

Innovative Restoration Solutions for an Unregulated Dump-site

Greg A. Whyte, PhD_(candidate) MBA, CF – Cirrus Environmental Services Tony Ciarla – *KLS Earthworks & Environmental*







This is a Story of a Successful Partnership

Owner, Consultant, Contractor, Regulator







1 What Was Accomplished . . .

- 11 000 m³ of material excavated and processed on-site
- Landscape and wetland restored
- 95% was reclaimed/recycled
- Costs were reduced ~50% (versus landfill and imported fill)







2 ... Using a Different Approach

- Non-landfill strategy cheaper, better
- "Strategic" ESA (start at end-points)
- Early stakeholder engagement ongoing collaboration
- On-site processing, materials handling, re-use



















3 What did we see... and not see?

- 1. Concrete debris small as a toaster, big as a refrigerator
- 2. Evidence of similar debris below ground-surface
- 3. Farm land to the North, East, and West. Residential development to the South
- 4. A wetland area....with debris













4 Stages of Project & Activities

- 1. Site laydown area by process/stream
- 2. Soil pre-screening & preservation
- 3. Wetland protection & rehabilitation
- 4. Concrete processing & recycling
- 5. Final site restoration



















5 Crushing & Recycling Activities

- 1. Cost optimized recovery and recycling was the goal
- 2. Concrete material processed to both 7.5cm and 15cm
- 3. 3 streams were recovered concrete, steel, and soil/fines
- 4. Processed material in contained treatment cells on-site







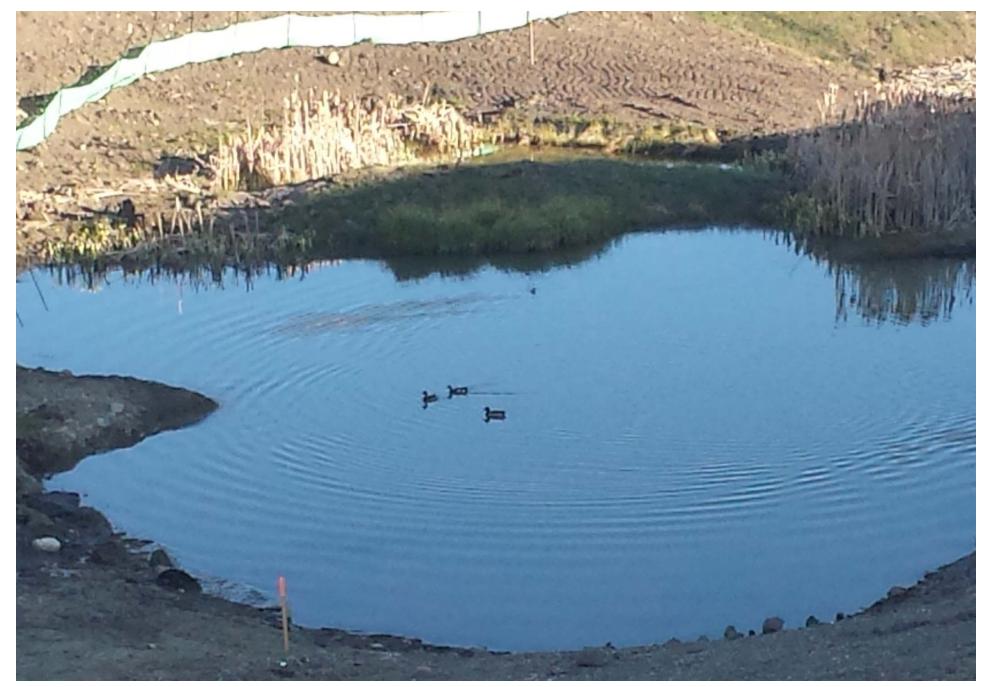






























6 Lessons-learned

- Define end-points and reach agreement with all stakeholders first
- Establish effective communication processes right away
- Consider variability in planning "slack" in execution

















QUESTIONS



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Cirrus Environmental Services
Bay 10, 1916 - 30 Avenue NE
Calgary, Alberta
T2E 7B2, Canada

403.291.6442

www.cirrusenviro.com

KLS Earthworks & Environmental 2882 Glenmore Trail SE

Calgary, Alberta T2C 2E6, Canada

403.240.9884

www.klsearthworks.com