1028246 (1) FILE

CITRUS COUNTY
SOLID WASTE MANAGEMENT DIVISION
CENTRAL LANDFILL
OPERATIONS PERMIT

OPERATIONS DRAWINGS

CITRUS COUNTY, FLORIDA
JANUARY 2006

BOARD OF COUNTY COMMISSIONERS

Gary Bartell, Chairman, District 2
Jim Fowler, 1st Vice Chairman, District 4
Dennis Damato, 2nd Vice Chairman, District 1
Vicki Phillips, Commissioner, District 3
Joyce Valentino, Commissioner, District 5

COUNTY ADMINISTRATOR

Richard Wm. Wesch, Esq.
Thomas H. Dick, Assistant

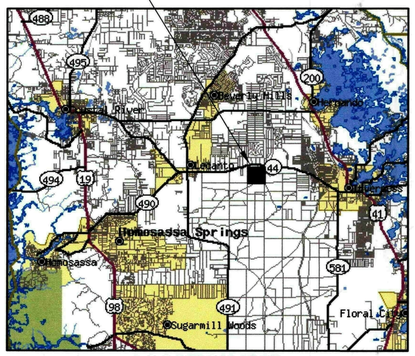
PUBLIC WORKS DEPARTMENT DIRECTOR

Glenn McCracken, P.E.

SOLID WASTE MANAGEMENT DIRECTOR

Susan J. Metcalfe, P.G.

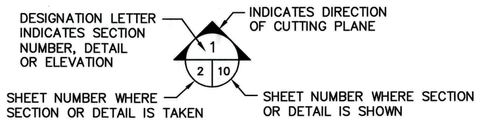
PROJECT LOCATION



LOCATION MAP

DRAWING INDEX

DRAWING NO.		DRAWING TITLE
1	-	COVER SHEET
2	-	1 - MILE AERIAL PHOTOGRAPH
3	-	EXISTING CONDITIONS SITE PLAN (10/14/05 SURVEY)
4	-	PHASE 1 AND 2 BUILDOUT SITE PLAN
5	-	(NOT USED)
6	-	PHASE 1 AND 2 FILL SEQUENCE SITE PLAN
7	-	SECTIONS
8	-	DETAILS
9	-	DRAINAGE DETAILS



SECTION AND DETAIL DESIGNATION

SCS ENGINEERS
ENVIRONMENTAL CONSULTANTS
3012 U.S. 301 N. SUITE 700
TAMPA, FLORIDA 33619
(813) 621-0080
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892
WWW.SCSENGINEERS.COM

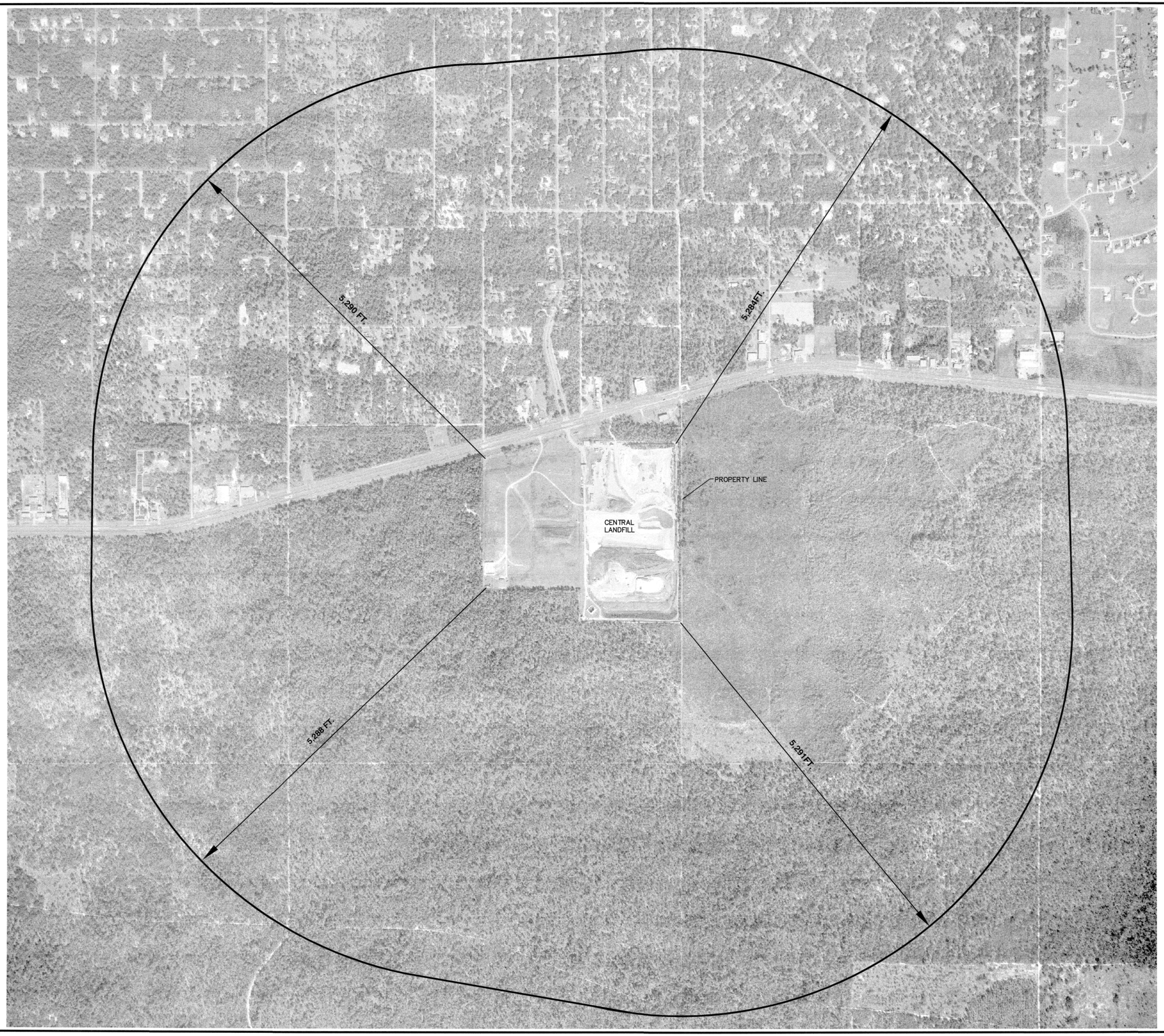
EXISTING STORMWATER PIPELINE	8"	SW
EXISTING LEACHATE FORCE MAIN	6"	FM
UNDERGROUND POWER LINES		UE
OVERHEAD POWER LINES		OE

LEGEND AND ABBREVIATIONS

	SHEET FLOW DRAINAGE DIRECTION
	CONCENTRATED DRAINAGE FLOW DIRECTION
	FILL PROGRESSION
	DAILY PROGRESSION
	ZONE/PHASE BOUNDARY
	CENTERLINE OF SWALE
	CENTERLINE OF TEMPORARY SWALE
55	EXISTING CONTOUR
55	PROPOSED CONTOUR
55	PROJECTED EXISTING CONTOUR
	DOWNCHUTE
	LIMITS OF EXCAVATION OF ORGANIC MATERIAL
	PROPERTY LINE
	FENCELINE
LFG-1	LANDFILL GAS MONITORING WELL
PP	EXISTING POWER POLE
MW-6A	EXISTING GROUNDWATER MONITORING WELL
SB-1	SOIL BORING
	VEGETATION
APPROX	APPROXIMATE
CTRD	CENTERED
ERCP	ELLIPTICAL REINFORCED CONCRETE PIPE
ELEV	ELEVATION
IE	INVERT ELEVATION
LF	LINEAR FEET
EXIST	EXISTING
SCH	SCHEDULE
TYP	TYPICAL
ø	DIAMETER
CONC	CONCRETE
W/	WITH
CMP	CORRUGATED METAL PIPE
MIN	MINIMUM
MAX	MAXIMUM
HDPE	HIGH DENSITY POLYETHYLENE
FDOT	FLORIDA DEPARTMENT OF TRANSPORTATION
NO	NUMBER
RCP	REINFORCED CONCRETE PIPE
DI	DUCTILE IRON PIPE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
CPP	CORRUGATED POLYETHYLENE PIPE

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

G:\PROJECT\09204067.02\OperationsDrawings\046702COVR.dwg Mar 27, 2006 - 3:3pm By: 2569gav



N

600 300 0 600
SCALE IN FEET

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

LEGEND

1 MILE RADIUS (APPROX.)

PHOTO DATE: 11/17/04

JOHN A. BANKS, P.E.
CERTIFICATE NO. 39397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE
1 - MILE AERIAL PHOTOGRAPH

PROJECT TITLE
CENTRAL LANDFILL OPERATIONS DRAWINGS

CLIENT
CITRUS COUNTY
LECANTO, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09204067.02 | DWN. BY: SDA | Q/A RVW BY: JAB
DSN. BY: JAB | CHK. BY: JAB | APP. BY: RJD

CADD FILE: 046702-AERIAL
DATE: JANUARY 2006
SCALE: AS SHOWN
DRAWING NO. 2 of 9

(3)

100 50 0 100
SCALE IN FEET

APPROXIMATE LOCATION OF PROPERTY LINE

MW-2
MW-7
GS-1E
MW-3
STORMWATER CHANNEL
PHASE 2 LIMITS OF LINER
EXISTING PHASE 1A LIMITS OF LINER
EXISTING PHASE 1 LIMITS OF LINER
DRY RETENTION AREA
GS-1S
COUNTY MAINT. BLDG.
COMMUNITY RECYCLING FACILITY
CONSTRUCTION TRAILER LOCATION
MW-1R
COUNTY OFFICES
GS-P10E
GS-P15E
GS-N6E
GS-L3E
GS-J3E
GS-H6E
MW-6
GS-C3E
GS-B3E
GS-A3E
MW-8
GS-Q6E
GS-O3E
GS-M15E
GS-K6E
GS-I3E
GS-G3E
MW-5
GS-F3E
GS-E3E
GS-D3E
GS-H3S
LANDFILL ENTRANCE
SCALE HOUSE
LEACHATE TREATMENT PLANT
CONTROL POINT NO. 60 P.K. NAIL AND COUNTY DISK
NORTH 1643106.1829
EAST 515785.2242
ELEVATION 120.28
STORMWATER CHANNEL
LEACHATE HOLDING TANKS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

LEGEND

- 90 — EXISTING ELEVATIONAL CONTOUR (5 FOOT INTERVAL)
- EXISTING ELEVATIONAL CONTOUR (1 FOOT INTERVAL)
- ×117.58 EXISTING SPOT ELEVATION

SURVEY SOURCE NOTE:

SURVEY PERFORMED BY KUCERA SOUTH, 2215 SOUTH FLORIDA AVENUE, LAKELAND FLORIDA 33803, TEL: (863) 686-8640. SURVEY INFORMATION SHOWN WAS COMPILED USING PHOTOGRAMMETRIC METHODS WITH A PHOTO DATE OF OCTOBER 14, 2005.

JOHN A. BANKS, P.E.
CERTIFICATE NO. 35397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE
EXISTING CONDITIONS SITE PLAN (10/14/05 SURVEY)

PROJECT TITLE
CENTRAL LANDFILL OPERATIONS DRAWINGS

CLIENT
CITRUS COUNTY LECANTO, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO. 0204067.02
DWN. BY: SDA
CHK. BY: JAB
QA/A RVW. BY: JAB
APP. BY: RJD
DSN. BY: JAB

CADD FILE: 046702EXCONDS

DATE: JANUARY 2006

SCALE: AS SHOWN

DRAWING NO. **3** of 9

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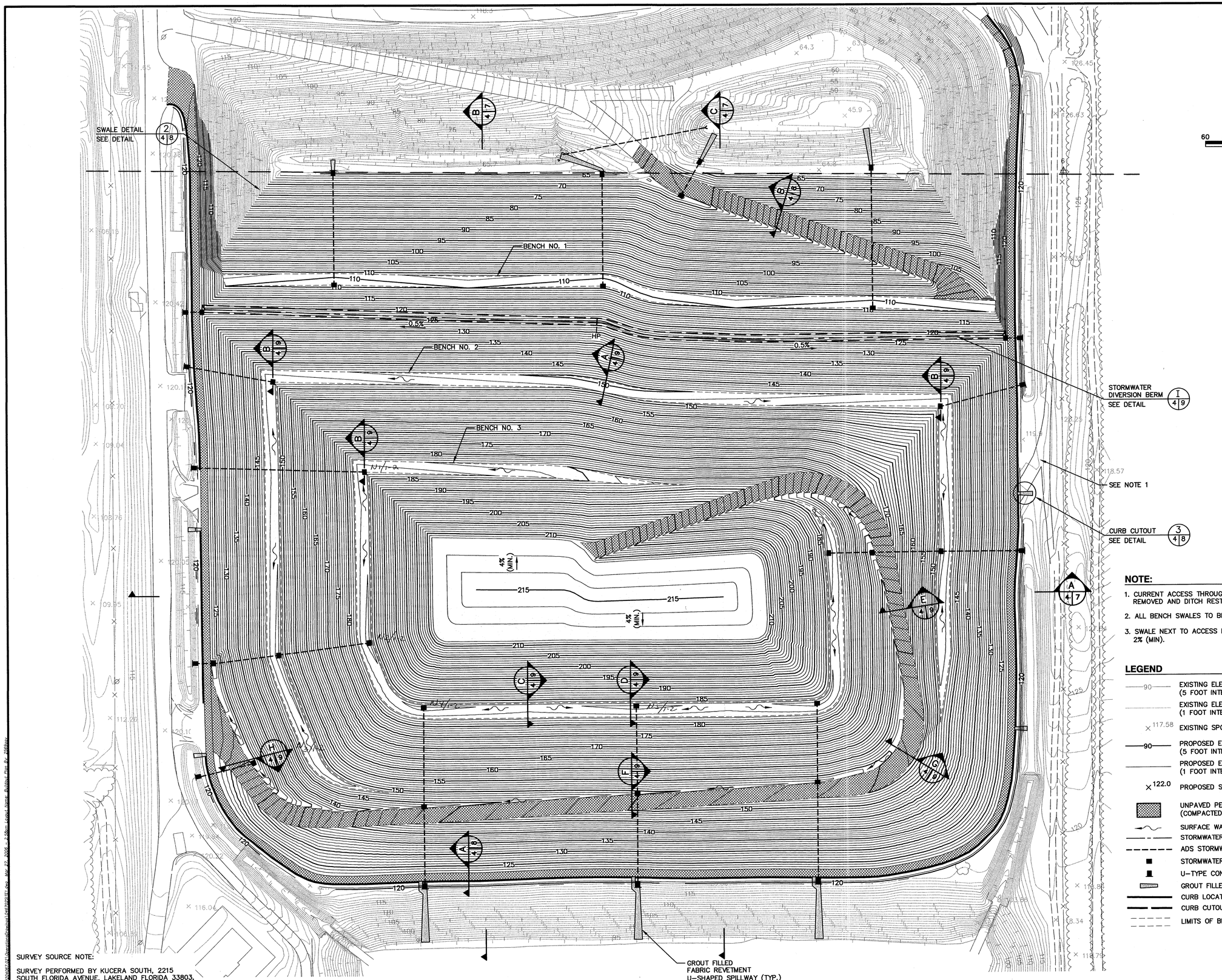


SURVEY SOURCE NOTE:

SURVEY PERFORMED BY KUCERA SOUTH, 2215 SOUTH FLORIDA AVENUE, LAKELAND FLORIDA 33803, TEL: (863) 686-8640. SURVEY INFORMATION SHOWN WAS COMPILED USING PHOTOGRAMMETRIC METHODS WITH A PHOTO DATE OF APRIL 05, 2005.

NOTE:

1. CURRENT ACCESS THROUGH PERIMETER DITCH SECTION TO BE REMOVED AND DITCH RESTORED PRIOR TO CLOSURE CONSTRUCTION.
2. ALL BENCH SWALES TO BE SLOPED A MINIMUM OF 0.5%.
3. SWALE NEXT TO ACCESS RAMP TO HAVE SLOPE OF 10% (MAX) TO 2% (MIN).

LEGEND

- 90 — EXISTING ELEVATIONAL CONTOUR (5 FOOT INTERVAL)
- EXISTING ELEVATIONAL CONTOUR (1 FOOT INTERVAL)
- × 117.58 EXISTING SPOT ELEVATION
- 90 — PROPOSED ELEVATIONAL CONTOUR (5 FOOT INTERVAL)
- PROPOSED ELEVATIONAL CONTOUR (1 FOOT INTERVAL)
- × 122.0 PROPOSED SPOT ELEVATION
- UNPAVED PERIMETER BERM AND ACCESS ROAD (COMPACTED LIMEROCK)
- SURFACE WATER FLOW DIRECTION
- STORMWATER SWALE CENTERLINE (APPROXIMATE)
- ADS STORMWATER PIPE
- STORMWATER INLET
- U-TYPE CONCRETE ENDWALL (FDOT INDEX NO. 261)
- GROUT FILLED FABRIC REVETMENT
- CURB LOCATION
- CURB CUTOUT LOCATION
- LIMITS OF BENCH

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

4

JOHN A. BRANCS, P.E. CERTIFICATE NO. 39397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE 1 AND 2 BUILDOUT SITE PLAN

PROJECT TITLE: CENTRAL LANDFILL OPERATIONS DRAWINGS

CLIENT: CITRUS COUNTY LECANTO, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

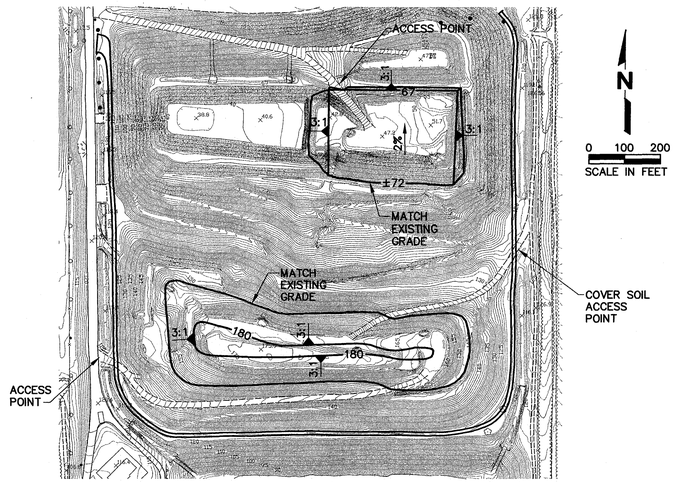
PROJ. NO. 09204067.02 | DSN. BY: JAB | DWN. BY: SDA | CHK. BY: JAB | QA/QC BY: JAB | APP. BY: RJD

CADD FILE: 046702SITE1

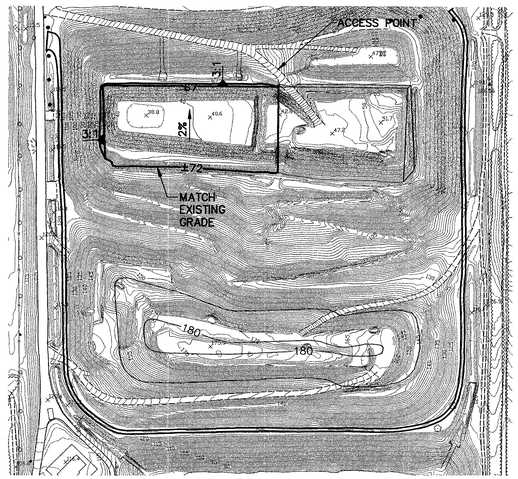
DATE: JANUARY 2006

SCALE: AS SHOWN

DRAWING NO. 4 of 9



STEP 1



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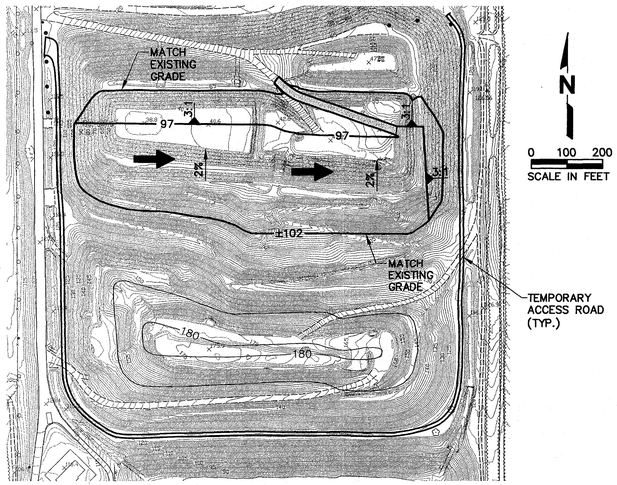

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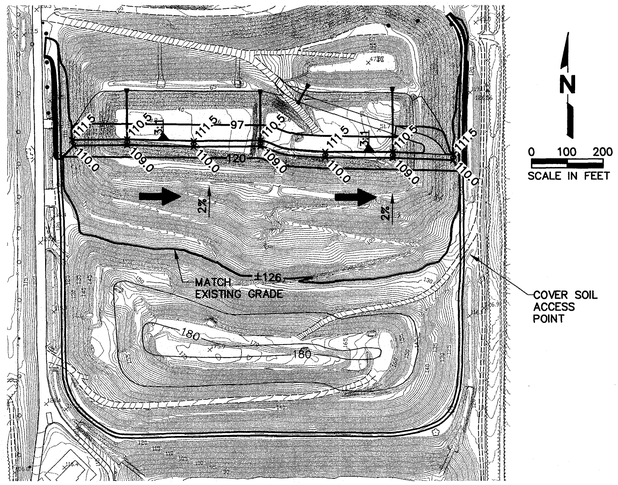

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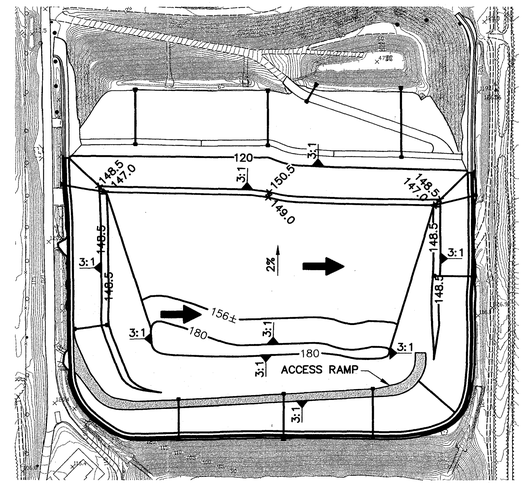

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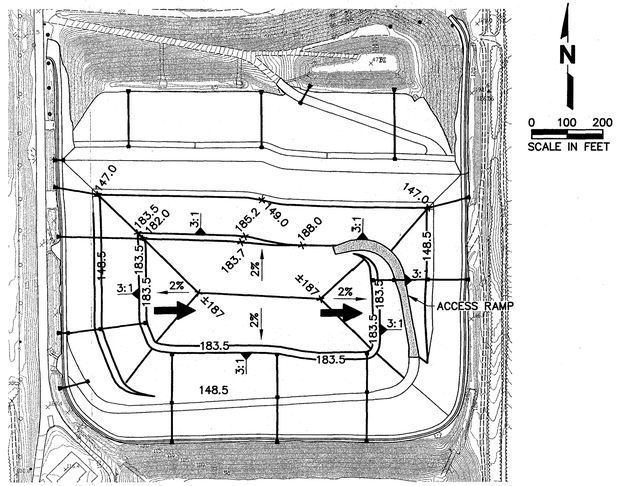
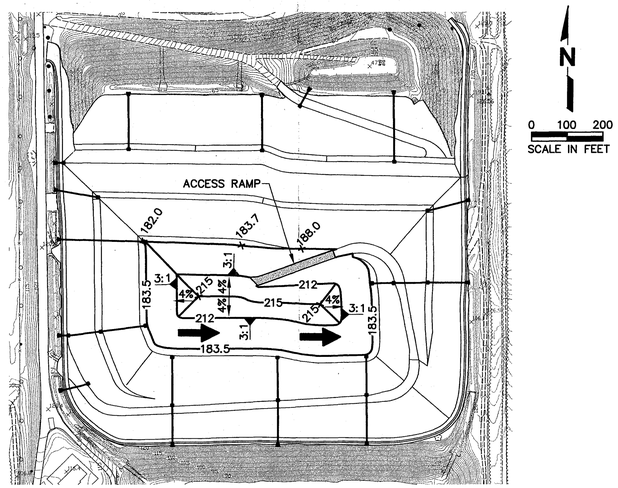


STEP 6



STEP 7/FINAL BUILDOUT

NOTE:
SEE DRAWING NUMBER 4 OF 9 FOR DETAILED PHASE 1 AND 2 FINAL BUILDOUT DESIGN.

LEGEND

- EXISTING ELEVATIONAL CONTOUR (5 FOOT INTERVAL)
- EXISTING ELEVATIONAL CONTOUR (1 FOOT INTERVAL)
- EXISTING SPOT ELEVATION
- SURFACE WATER FLOW DIRECTION
- ADS STORMWATER PIPE
- STORMWATER INLET
- U-TYPE CONCRETE ENDWALL (FDOT INDEX NO. 261)
- LIMIT OF FILL AREA CELL
- ACCESS/HAUL ROAD APPROX. LOCATION
- GENERAL DIRECTION OF FILLING

GENERAL FILL SEQUENCE

STEP 1 – COMPLETE FILL OF PHASE 1 AND 1A TO ELEV. 180. FILL EAST HALF OF PHASE 2 AREA IN THREE TEN FOOT LIFTS TO ELEVATION 67±.

STEP 2 – FILL WEST HALF IN THREE TEN FOOT LIFTS TO ELEVATION 67±.

STEP 3 – FILL PHASE 2 AREA IN THREE TEN FOOT LIFTS TO ELEVATION 97±.

STEP 4 – FILL UP TO ELEVATION 120± IN TWO 10 FOOT LIFTS.

STEP 5 – FILL FROM ELEVATION 120± TO BENCH AT ELEVATION 150± IN THREE TEN FOOT LIFTS.

STEP 6 – FILL FROM ELEVATION 150± TO BENCH AT ELEVATION 180± IN THREE TEN FOOT LIFTS.

STEP 7 – FILL FROM BENCH AT ELEVATION 180± TO TOP OF SLOPE ELEVATION 212 IN TWO ELEVEN FOOT LIFTS AND COMPLETE CROWN TO ELEVATION 215 WITH 4% MIN. SLOPE.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR
SOUTHWEST DISTRICT TAMPA

(5)

JOHN A. BANKS
STATE OF FLORIDA
3/27/06
JOHN A. BANKS, P.E.
CERTIFICATE NO. 39397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE 1 AND 2 FILL SEQUENCE SITE PLAN

PROJECT TITLE: CENTRAL LANDFILL OPERATIONS PERMIT RENEWAL

CLIENT: CITRUS COUNTY LECANTO, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH: (813) 621-0080 FAX NO. (813) 623-5757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN. BY:	CHK. BY:	QA/A RVW BY:	APP. BY:
09204067.02	SDA	JAB	JAB	RJD
DSN. BY: JAB				

CADD FILE: 095613PH2SEQ

DATE: MARCH 2006

SCALE: AS SHOWN

DRAWING NO. 6 of 9

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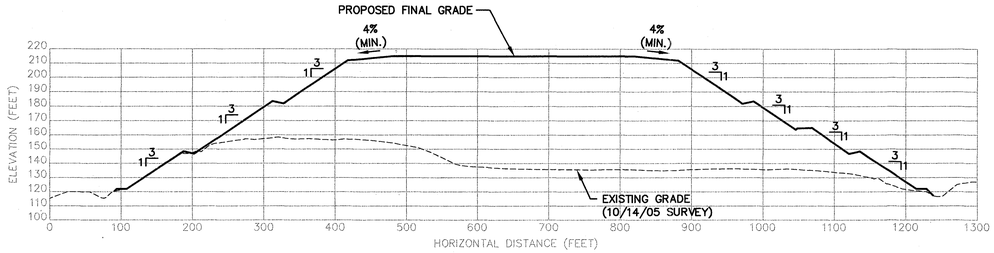
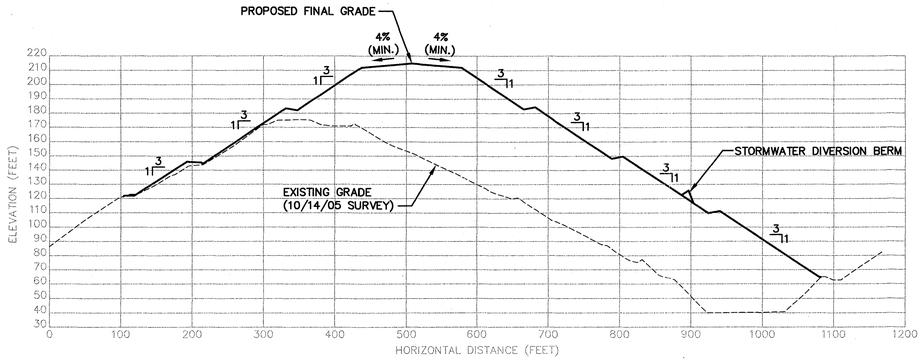


SECTION A 4 7
SCALE: 1" = 100' HORIZ.
1" = 50' VERT.



SECTION B 4 7
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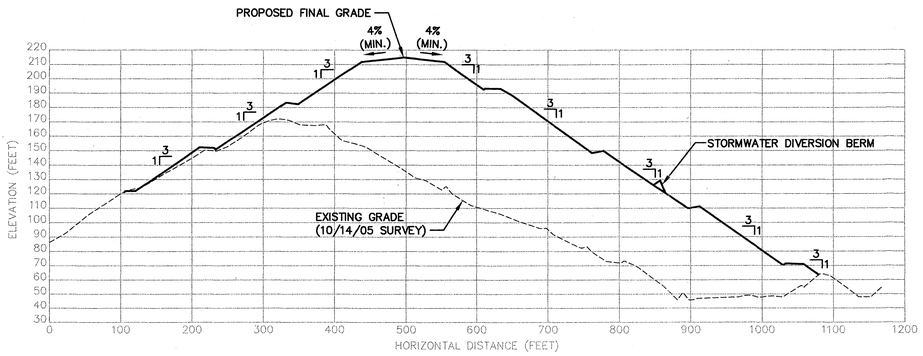
1" = 50' VERT.



SECTION C 4 7
SCALE: 1" = 100' HORIZ.
1" = 50' VERT.

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

JOHN A. BANKS, P.E.
CERTIFICATE NO. 39397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: SECTIONS

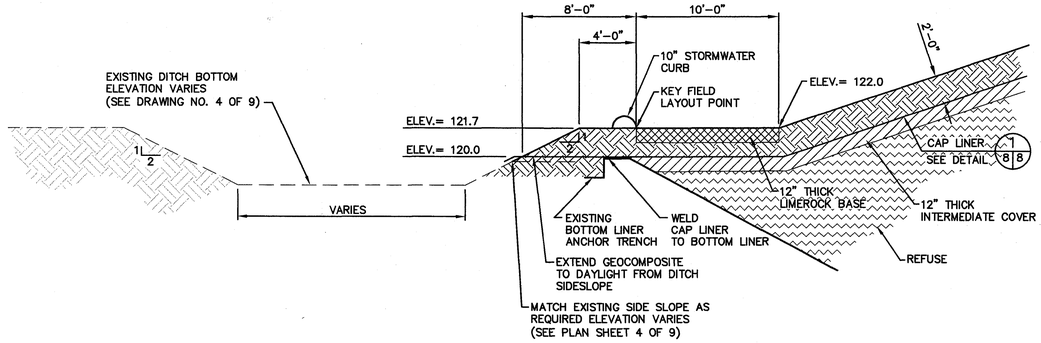
PROJECT TITLE: CENTRAL LANDFILL OPERATIONS PERMIT RENEWAL

CLIENT: CITRUS COUNTY LECANTO, FLORIDA

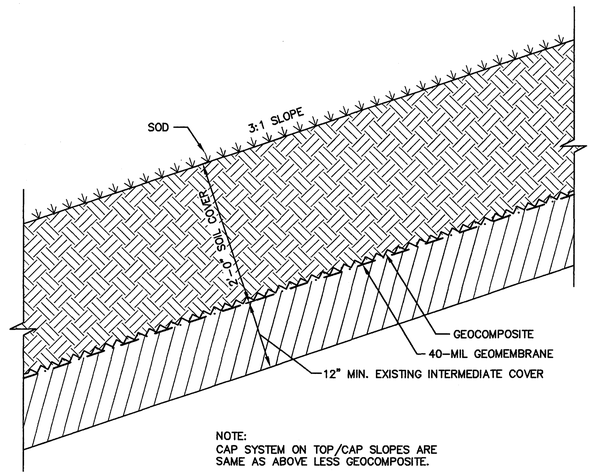
SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09204067.02 | DWN. BY: SDA | Q/A RVW BY: JAB
DSN. BY: JAB | CHK. BY: JAB | APP. BY: RJD

CADD FILE: 095613SITE1
DATE: JANUARY 2006
SCALE: AS SHOWN
DRAWING NO. 7 of 9

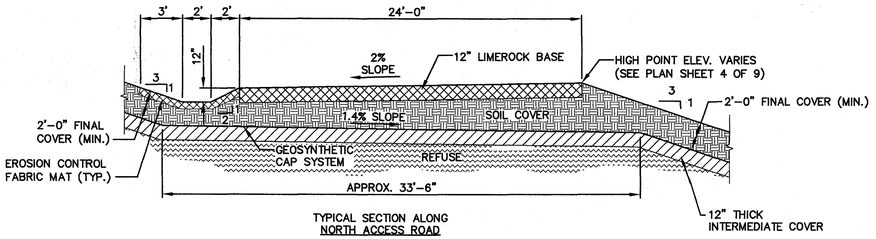


PERIMETER ROAD AND CURB SECTION A 4,8 8
SCALE: 1" = 5'



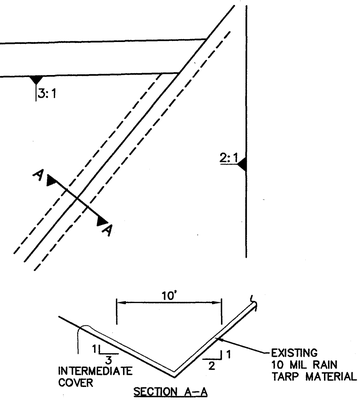
NOTE:
CAP SYSTEM ON TOP/CAP SLOPES ARE SAME AS ABOVE LESS GEOCOMPOSITE.

TYPICAL GEOSYNTHETIC CAP SYSTEM DETAIL 1 8 8
SCALE: 1" = 1'

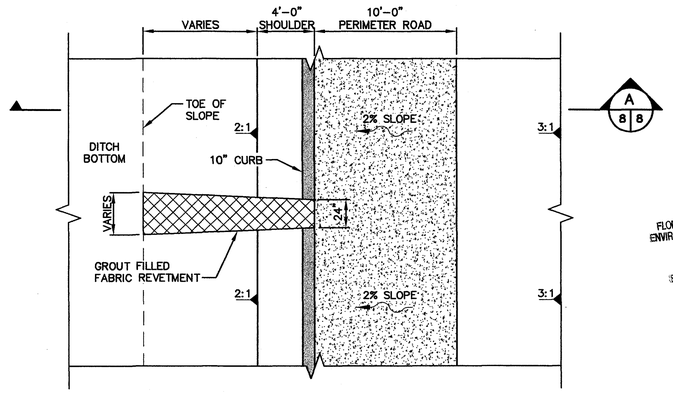


TYPICAL SECTION ALONG NORTH ACCESS ROAD

SECTION B 4 8
SCALE: 1" = 5'



SWALE DETAIL 2 4 8
SCALE: NOT TO SCALE



CURB CUTOUT (TYPICAL) DETAIL 3 4 8
SCALE: 1" = 5'

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT TAMPA

7

JOHN A. BANKS, P.E.
CERTIFICATE NO. 39397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: DETAILS

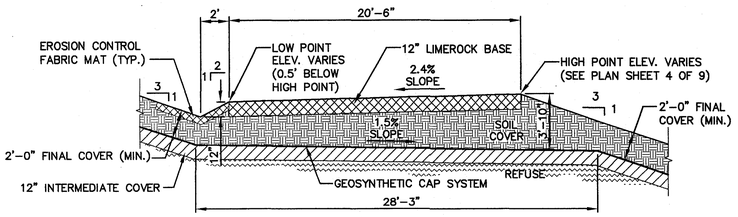
PROJECT TITLE: CENTRAL LANDFILL OPERATIONS DRAWINGS

CLIENT: CITRUS COUNTY LECANTO, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

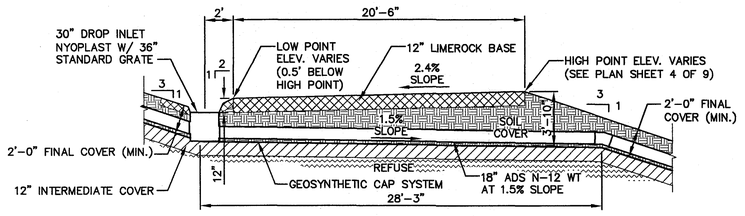
PROJ. NO. 09204067.02 | DWN. BY: SDA | Q/A RVW BY: JAB
DSN. BY: JAB | CHK. BY: JAB | APP. BY: RJD

CADD FILE: 046702DETL
DATE: JANUARY 2006
SCALE: AS SHOWN
DRAWING NO. 8 of 9



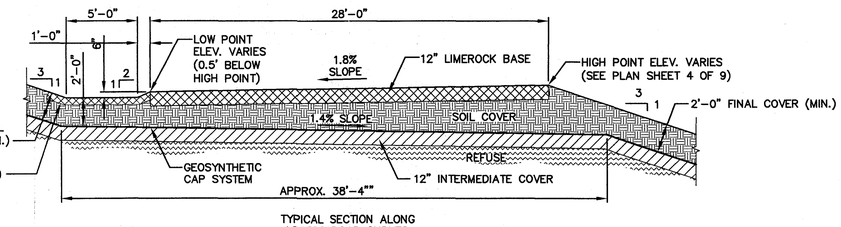
TYPICAL SECTION ALONG
STRAIGHT ACCESS ROAD

SECTION E (4 | 9)
SCALE: 1" = 5'



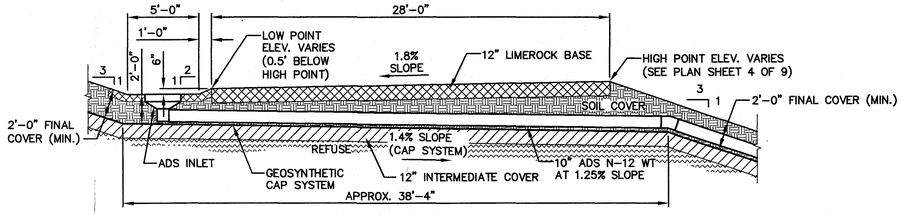
TYPICAL SECTION ALONG
STRAIGHT ACCESS ROAD
AT INLET LOCATIONS

SECTION F (4 | 9)
SCALE: 1" = 5'



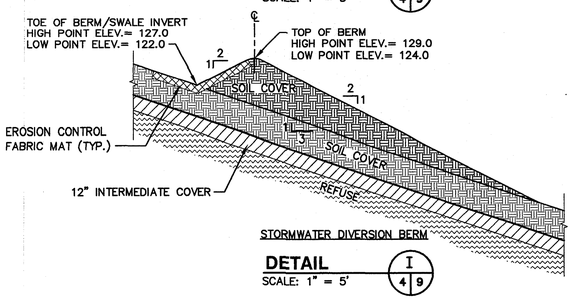
TYPICAL SECTION ALONG
ACCESS ROAD CURVES

SECTION G (4 | 9)
SCALE: 1" = 5'



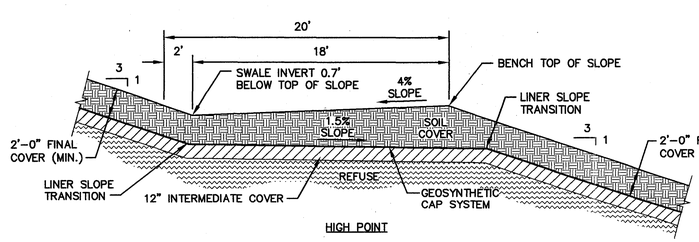
TYPICAL SECTION ALONG
ACCESS ROAD CURVES
AT INLET LOCATIONS

SECTION H (4 | 9)
SCALE: 1" = 5'



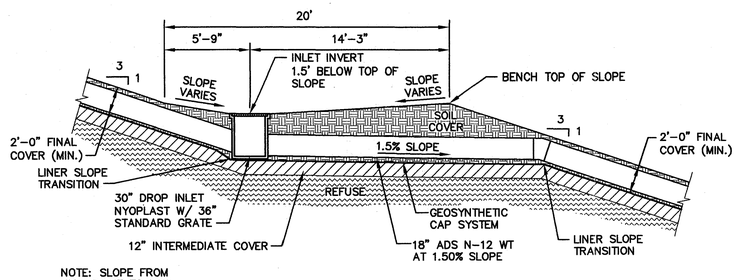
STORMWATER DIVERSION BERM

DETAIL I (4 | 9)
SCALE: 1" = 5'



HIGH POINT

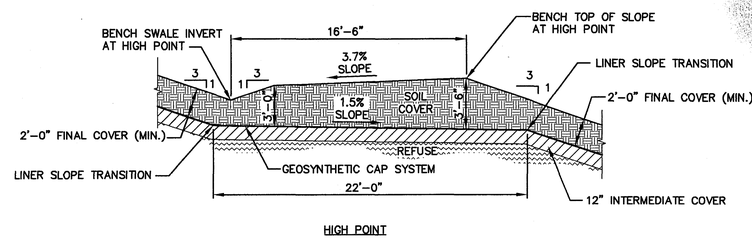
SECTION C (4 | 9)
SCALE: 1" = 5'



NOTE: SLOPE FROM
HIGH POINT TO LOW
POINT MIN. 0.6%

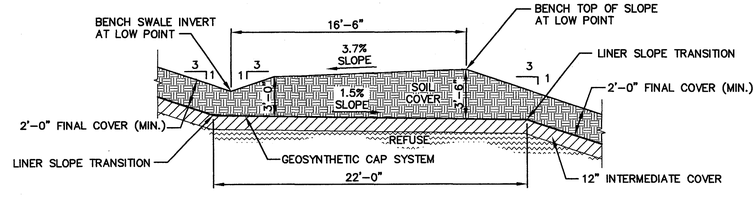
LOW POINT

SECTION D (4 | 9)
SCALE: 1" = 5'



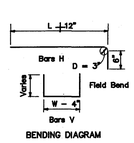
HIGH POINT

SECTION A (4 | 9)
SCALE: 1" = 5'

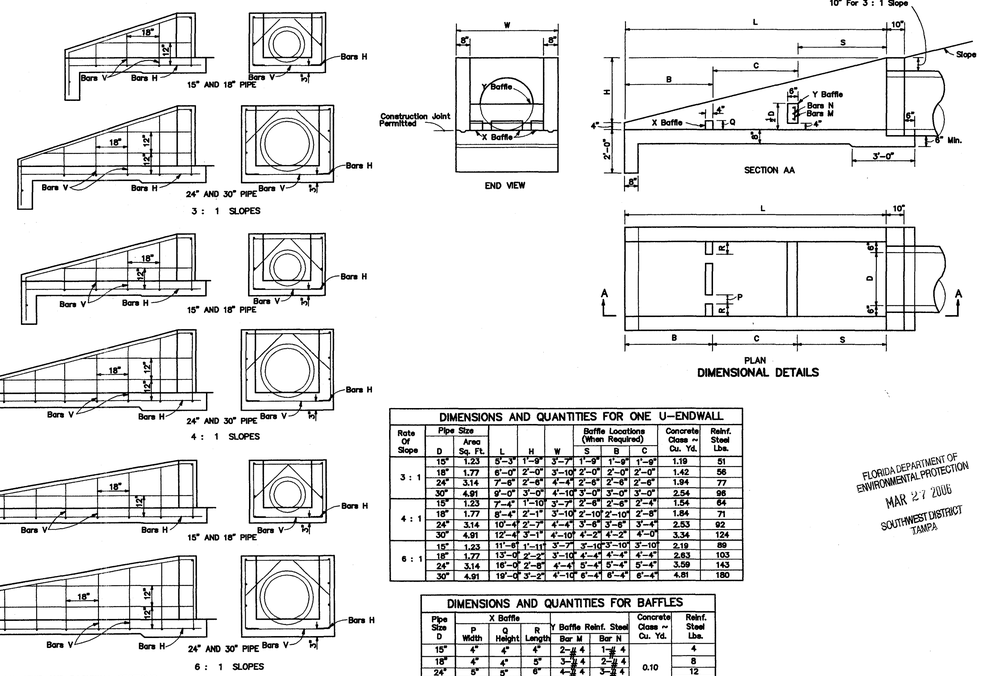


LOW POINT

SECTION B (4 | 9)
SCALE: 1" = 5'



BENDING DIAGRAM



SIDE VIEWS AND BACKWALL SECTIONS
REINFORCING DETAILS

DIMENSIONS AND QUANTITIES FOR ONE U–ENDWALL

Rate Of Slope	Pipe Size D	Pipe Size Area Sq. Ft.	L	H	W	Baffle Locations (When Required) S	B	C	Concrete Class ≈ Cu. Yd.	Reinf. Steel Lbs.
3 : 1	15"	1.23	8'–3"	1'–9"	3'–7"	1'–9"	1'–9"	1'–9"	1.19	51
	18"	1.77	6'–0"	2'–0"	3'–10"	2'–0"	2'–0"	2'–0"	1.42	56
	24"	3.14	7'–6"	2'–6"	4'–4"	2'–6"	2'–6"	2'–6"	1.84	77
	30"	4.91	9'–0"	3'–0"	4'–10"	3'–0"	3'–0"	3'–0"	2.54	98
4 : 1	15"	1.23	7'–4"	1'–10"	3'–7"	2'–0"	2'–6"	2'–4"	1.54	64
	18"	1.77	8'–4"	2'–1"	3'–10"	2'–10"	2'–6"	2'–8"	1.84	71
	24"	3.14	10'–4"	2'–7"	4'–4"	3'–6"	3'–6"	3'–4"	2.53	92
	30"	4.91	12'–4"	3'–1"	4'–10"	4'–2"	4'–2"	4'–0"	3.36	124
6 : 1	15"	1.23	11'–8"	1'–11"	3'–7"	3'–10"	3'–10"	3'–10"	2.19	89
	18"	1.77	13'–0"	2'–2"	3'–10"	4'–4"	4'–4"	4'–4"	2.83	103
	24"	3.14	16'–0"	2'–8"	4'–4"	5'–4"	5'–4"	5'–4"	3.59	143
	30"	4.91	19'–0"	3'–2"	4'–10"	6'–4"	6'–4"	6'–4"	4.81	180

DIMENSIONS AND QUANTITIES FOR BAFFLES

Pipe Size D	X Baffle P Width	X Baffle Q Height	X Baffle R Length	Y Baffle Reinf. Steel Bar M	Y Baffle Reinf. Steel Bar N	Concrete Class ≈ Cu. Yd.	Reinf. Steel Lbs.
15"	4"	4"	4"	2–#4	1–#4	0.10	4
18"	4"	4"	5"	3–#4	2–#4		8
24"	5"	5"	6"	4–#4	3–#4		12
30"	5"	5"	7"	4–#4	4–#4		16

ENDWALLS WITH AND WITHOUT BAFFLES FOR 3 : 1, 4 : 1 AND 6 : 1 SLOPES

U–TYPE CONCRETE ENDWALLS
BAFFLES AND GRATE OPTIONAL
15" TO 30" PIPE
FDOT INDEX NO. 261

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAR 27 2006
SOUTHWEST DISTRICT
TAMPA

8

JOHN A. BANKS, P.E.
CERTIFICATE NO. 39397

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: **DRAINAGE DETAILS**

PROJECT TITLE: **CENTRAL LANDFILL OPERATIONS DRAWINGS**

CLIENT: **CITRUS COUNTY**
LECANTO, FLORIDA

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT
CONSULTING ENGINEERS
3012 U.S. HWY. 301 NORTH, SUITE 700, TAMPA, FL 33619
PH (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO. 09204067.02 | DWN. BY: SDA | CHK. BY: JAB | O/A RVW BY: JAB | APP. BY: RJD

CADD FILE: 046702DRNDETL

DATE: JANUARY 2006

SCALE: AS SHOWN

DRAWING NO. **9** of 9

G:\PROJECTS\09204067.02\Civil\Drawings\Landfill Drawings\Drainage Details.dgn 27-Mar-06 8:56a - 1:20pm Ronald Monroe