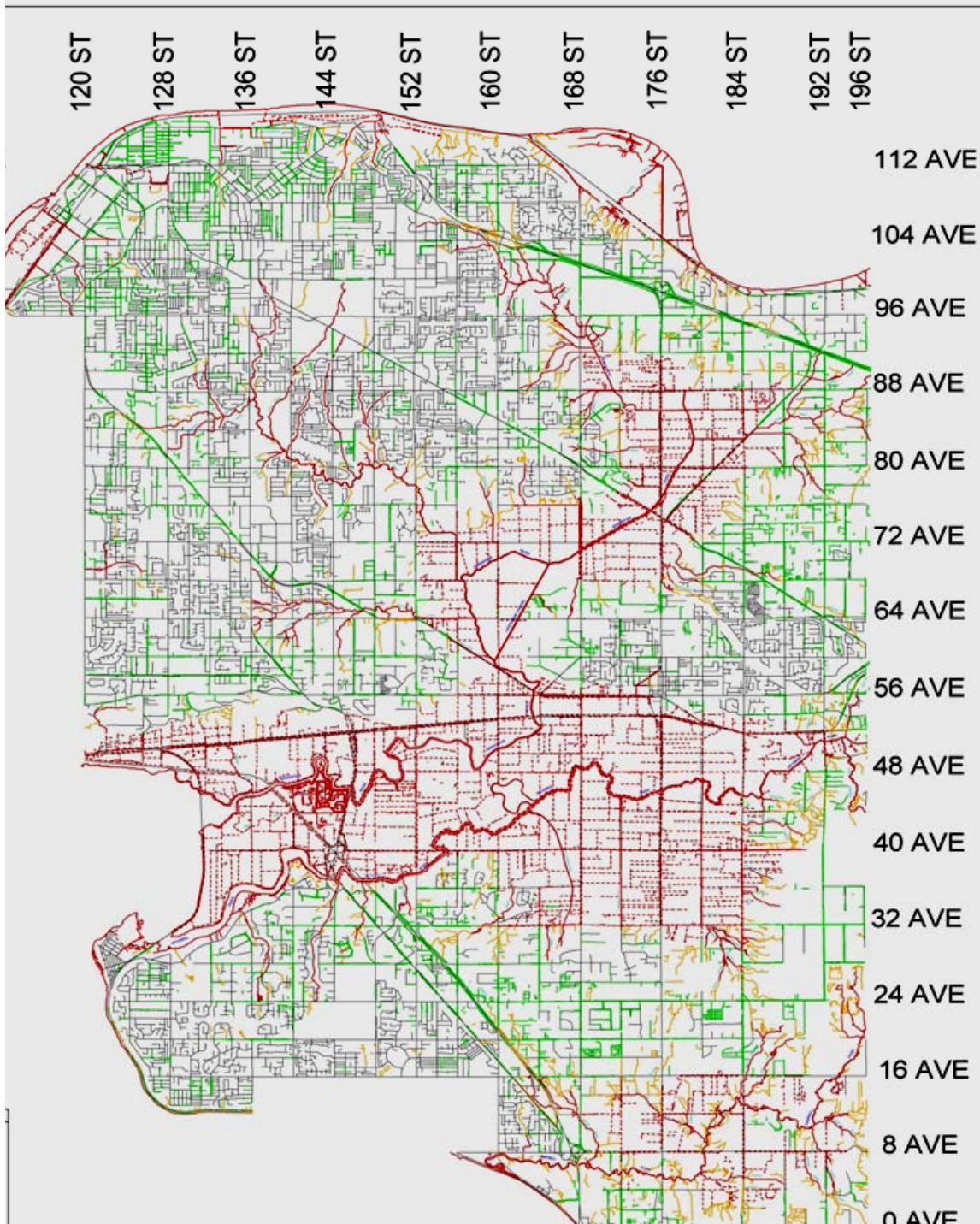
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Green Infrastructure Partnership



Surrey Context



Stream Perspective

Historical Perspective

- Water courses as a resource
- First nations/colonization/logging/agriculture
- Urbanization
- Drainage servicing
- Surrey (1967) Waterways protection by-law/Natural Drainage Policy (natural water courses are integral to our system)
- Applied the science as it evolved: Pipes, Ponds, Integration
- Increased Stewardship, new guidelines/pilot projects, New By-law

Drainage Servicing



Drainage Servicing Framework

- City wide design criteria
- Master Drainage Plans
- Functional Plans
- Integrated into Neighbourhood Concept Plans

- We developed good long range servicing plans in the context of our natural drainage policy



Stewardship



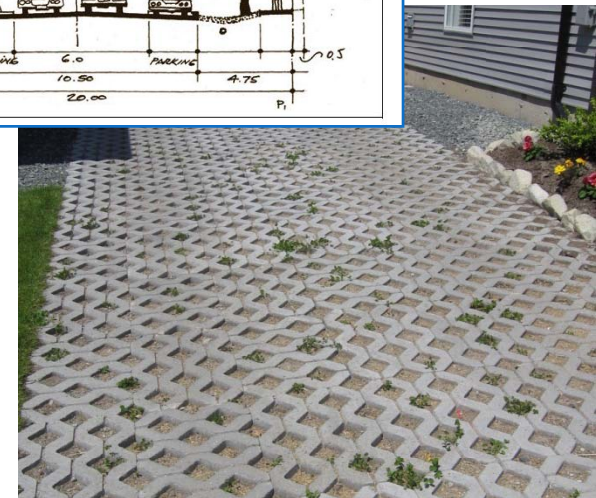
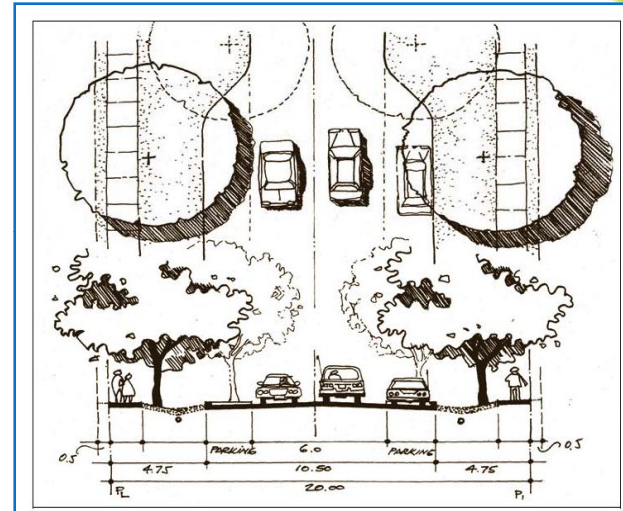
Stewardship

- Protect our watercourses and their natural environment.
- Social benefits interweaved with environmental values.
- Could be conflicting with drainage servicing philosophy but consistent with natural drainage policy.
- Must understand natural processes.

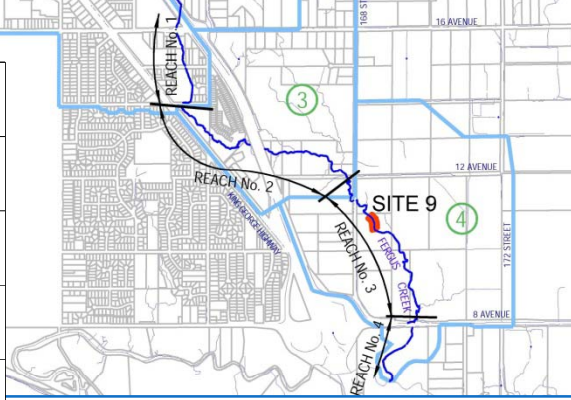
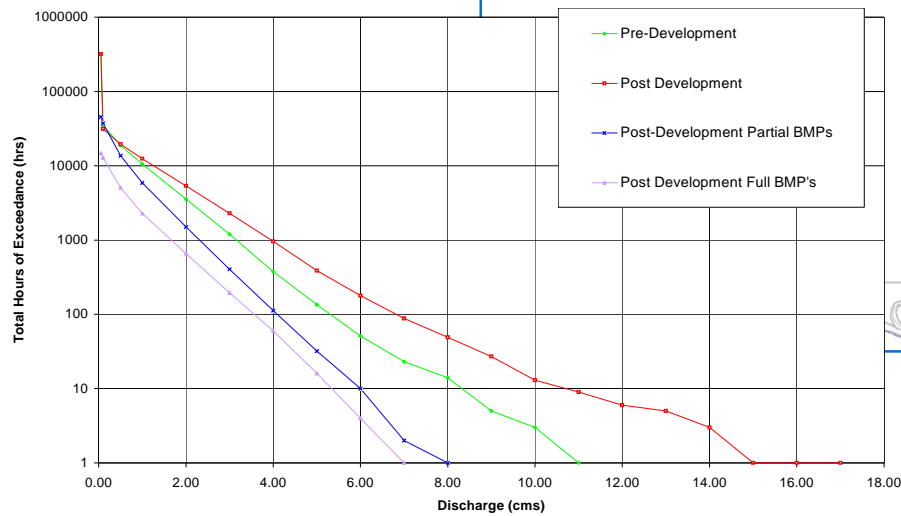
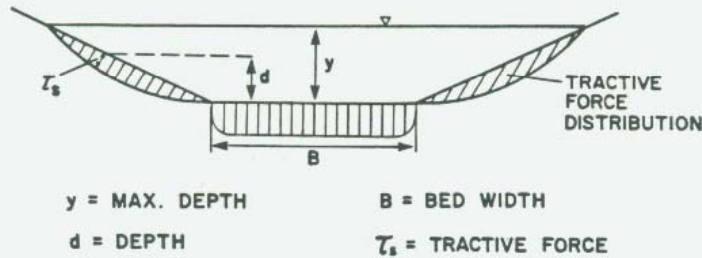


Sustainability Smart Development

- Mid 1990's
- Multi-leveled sustainability objectives
- Natural drainage
- With respect to drainage hoped one size could fit all (capture 25 mm)
- Given Surrey's varied geology and streams a different approach was necessary



Watershed Based Performance Targets (ISMPs under LWMP)



Watershed Based Approach

- Need to understand the watershed
 - streams
 - opportunities/constraints
 - vision
 - Need to go beyond peak flow conveyance and address full hydrologic regime.
 - Need to communicate vision (objectives/targets).
 - Must have a process to implement plan
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- Shift from arbitrary performance targets to watershed based performance targets (Fergus Creek and other ISMPs)



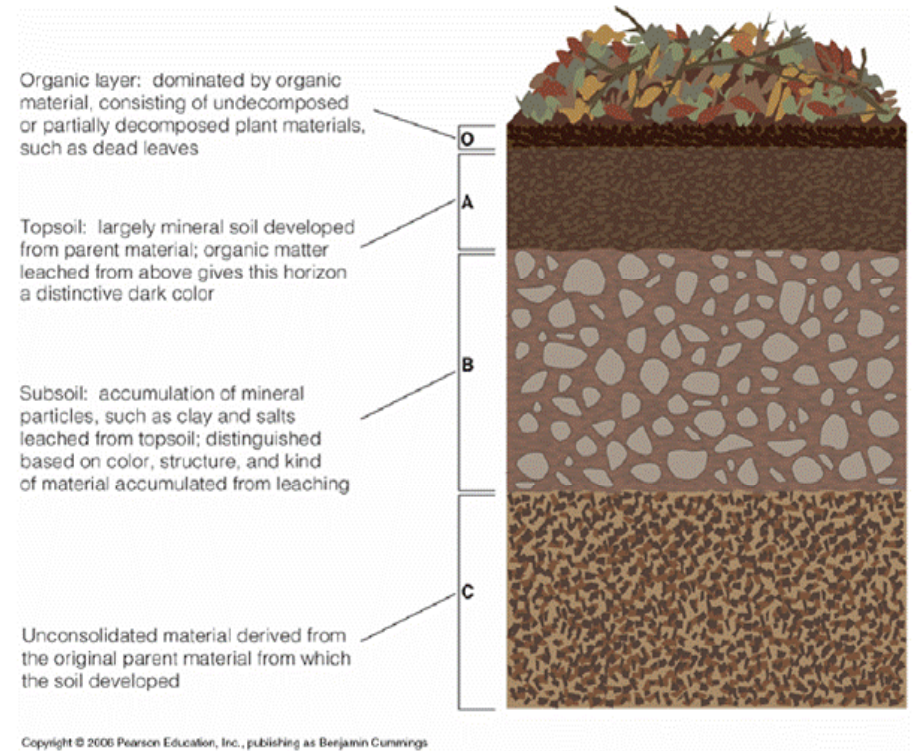
Where does the primer fit in?

Enhanced Topsoil was a mitigation strategy common to each of our ISMPs.

Such a basic detail should be easily dealt with as the GIP's first attempt at a 'one page' primer.

Not intended to be a design guideline or expert system.

Intended to highlight opportunities, constraints and experience.



Issues highlighted early

Definition of top soil
(engineers, agrologists,
landscape arch.)

MMCD is currently reviewing
its definition, Surrey Parks
and Rec. use an in-house
specification

Difference in specifications
not as important as having a
specification that can be met
and has well defined areas of
application



Areas of Responsibility

As noted previously, a clear understanding of who is responsible for what is important

In Surrey, City sets targets (based on ISMP or NCP)

Developer responsible to property line
(Engineering dept)

Builder responsible on private property
(Building dept)

Engineer of record for the developer must highlight issues if performance targets are at risk

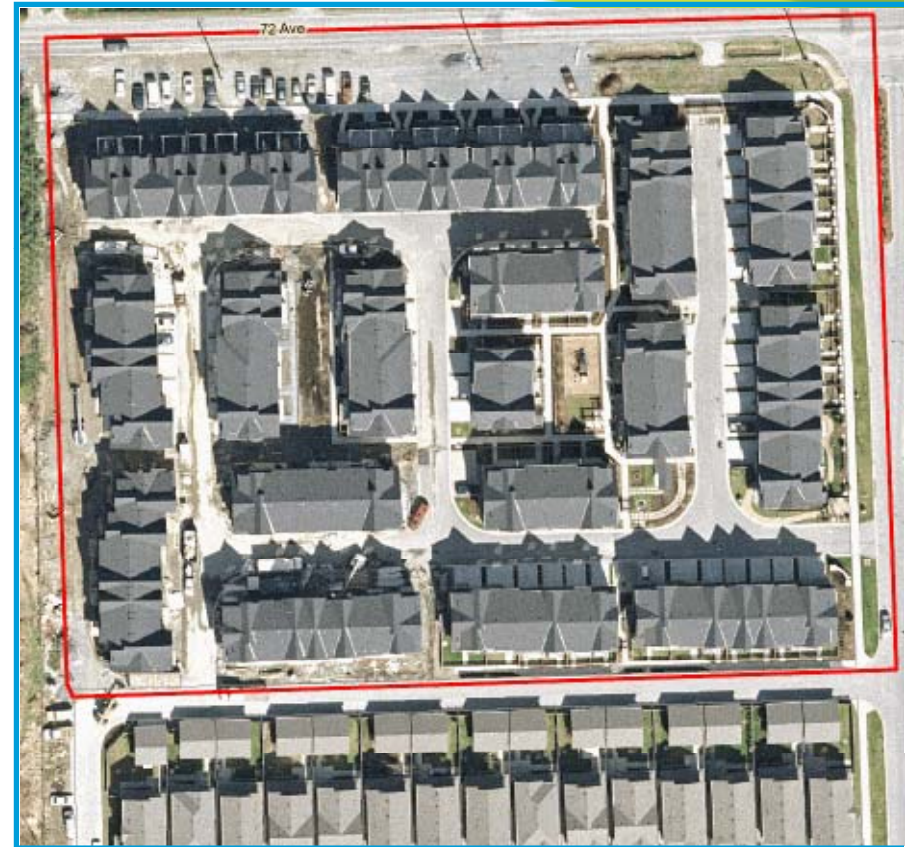


Range of developments is a challenge

Over 200 development applications per year, 2000 building permits.

Different delivery models
developer is builder
developer sells
developer leaves
builder

Depending on the project, sign-off is required at different points of the project. (through servicing agreement process, building permit process, development permit process). Every municipality will have its own process.



Summary

- Define the need – set targets
- Ensure soil mixes are clearly specified
- Clarify/define responsibilities (communication)
- Do not ignore good engineering practice (details)

