



REGION 2000 SERVICES AUTHORITY

LANDFILL MASTER PLANNING LIVESTOCK ROAD FACILITY

PREPARED FOR:

CAMPBELL COUNTY

BOARD OF SUPERVISORS

OCTOBER 7, 2014

AGENDA



Part 1 – Lateral Expansion

- ▶ Permitting update
- ▶ Schedule

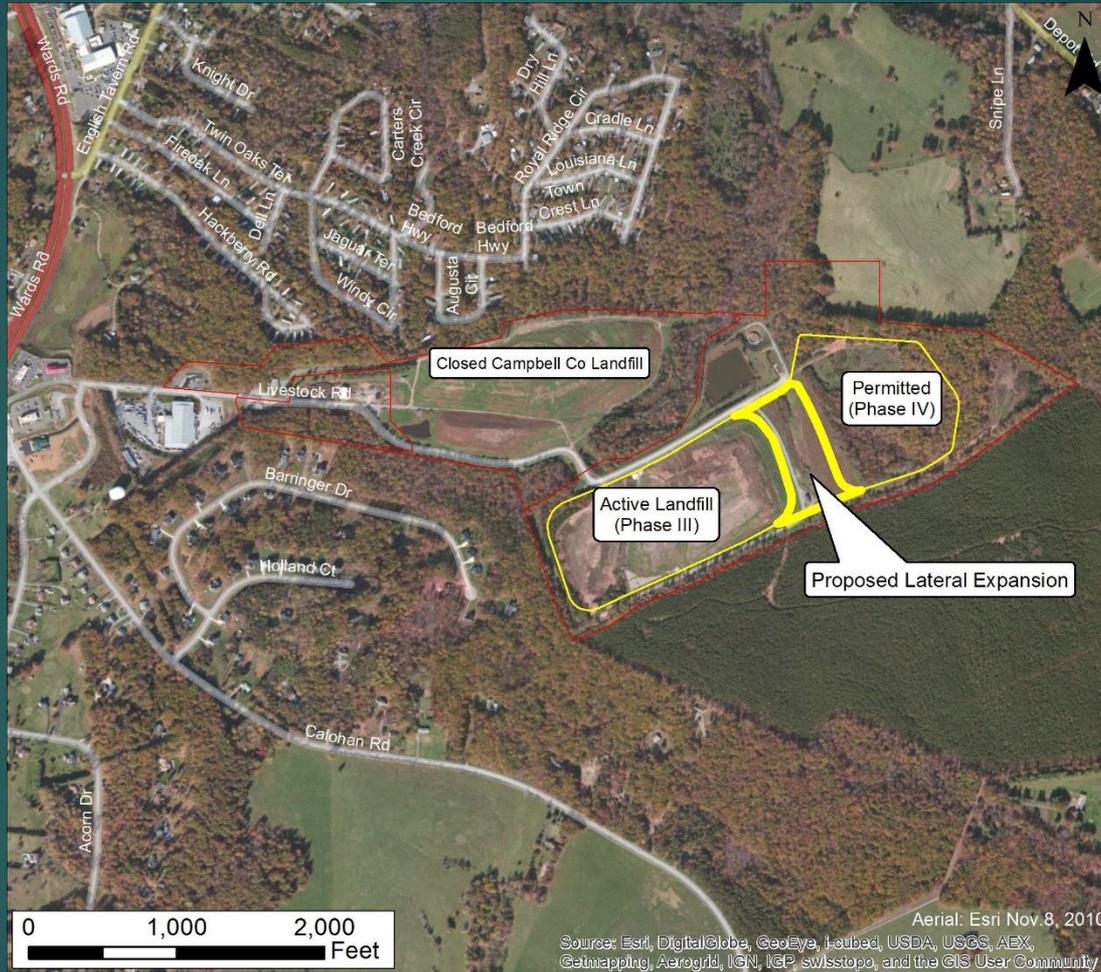
Part 2 – Master Planning

- ▶ Area under consideration
- ▶ Concepts
- ▶ Schedule

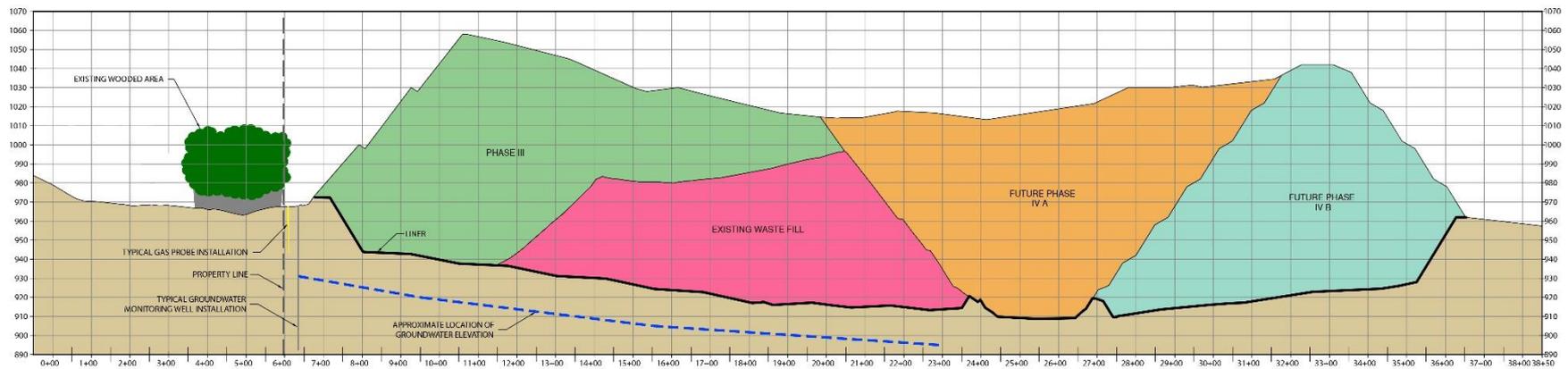


LATERAL EXPANSION

LATERAL EXPANSION CONCEPT

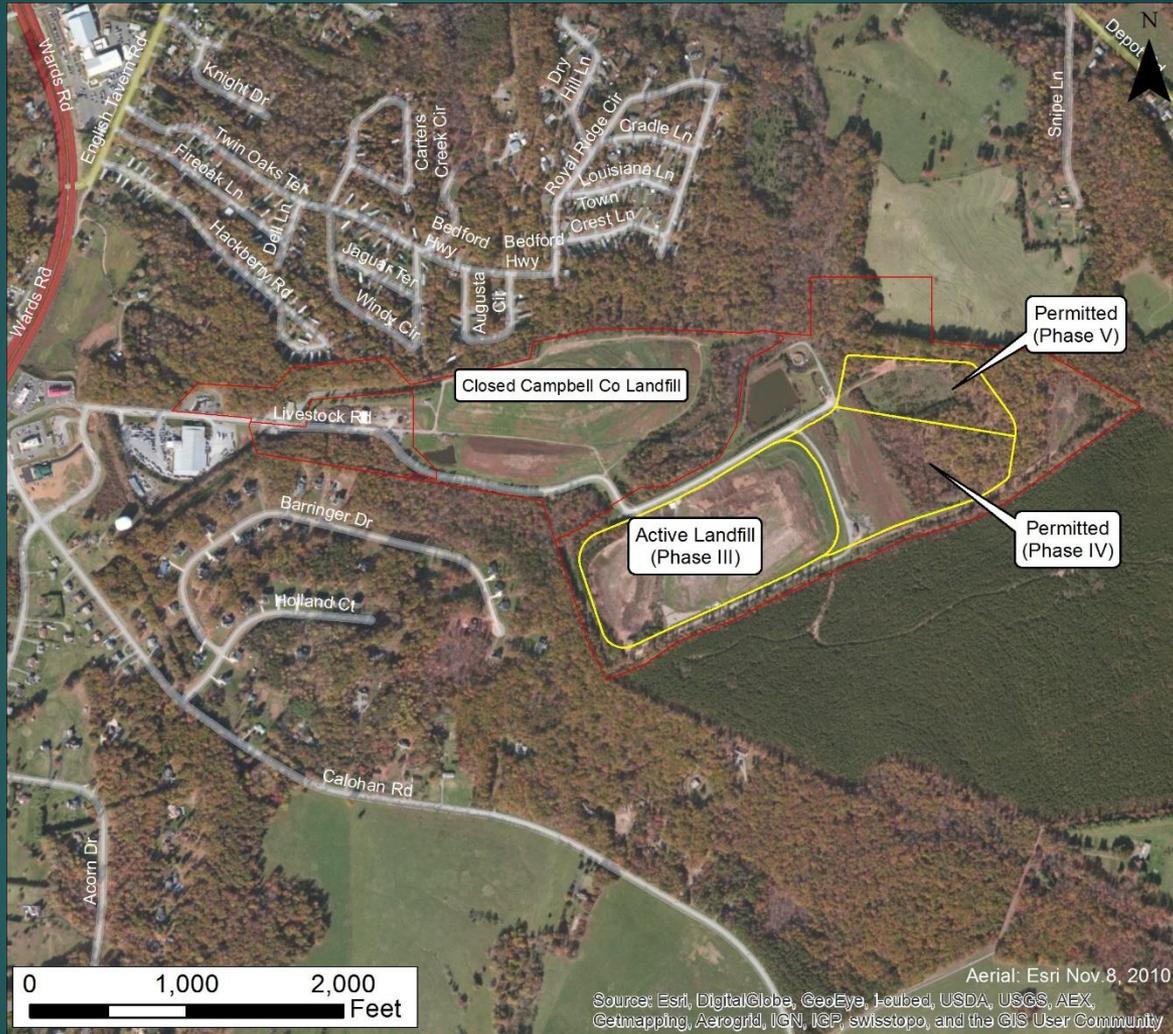


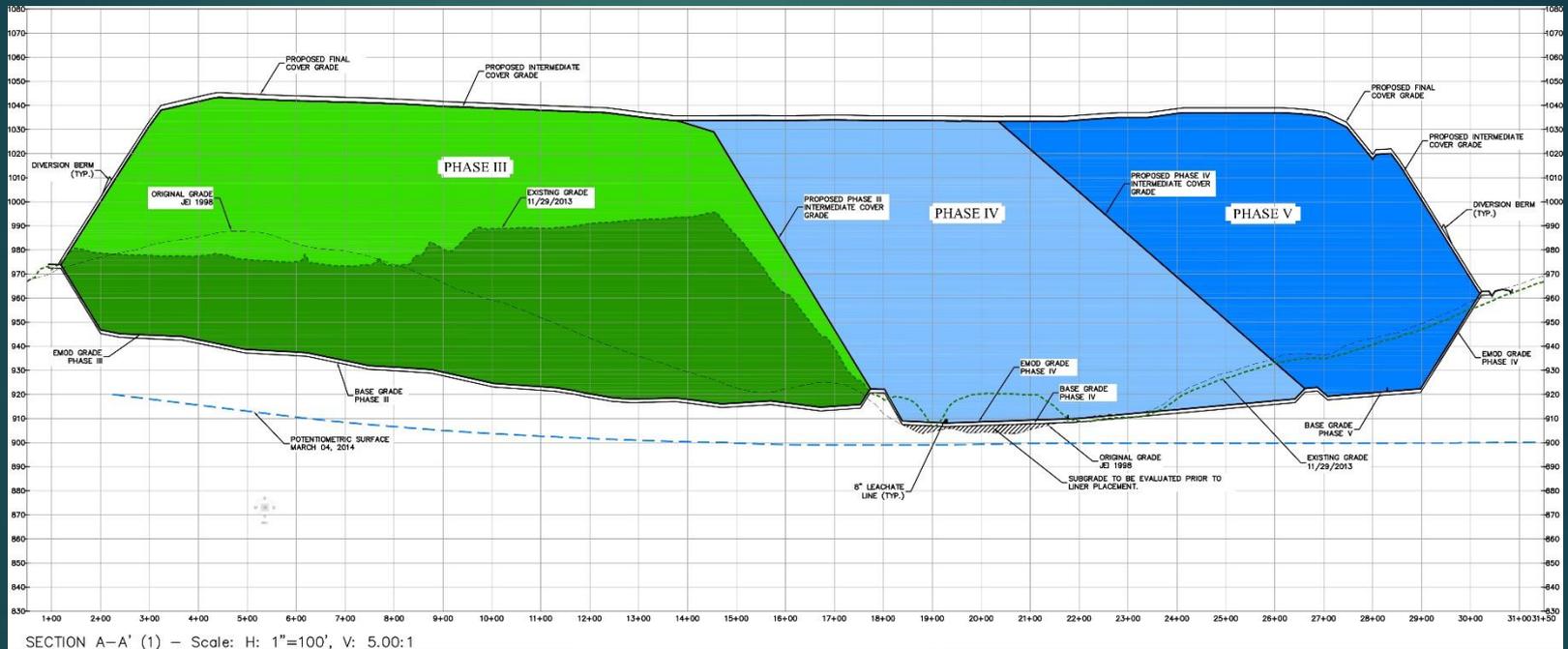
CROSS SECTION - CONCEPT



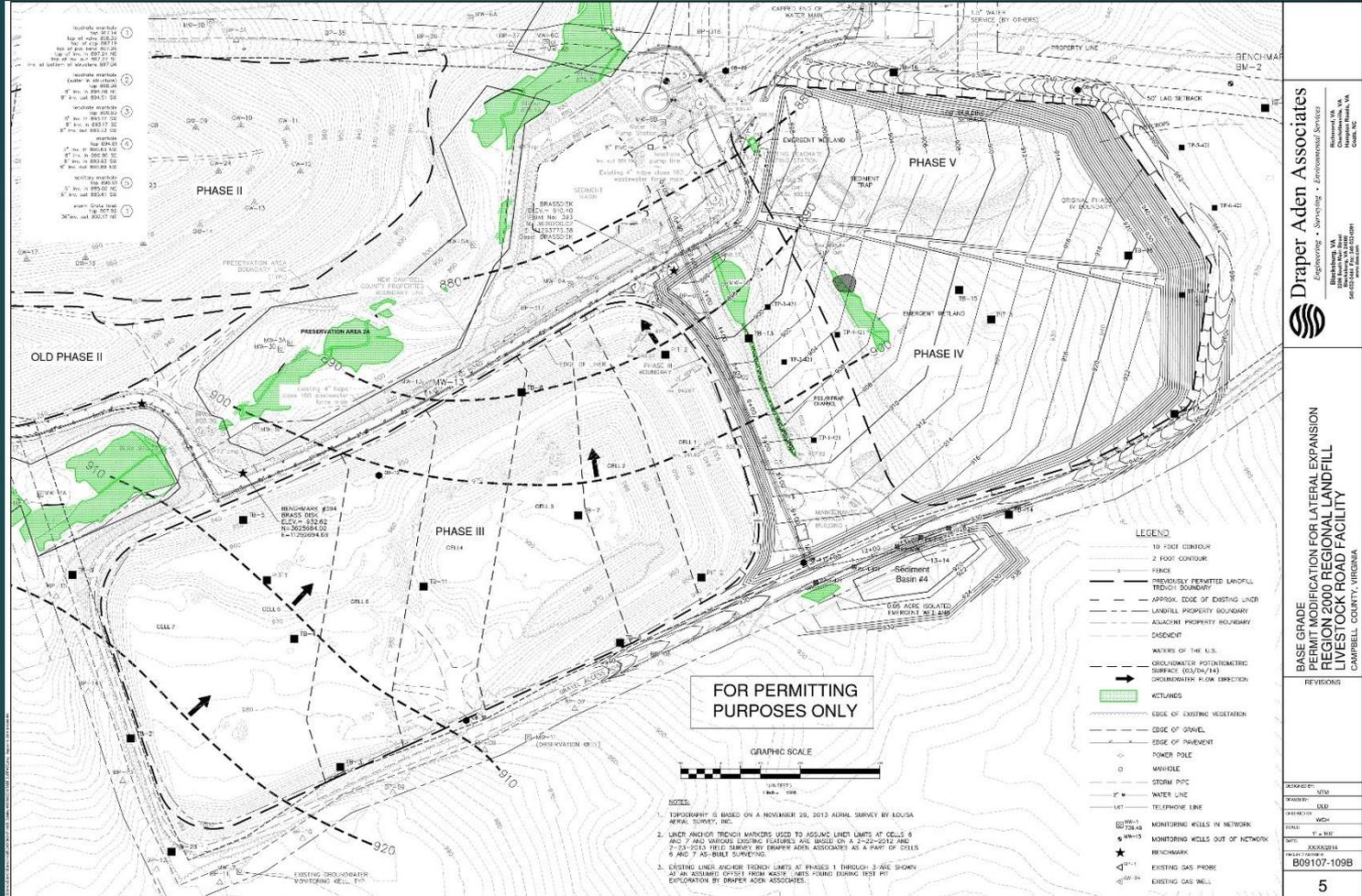
CROSS SECTION 1 - Scale: H: 1"=150', V: 1"=30' (5 TIMES VERTICAL EXAGGERATION)

LATERAL EXPANSION FINAL DESIGN





LATERAL EXPANSION BASE GRADE



Draper Aden Associates
 Engineering • Surveying • Environmental Services
 10000 W. Market Street, Suite 100
 Charlottesville, VA 22903
 540.980.1000 • Fax: 540.980.1001

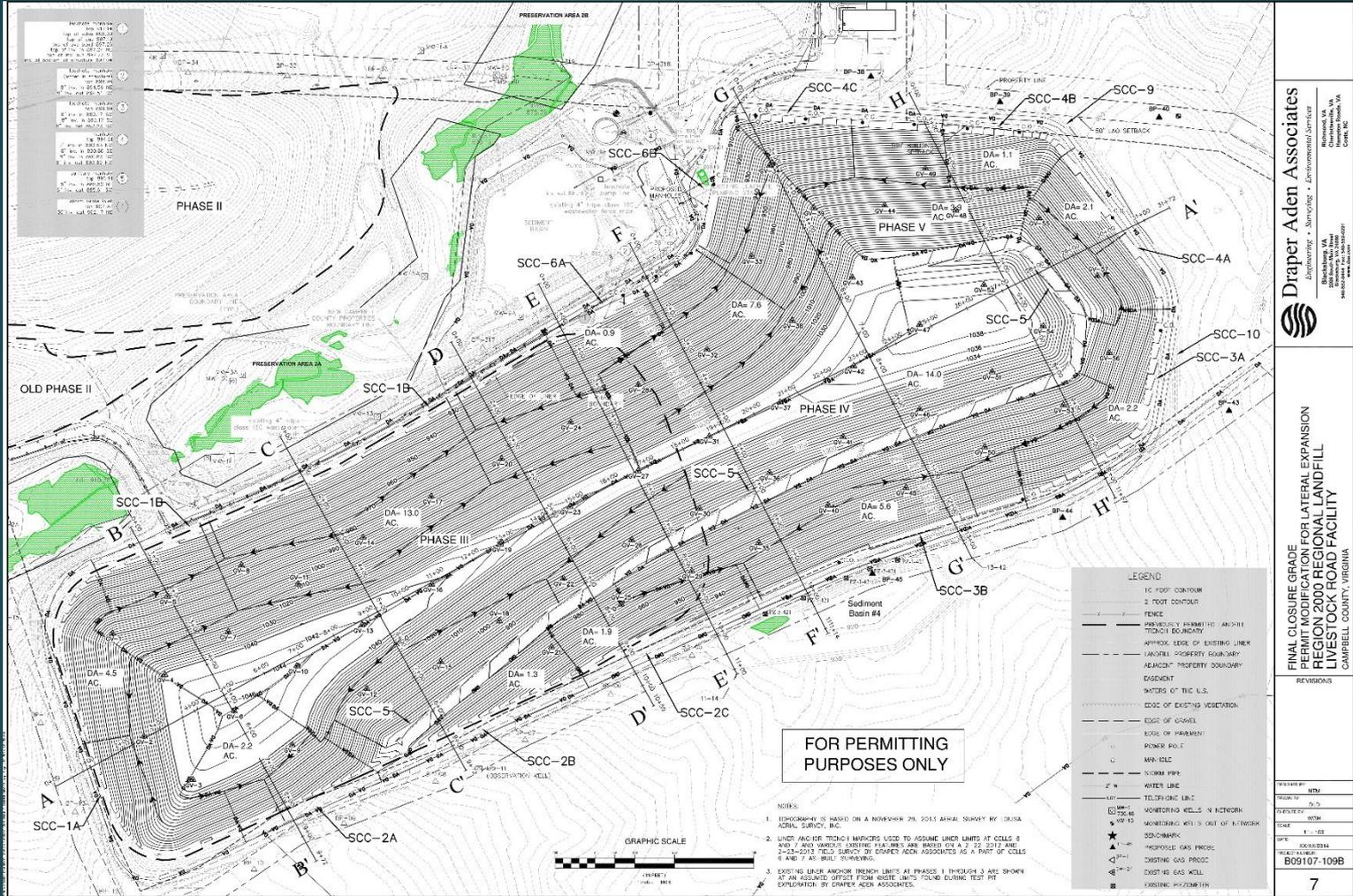
BASE GRADE PERMIT MODIFICATION FOR LATERAL EXPANSION REGION 2000 REGIONAL LANDFILL LIVESTOCK ROAD FACILITY CAMPBELL COUNTY, VIRGINIA

REVISIONS

REVISION:	DATE:
1	11/15/13
2	11/15/13
3	11/15/13
4	11/15/13
5	11/15/13

5

LATERAL EXPANSION FINAL GRADE



LATERAL EXPANSION SCHEDULE

	FY 2015						FY 2016						FY 2017																	
							2015						2016																	
ACTIVITY	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
REMAINING LIFE IN PHASE III (3/4/14 letter)																														
PERMITTING																														
<i>Lateral Expansion Permitting</i>																														
<i>Solid Waste Management Plan</i>																														
<i>Wetland permitting</i>																														
<i>Air permitting</i>																														
<i>Groundwater monitoring - well installation/sampling</i>																														
PHASE IV CONSTRUCTION																														
<i>Loan application and funding approval</i>																														
<i>Phase IV - Liner construction (17.9 acres)</i>																														
Identify borrow site on Bennett Property and permit																														
Construction document preparation - Phase IV																														
E&S plan and storm water management submittals																														
Bidding																														
Construction																														
Certificate to operate																														

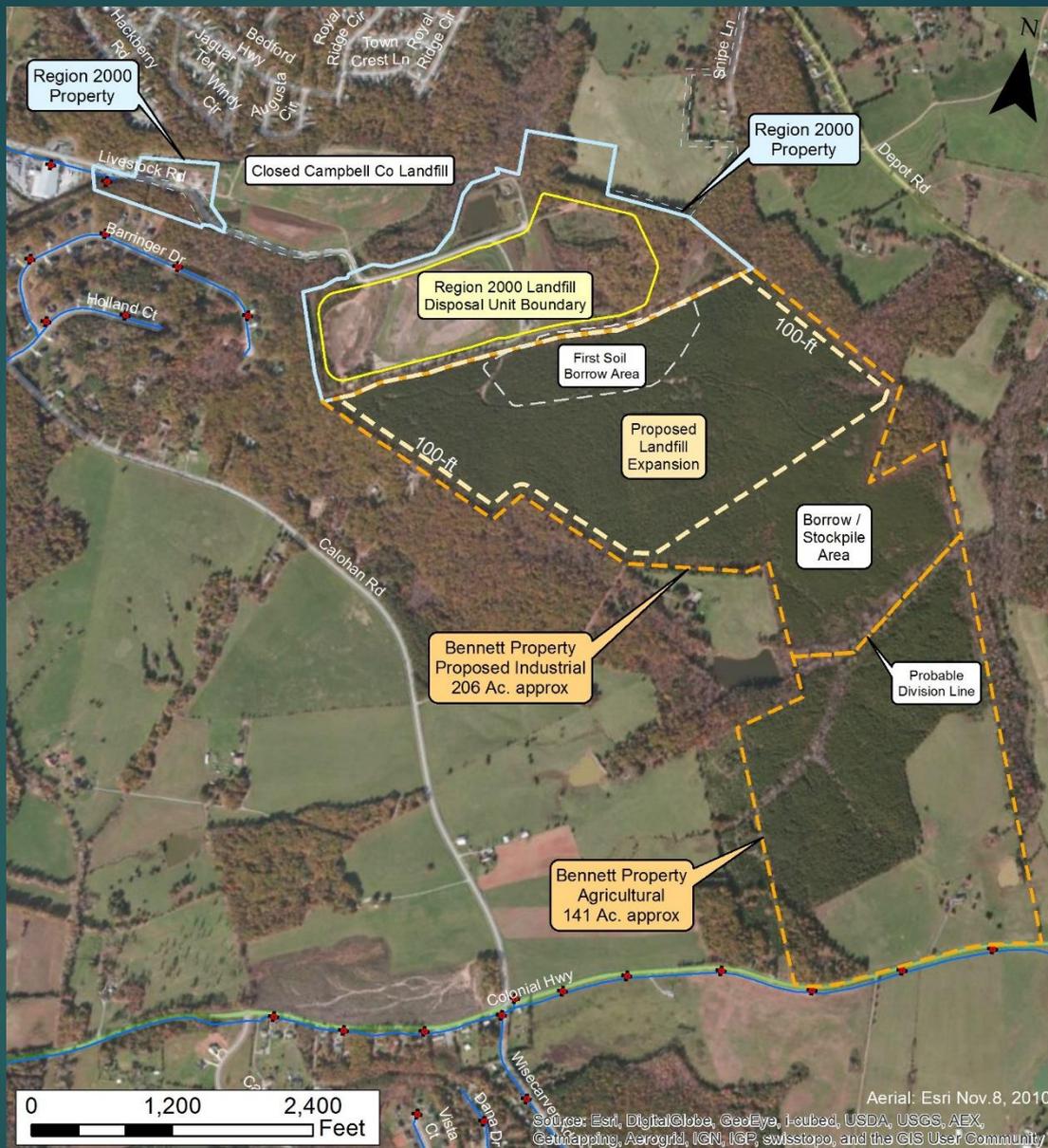


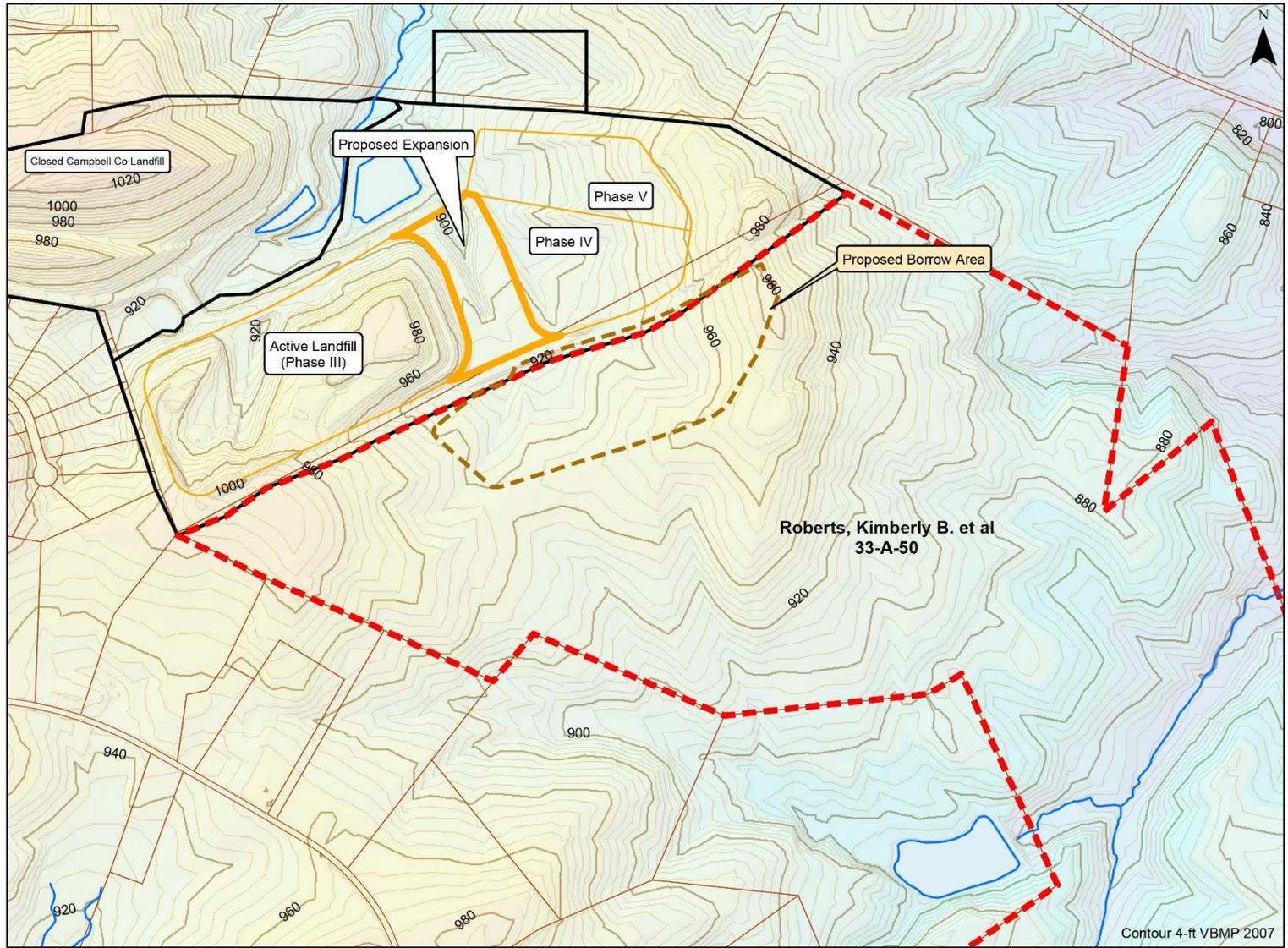
LANDFILL MASTER PLANNING



Draper Aden Associates
Engineering • Surveying • Environmental Services

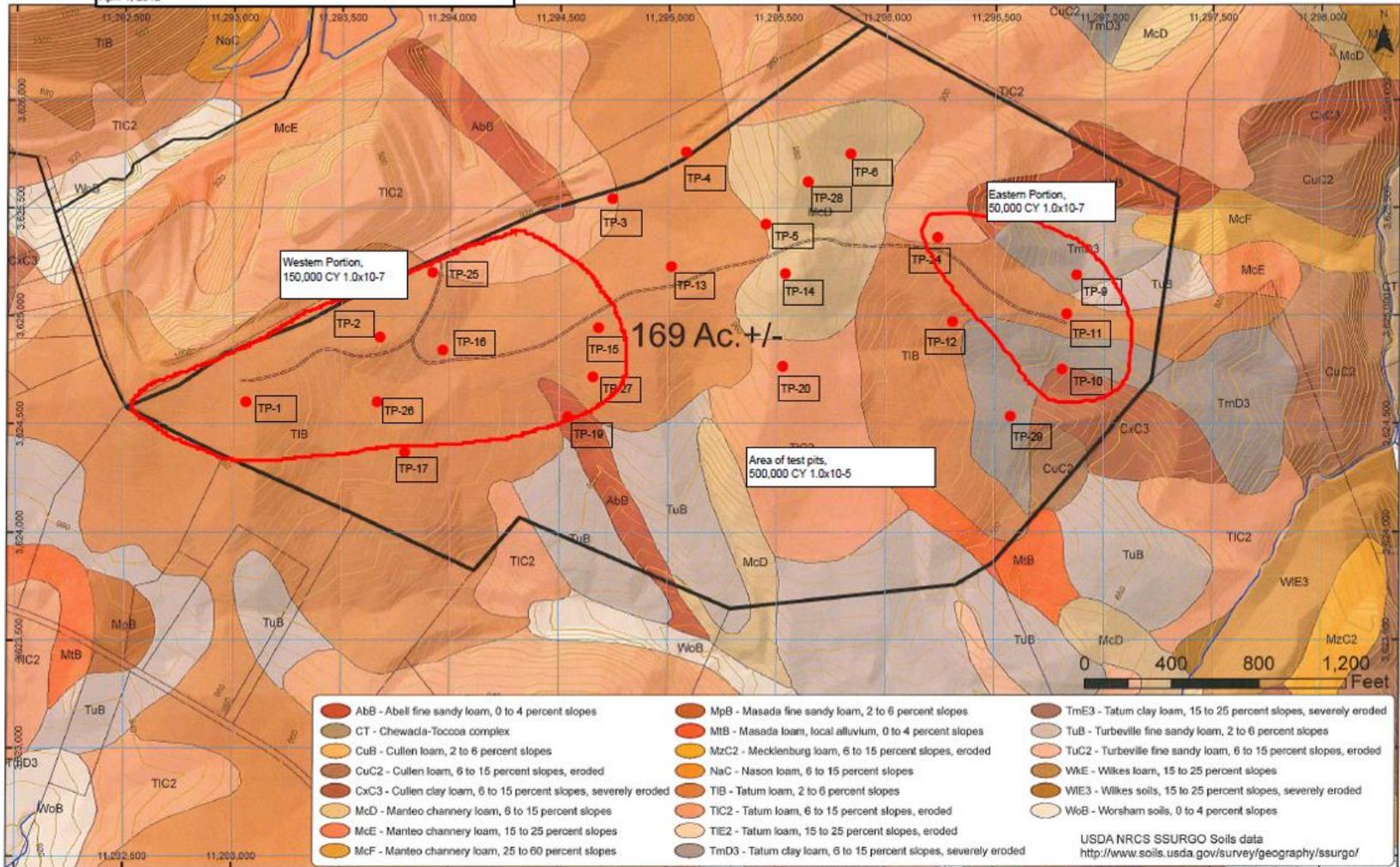


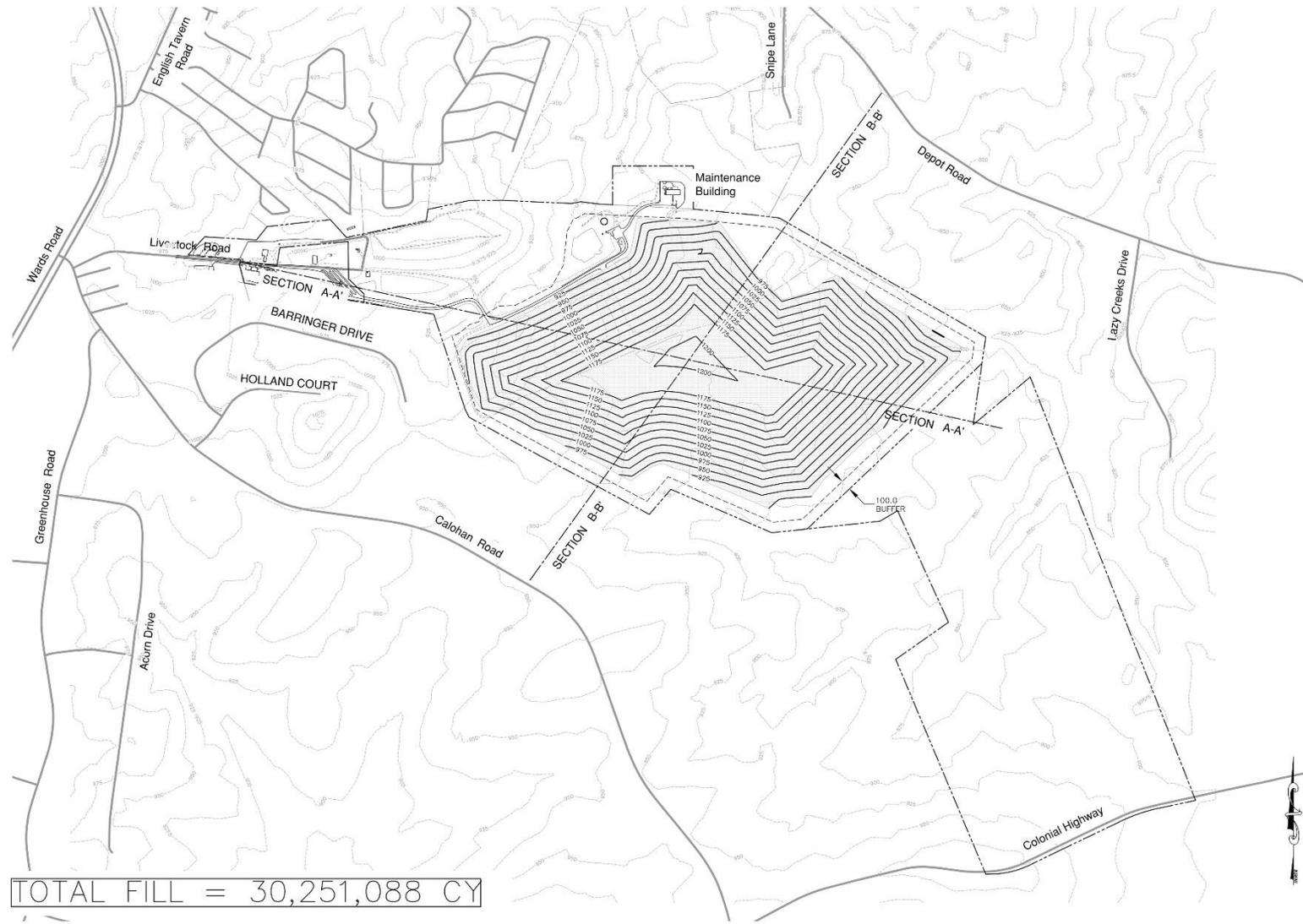




Bennett Property Test Pit Location Plan
April 4, 2012

● Test Pit Location





TOTAL FILL = 30,251,088 CY

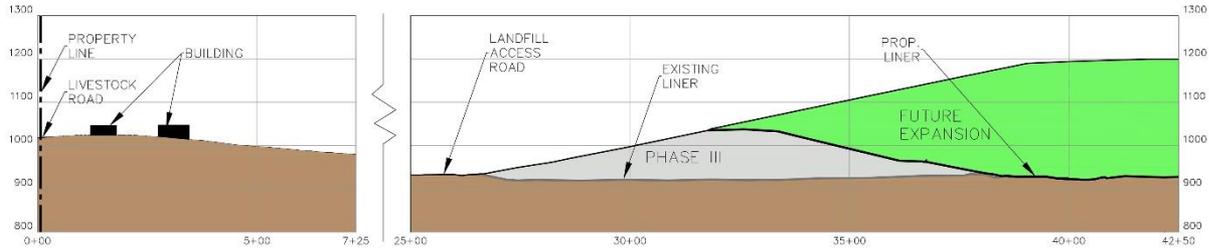
Draper Aden Associates
 Engineering • Surveying • Environmental Services
 Blacksburg, VA
 2020 South Main Street
 Suite 1000 • Blacksburg, VA 24060-2021
 Phone: 540-538-2222
 Fax: 540-538-2223
 Blacksburg, VA
 Charlottesville, VA
 Hampton Roads, VA

REGION 2000 SERVICES AUTHORITY
 ADJACENT PROPERTY MAP SKETCH
 CONCEPTUAL LANDFILL EXPANSION
 1200' CREST ELEVATION
 CAMPBELL COUNTY, VIRGINIA

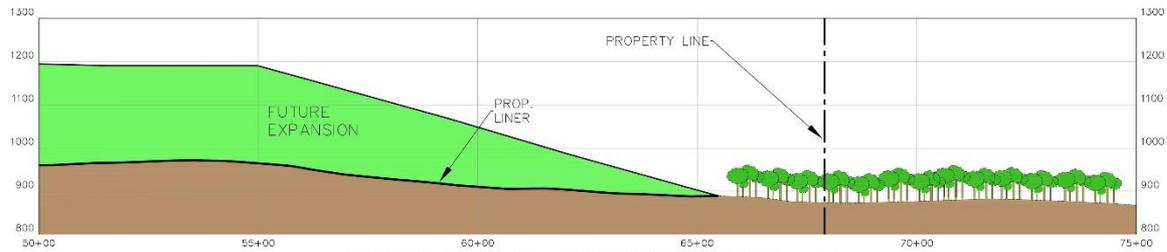
REVISIONS	
DESIGNED BY:	MAC
DRAWN BY:	AJI
CHECKED BY:	LPK
SCALE:	
DATE:	OCTOBER 6, 2014
PROJECT NUMBER:	B09107-115



PROFILE A-A'



SECTION A:A (STA. 0 - 40+00) VERTICAL PROJECTION = 1:1



SECTION A:A (STA. 45 - 70) VERTICAL PROJECTION = 1:1

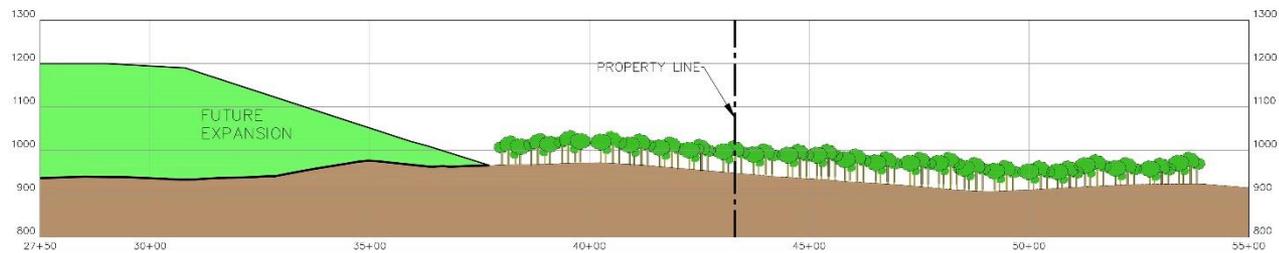
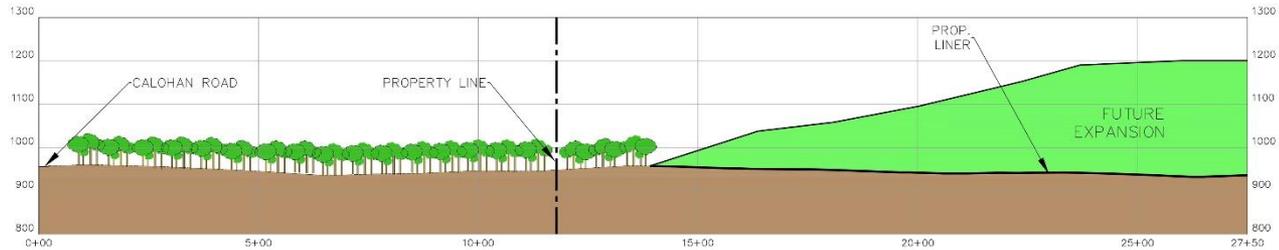
Draper Aden Associates
 Engineering • Surveying • Environmental Services
 Blacksburg, VA
 540-532-1111
 540-532-1112
 540-532-1113
 Blacksburg, VA
 Harrison Run, VA

CONCEPTUAL LANDFILL EXPANSION PROFILE
 1200' CREST ELEVATION
 LIVESTOCK ROAD LANDFILL
 CAMPBELL COUNTY, VIRGINIA

REVISIONS

DESIGNED BY	MNC
DRAWN BY	AJM
CHECKED BY	LPC
SCALE	
DATE	OCTOBER 4, 2014
PROJECT NUMBER	809107-115

PROFILE B-B'



Draper Aden Associates
 Engineering • Surveying • Environmental Services
 Blacksburg, VA
 540-538-7000
 www.dra-aden.com

CONCEPTUAL LANDFILL EXPANSION PROFILE
 1200' CREST ELEVATION
 LIVESTOCK ROAD LANDFILL
 CAMPBELL COUNTY, VIRGINIA

REVISIONS

DESIGNED BY	MSD
DRAWN BY	ASH
CHECKED BY	LEW
DATE	
DATE	OCTOBER 8, 2014
PROJECT NUMBER	B09107-115

1 OF 1

MASTER SCHEDULE

REGION 2000 SERVICES AUTHORITY LIVESTOCK ROAD FACILITY MASTER DEVELOPMENT SCHEDULE													
ACTIVITY	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Life of Phase III													
Permitting Lateral Expansion													
Construction Phase IV													
Operation Phase IV													
Construction Phase V													
Operation Phase V													
PERMITTING PHASE VI													
Local landuse planning													
Part A - Hydro-geo evaluation													
Part B - Design													
Air permitting													
Storm water													
Construction next phase													
Operation next phase													

NEXT STEPS

- Neighborhood meetings
 - ▶ Completed.
- Region 2000 Quarterly Board meeting
 - ▶ October 22, 2014 – 2:00 PM – Bank of the James
 - ▶ Board authorization to proceed with re-zoning and special use permitting with Campbell County.
- Submission of applications to Campbell County
 - ▶ Planning Commission meeting
 - ▶ Board of Supervisor meeting

BENEFITS TO CAMPBELL COUNTY

- Low tipping fees
- Excess Revenue Sharing: Average \$ 818,000 annual payment to Campbell County
- Reduced construction costs (overlays, adjacent soil, use of existing infrastructure)
- Economies of scale
- Shared liability for closure and post closure



SAMPLE TIPPING FEES

Tipping Fee Comparison 2014

Locality	Type of Landfill or Facility	Tonnage 2013 (SWIA forms)	Tipping Fee 2013 (\$/ton)
Amherst County Landfill	Subtitle D	22,199.51	\$53/\$44
Augusta Regional Landfill	Subtitle D	114,529.00	\$45
Bedford County Sanitary Landfill	Subtitle D	37,769.00	\$57/\$38
Carroll Grayson Galax Regional Landfill	Subtitle D	36,218.12	\$50
Franklin County Sanitary Landfill	Subtitle D	48,492.00	\$43
Pittsylvania County Sanitary Landfill	Subtitle D	38,157.31	\$60
Region 2000 Services Authority	Subtitle D	207,628.76	\$28.75/\$38.75
Rockingham County Sanitary Landfill	Subtitle D	103,073.35	\$50 county /\$69 city
Roanoke Valley Resource Authority	Subtitle D	149,495.00	\$48/\$58
Spotsylvania County Livingston Sanitary Landfill	Subtitle D	101,799.48	\$45
SRPSA - Butcher Creek Sanitary Landfill	Subtitle D	65,650.94	\$40
Prince Edward County Sanitary Landfill	Subtitle D	22,805.94	\$38.50

Note: Tipping fee information taken from web research. For those with two fees, the first value represents the fee to the locality; the second fee represent the fee to commercial. Single fees usually represent just the commercial rates. These have not been verified with the localities.