

Attleboro Landfill – Proposed Landfill Closure Project
Public Information Meeting- March 10, 2015
AGENDA

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|--------------------------|--|
| 6:00 -- 6:30 p.m. | Poster board display |
| 6:30 - 6:40 p.m. | Open Meeting/Introductions
Ellie Donovan, MassDEP, Facilitator |
| 6:40 - 6:45 p.m. | Opening Remarks
Michelle O'Brien, Esq.
Pierce Atwood, LLP |
| 6:45 - 7:00 p.m. | Landfill Closure Project Presentation
Bob Cummings, Enviro-Cycle, LLC |
| 7:00 - 8:15 p.m. | Question and Answer Session |
| 8:15 - 8:20 p.m. | Wrap up/Next Steps/Adjourn |



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CLOSURE PROCESS

- 1. Site Preparation**
 - a. Preliminary grading**
 - b. Stormwater controls**
 - c. Equipment Shelter**
- 2. Mix and place Re--Crete™**
- 3. Construct Cap**



What is Re-Crete?

- Re-Crete™ is trademarked and has a patent issued by the US Patent and Trademark Office (US 7,815,729 B2). The patent develops a method for incorporating Construction & Demolition (C&D) fines into a concrete mixture.
- The product is essentially a lightweight, low strength concrete and as such has no environmental impacts on the surroundings.



C&D Fines

- **What is it and where does it come from?** The term C&D fines refers to the small particles of debris that fall through crushing equipment and conveyor systems at C&D processing facilities.
- **What uses does it presently have?** C&D fines are used as daily cover on landfills and for grading and shaping material in preparation for landfill closure.
- **Where will C&D files for Attleboro landfill closure come from?** The C&D fines will come from one or more permitted processing/recycling facility.



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MINIMUM CLOSURE REQUIREMENTS

19.112: Landfill Final Cover Systems

(1) General Performance Standards. The final cover system shall:

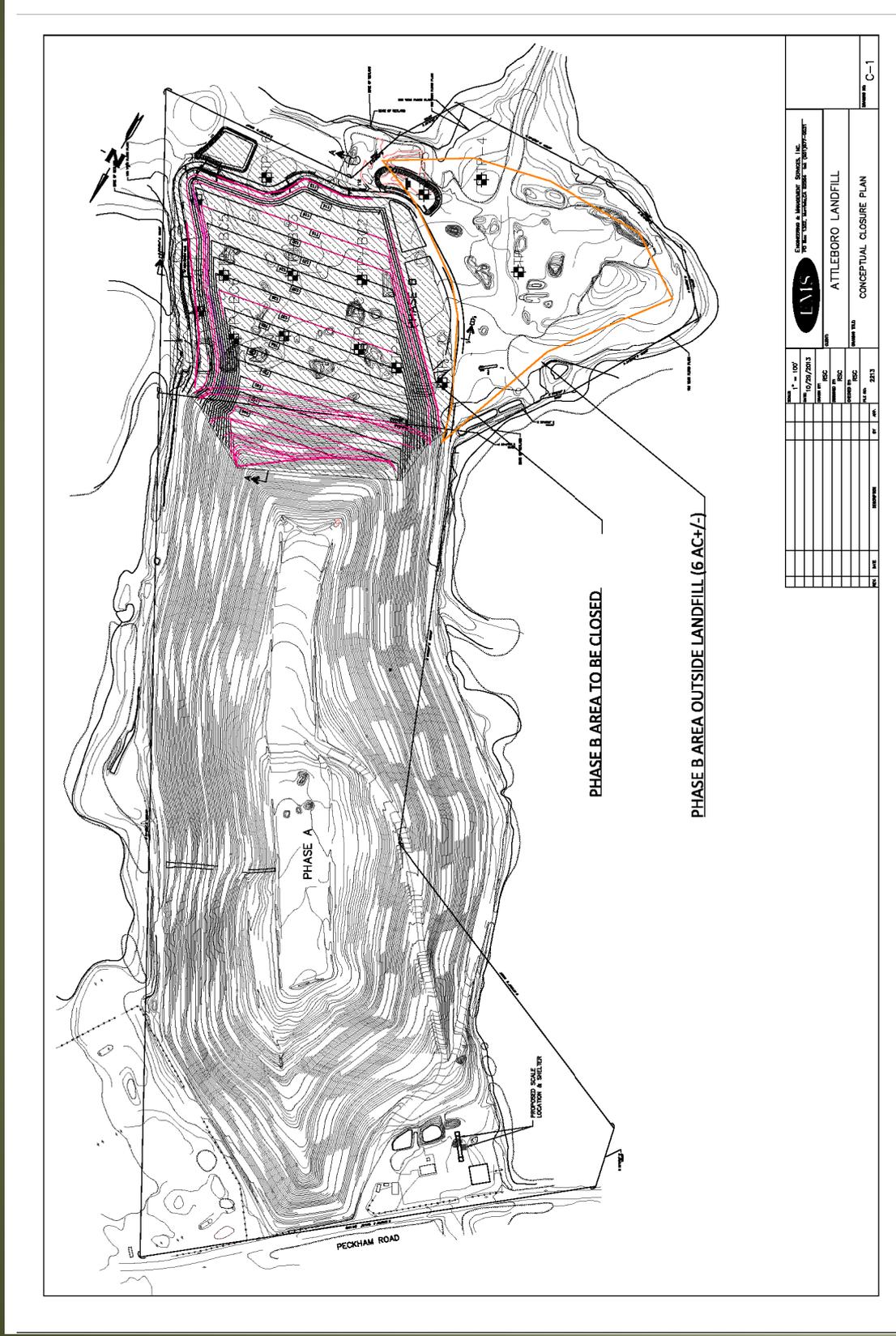
- (a) minimize the percolation of water through the final cover system into the landfill to the greatest extent practicable;
- (b) promote proper drainage of precipitation ;
- (c) minimize erosion of the final cover;
- (d) facilitate the venting and control of landfill gas;
- (e) ensure isolation of landfill wastes from the environment; and
- (f) accommodate settling and subsidence of the landfill such that the above performance standards will continue to be met.

(2) General Design Standards. The final cover system shall:

- (a) have a final top slope of not less than 5% and side slopes no greater than three horizontal to one vertical (3:1);
- (b) be constructed of material(s) that are compatible with gases and leachate expected to be generated;
- (c) be constructed so as to minimize erosion of all layers of the final cover by using terraces or other appropriate stormwater controls;
- (d) be constructed so that the low permeability layer is protected from the adverse effects of frost and/or freeze/thaw cycles;
- (e) be constructed to maintain slope stability;
- (f) be sufficiently strong and stable enough to withstand the static and seismic loads at the site under all expected operating conditions; and
- (g) be designed with a factor of safety (FS) appropriate for the site-specific closure being evaluated. All factors of safety shall be identified and justified.

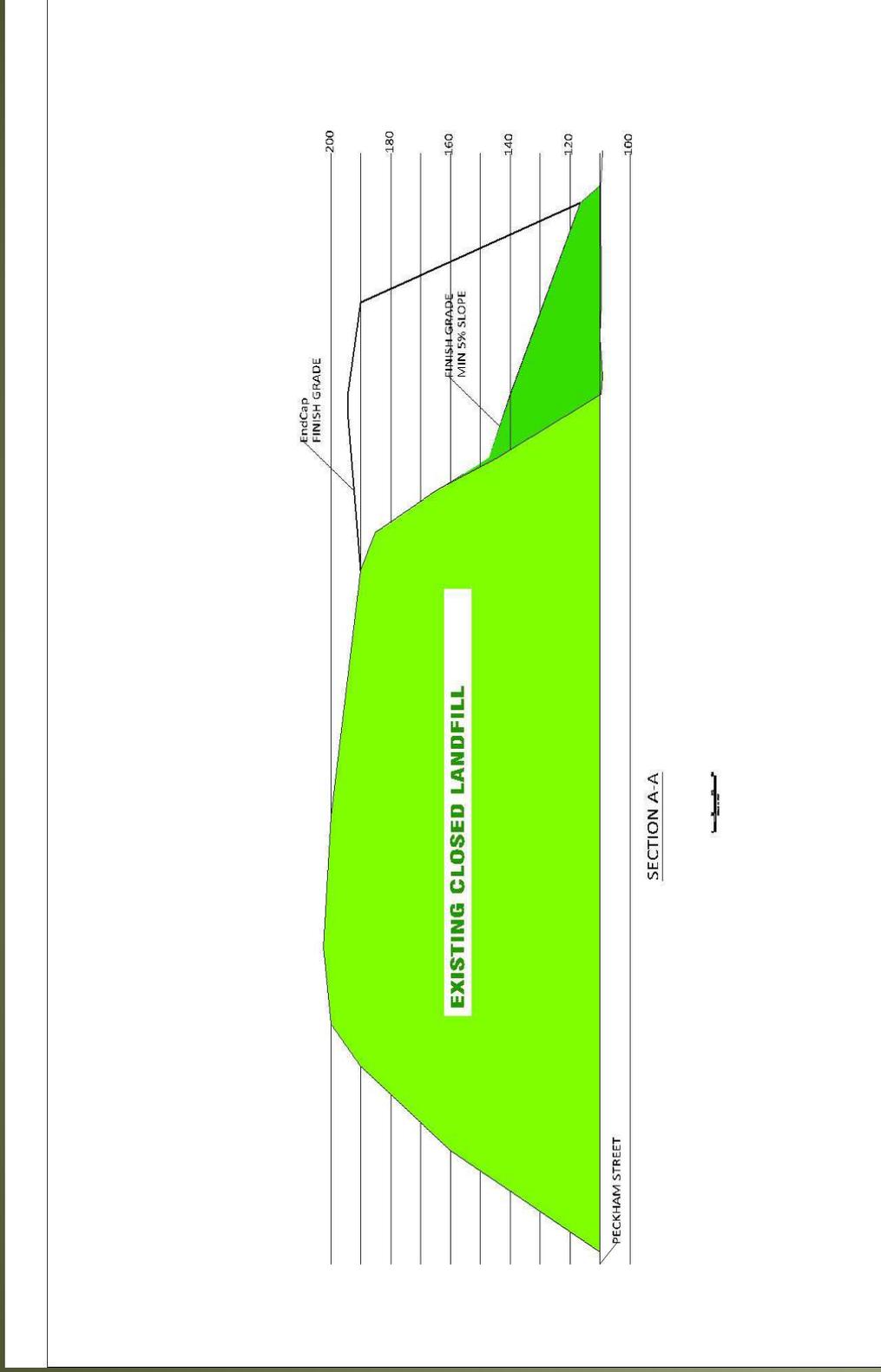


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Enviro-Cycle, LLC

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TRAFFIC SUMMARY

Item	Standard DEP Closure		Re-Crete™ Closure		End Cap Closure	
	Volume (CY)	Truck Deliveries	Volume (CY)	Truck Deliveries	Volume (CY)	Truck Deliveries
Material necessary to bring site to 5% grades	140,000	10,200 ¹	201,000	9,136²	650,000	47,272 ¹
Sand Layer	24,000	1,745 ¹	24,000¹	1,745	24,000 ¹	1,745 ¹
Plantable Soil	16,000	1,163 ¹	16,000¹	1,163	16,000 ¹	1,163 ¹
Cement				482³		
Total		13,108		12,526		50,180

Notes:

1. Truck trips =(total volume x 1.6 tons per c.y.)/22 tons per load
2. Truck trips =(total volume x 1.0 tons per c.y.)/22 tons per load
3. Truck trips =(total volume x 1.0 tons per c.y. x 6% cement)/25 tons per load



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TRAFFIC MANAGEMENT

- **Scheduling Deliveries**
- **Speed Limit on Union Road**
- **Coordination with Town of Norton Traffic Sub committee**



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FINANCIAL SUMMARY

ESTIMATED REVENUE	
Revenue from C&D Fines	\$6,633,000.00
LESS – Cost of mixing and placing Re-Crete™	\$3,331,374.00
NET REVENUE	\$3,301,626.00
ESTIMATED COSTS	
Capping and Closure	\$1,745,277.00
Post Closure Fund	\$508,000.00
Financial Assurance Mechanism	\$200,000.00
Engineering	\$125,000.00
Mitigation Fund	\$201,000.00
Union Road Reconstruction (in addition to \$100,000 from mitigation fund)	\$125,000.00
TOTAL CAPPING, MONITORING AND MAINTENANCE COSTS	\$2,904,277.00
TOTAL REVENUE	\$6,633,000.00
TOTAL EXPENSES	\$6,235,651.00
PROFIT	\$397,349.00

Enviro-Cycle, LLC

