1430323 (1)

PROPERTY LIMIT (TYP)

PROTECT MONITORING WELLS DURING CONSTRUCTION (TYP)

PHASE II SECTION II (FUTURE CONSTRUCTION)

TOP OF DRAINAGE SAND ELEVATIONS (TYP)

TYP. STORMWATER BERMS SEE DETAIL 5 OP1 22

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1 OP1 22

PHASE I/II EDGE OF LINER SEE DETAIL 4 OP1 18

TYP. STORMWATER DOWNLET 3 OP1 22

EXIST. LANDFILL (PHASE I)

3 FT HIGH COMPACTED RAIN SEPARATION BERM (COVER WITH RAINTARP) 3:1 SIDESLOPE, 2 FT TOP WIDTH

1 OP1 18 SOUTH EDGE OF LINER SEE DETAIL

ACTIVE FILL AREA

PHASE II SECTION I TOTAL FILL APPROX. 2 AC

PUMP NON-CONTACT RAINWATER INTO PERIMETER DITCHES

TYP. WORKING FACE BERM; 3 FT HIGH; 2:1 SIDESLOPE, 2 FT TOP WIDTH; COMPACTED GENERAL FILL

30 FT CRUSHED SHELL ROAD; 12-IN THICK; 3:1 SIDESLOPE

19X30 ERCP CLASS III; MES
NORTH END I.E. 85.00
SOUTH END I.E 84.60
INSTALL PER FDOT INDEX 205

3 OP1 18 EAST EDGE OF LINER SEE DETAIL

WETLAND DISCHARGE STRUCTURE SEE DETAIL 4 OP1 21

REMOVE EXIST. PIPE AND STRUCTURE

A OP1 16 — B OP1 16 — C OP1 17 — D OP1 17

LEGEND

- TWO-WAY TRAFFIC FLOW
- ONE-WAY TRAFFIC FLOW
- FILL PROGRESSION DIRECTION
- SURFACE RUNOFF FLOW DIRECTION

SCALE IN FEET: 60 0 60 120

JOSEPH R. O'NEILL, P.E. — STATE OF FLORIDA — No. 62545 — CERTIFICATE NO. 9849

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 1

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

D.E.P. MAY 2 3 2005 Southwest District Tampa

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.	DWN. BY:	CHK. BY:	APP. BY:
0190333.09	JHO	JHO	CEH
DSN. BY: JHO			

CADD FILE: 993309OPS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. OP 1 of 27

FILE

PROPERTY LIMIT (TYP)

PROTECT MONITORING WELLS DURING CONSTRUCTION (TYP)

PHASE II SECTION II (FUTURE CONSTRUCTION)

20-MIL VFPE RAINTARP (PUMP RAINWATER INTO PERIMETER DITCHES)

TOP OF DRAINAGE SAND ELEVATIONS (TYP)

TYP. STORMWATER BERMS SEE DETAIL 5 OP2 22

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1 OP2 22

3 FT HIGH COMPACTED RAIN SEPARATION BERM (COVER WITH RAINTARP) 3:1 SIDESLOPE, 2 FT TOP WIDTH

PHASE I/II EDGE OF LINER SEE DETAIL 4 OP2 18

TYP. STORMWATER DOWNLET SEE DETAIL 3 OP2 22

EXIST. LANDFILL (PHASE I)

TOP OF INTERMEDIATE COVER ELEVATIONS SHOWN

1 OP2 18 SOUTH EDGE OF LINER SEE DETAIL

PROTECT ALL SLOPES WITH 6-IN (MIN) OF MULCH; SEED IF NEEDED. (TYP OF ALL SLOPES)

PHASE II SECTION I
TOTAL FILL APPROX. 2 AC
ACTIVE FILL AREA

TYP. WORKING FACE BERM; 2:1 SIDESLOPE, 2 FT TOP WIDTH; COMPACTED GENERAL FILL

WETLAND DISCHARGE STRUCTURE SEE DETAIL 4 OP2 21

REMOVE EXIST. PIPE AND STRUCTURE

3 OP2 18 EAST EDGE OF LINER SEE DETAIL

A OP2 16

B OP2 16

C OP2 17

D OP2 17

E OP2 17

LEGEND

- TWO-WAY TRAFFIC FLOW
- ONE-WAY TRAFFIC FLOW
- FILL PROGRESSION DIRECTION
- SURFACE RUNOFF FLOW DIRECTION

N

60 0 60 120
SCALE IN FEET

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 23 2005
SOUTHWEST DISTRICT
TAMPA

JOSEPH H. HOWELL, P.E.
CERTIFICATE NO. 52963

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 2

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

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: 09033.09 | DWN. BY: JHO | CHK. BY: JHO | DSN. BY: JHO | QA/QC BY: TMO/CEH | APP. BY: CEH

CADD FILE: 993309OPS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. OP 2 of 27

PROPERTY LIMIT (TYP)

N

60 0 60 120
SCALE IN FEET

PROTECT MONITORING WELLS DURING CONSTRUCTION (TYP)

PHASE II SECTION II (FUTURE CONSTRUCTION)

20-MIL VFPE RAINTARP (PUMP RAINWATER INTO PERIMETER DITCHES)

3 FT HIGH COMPACTED RAIN SEPARATION BERM (COVER WITH RAINTARP) 3:1 SIDESLOPE, 2 FT TOP WIDTH

TOP OF DRAINAGE SAND ELEVATIONS (TYP)

TYP. STORMWATER BERMS SEE DETAIL 5 OP3 22

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1 OP3 22

PHASE I/II EDGE OF LINER SEE DETAIL 4 OP3 18

TOP OF INTERMEDIATE COVER ELEVATIONS SHOWN

ACTIVE FILL AREA

1 OP3 18 SOUTH EDGE OF LINER SEE DETAIL

PROTECT ALL SLOPES WITH 6-IN (MIN) OF MULCH; SEED IF NEEDED. (TYP OF ALL SLOPES)

PHASE II SECTION I
TOTAL FILL APPROX. 3 AC

TYP. WORKING FACE BERM; 2:1 SIDESLOPE, 2 FT TOP WIDTH; COMPACTED GENERAL FILL

EXIST. LANDFILL (PHASE I)

C OP3 17

TYP. STORMWATER DOWNLET SEE DETAIL 3 OP3 22

A OP3 16

B OP3 16

D OP3 17

E OP3 17

3 OP3 18 EAST EDGE OF LINER SEE DETAIL

WETLAND DISCHARGE STRUCTURE SEE DETAIL 4 OP3 21

REMOVE EXIST. PIPE AND STRUCTURE

LEGEND

- TWO-WAY TRAFFIC FLOW
- ONE-WAY TRAFFIC FLOW
- FILL PROGRESSION DIRECTION
- SURFACE RUNOFF FLOW DIRECTION

TH-1 TH-2 TH-3 TH-4 TH-5 TH-6 TH-7

MW-1 MW-2 MW-3 MW-4 MW-5 MW-6 MW-7 MW-8 MW-9 MW-10 MW-11 MW-12

GP-4R GP-5R GP-6R GP-7R GP-8R

P-16 P-17 P-18 P-19 P-20 P-21 P-22

W2-5 W2-6

JOSEPH H. O'NEIL, P.E.
STATE OF FLORIDA
No. 53049
PROFESSIONAL ENGINEER
CERTIFICATE NO. 53049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 3

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 20 2005
SOUTHWEST DISTRICT TAMPA

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.	DWN.: BY:	CHK.: BY:	APP.: BY:
09199033.09	JHO	JHO	CEH
DSN. BY: JHO			

CADD FILE: 993309OPS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. OP 3 of 27

PROPERTY LIMIT (TYP)

SCALE IN FEET: 60 0 60 120

PROTECT MONITORING WELLS DURING CONSTRUCTION (TYP)

20-MIL VFPE RAINTARP (PUMP RAINWATER INTO PERIMETER DITCHES)

3 FT HIGH COMPACTED RAIN SEPARATION BERM (COVER WITH RAINTARP) 3:1 SIDESLOPE, 2 FT TOP WIDTH

PHASE II SECTION II (FUTURE CONSTRUCTION)

TOP OF DRAINAGE SAND ELEVATIONS (TYP)

TYP. STORMWATER BERMS SEE DETAIL 5 / OP4 22

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1 / OP4 22

ACTIVE FILL AREA

TYP. WORKING FACE BERM; 2:1 SIDESLOPE, 2 FT TOP WIDTH; COMPACTED GENERAL FILL

TOP OF INTERMEDIATE COVER ELEVATIONS SHOWN

PHASE I/II EDGE OF LINER SEE DETAIL 4 / OP4 18

EXIST. LANDFILL (PHASE I)

TYP. STORMWATER DOWNLET SEE DETAIL 3 / OP4 22

PHASE II SECTION I TOTAL FILL APPROX. 4 AC

1 / OP4 18 SOUTH EDGE OF LINER SEE DETAIL

PROTECT ALL SLOPES WITH 6-IN (MIN) OF MULCH; SEED IF NEEDED. (TYP OF ALL SLOPES)

3 / OP4 18 EAST EDGE OF LINER SEE DETAIL

WETLAND DISCHARGE STRUCTURE SEE DETAIL 4 / OP4 21

REMOVE EXIST. PIPE AND STRUCTURE

LEGEND

- TWO-WAY TRAFFIC FLOW
- ONE-WAY TRAFFIC FLOW
- FILL PROGRESSION DIRECTION
- SURFACE RUNOFF FLOW DIRECTION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 23 2005
SOUTHWEST DISTRICT TAMPA

JOSEPH H. JONES, P.E. CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 4

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

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) 623-4707
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJECT NO.	DWN. BY:	CHK. BY:	APP. BY:
09199033.09	JHO	JHO	CEH
DSN. BY: JHO			

O/A JHO/CEH

CADD FILE: 993309OPS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. OP 4 of 27

PROPERTY LIMIT (TYP)

SCALE IN FEET 60 0 60 120

PROTECT MONITORING WELLS DURING CONSTRUCTION (TYP)

20-MIL VFPE RAINTARP (PUMP RAINWATER INTO PERIMETER DITCHES)

PHASE II SECTION II (FUTURE CONSTRUCTION)

ACTIVE FILL AREA

TYP. WORKING FACE BERM; 2:1 SIDESLOPE, 2 FT TOP WIDTH; COMPACTED GENERAL FILL

TYP. STORMWATER BERMS SEE DETAIL 5/OP5 22

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1/OP5 22

TOP OF DRAINAGE SAND ELEVATIONS (TYP)

TOP OF INTERMEDIATE COVER ELEVATIONS SHOWN

PHASE II SECTION I TOTAL FILL APPROX. 4.3 AC

PHASE I/II EDGE OF LINER SEE DETAIL 4/18 OP5

EXIST. LANDFILL (PHASE I)

TYP. STORMWATER DOWNLET SEE DETAIL 3/22 OP5

1/18 OP5 SOUTH EDGE OF LINER SEE DETAIL

PROTECT ALL SLOPES WITH 6-IN (MIN) OF MULCH; SEED IF NEEDED. (TYP OF ALL SLOPES)

3/18 OP5 EAST EDGE OF LINER SEE DETAIL

WETLAND DISCHARGE STRUCTURE SEE DETAIL 4/21 OP5

REMOVE EXIST. PIPE AND STRUCTURE

A/16 OP5 B/16 OP5 C/17 OP5 D/17 OP5 E/17 OP5

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 23 2005
SOUTHWEST DISTRICT
TAMPA

REV	DATE	DESCRIPTION
1		
2		
3		
4		
5		
6		

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 5

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

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) 623-4757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO: 993033.09
DSN. BY: JHO
DWN. BY: JHO
CHK. BY: JHO
O/A RVW BY: JHO/CEH
APP. BY: CEH

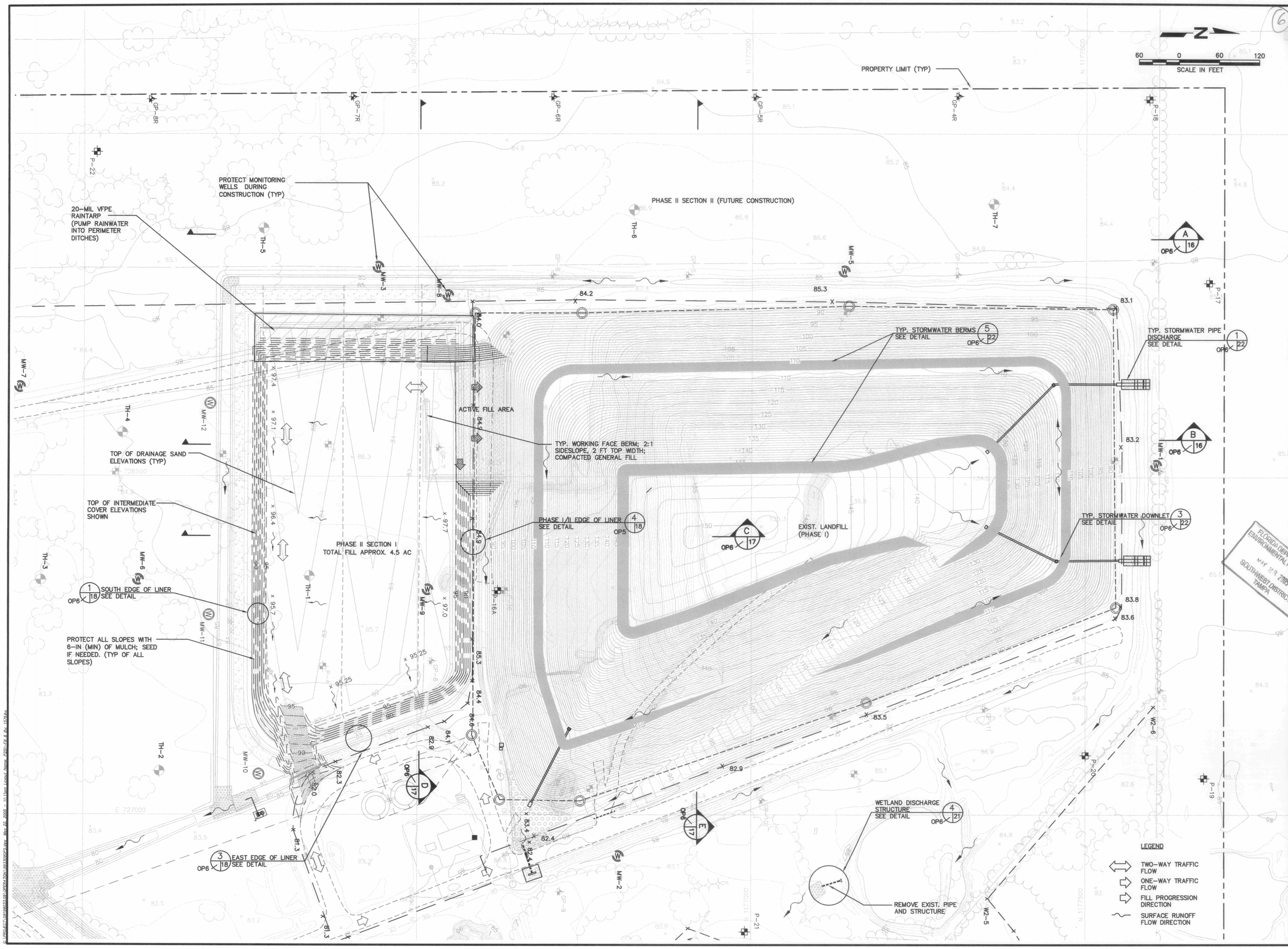
CADD FILE: 993309OPS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. OP 5 of 27

CHRISTOPHER E. HUSKA, P.E. STATE OF FLORIDA LICENSE No. 62053 PROFESSIONAL ENGINEER CERTIFICATE NO. 52049



6

JOSEPH C. PINELLI, P.E.
CERTIFICATE NO. 52049

REV	DATE	DESCRIPTION	BY

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 6

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

SCS ENGINEERS
STEARNS, CONRAD AND SCHMIDT CONSULTING ENGINEERS
3011 W. CYPRESS ST., SUITE 300, TAMPA, FL 33619
PH: (813) 621-0080 FAX NO. (813) 623-6757
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN. BY	D/A REVIEW BY	APP. BY
09199033.09	JHO	JHO/CEH	CEH
DSN. BY	CHK. BY		
JHO	JHO		

CADD FILE: 9933090PS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. **OP 6** of 27

N

60 0 60 120
SCALE IN FEET

PROPERTY LIMIT (TYP)

PROTECT MONITORING WELLS DURING CONSTRUCTION (TYP)

20-MIL VFPE RAINTARP (PUMP RAINWATER INTO PERIMETER DITCHES)

PHASE II SECTION II (FUTURE CONSTRUCTION)

TOP OF DRAINAGE SAND ELEVATIONS (TYP)

25 FT OFFSET (TERRACE)

TYP. STORMWATER BERMS SEE DETAIL 5 / 22 OP7

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1 / 22 OP7

TYP. STORMWATER DOWNLET SEE DETAIL 3 / 22 OP7

TYP. STORMWATER PIPE DISCHARGE SEE DETAIL 1 / 22 OP7

ACTIVE FILL AREA

TYP. WORKING FACE BERM; 2:1 SIDESLOPE, 2 FT TOP WIDTH; COMPACTED GENERAL FILL

PHASE II SECTION I
TOTAL FILL APPROX. 4.5 AC

EXIST. LANDFILL (PHASE I)

TYP. STORMWATER DOWNLET SEE DETAIL 3 / 22 OP7

SOUTH EDGE OF LINER SEE DETAIL 1 / 18 OP7

20 FT OFFSET (TERRACE)

TOP OF INTERMEDIATE COVER ELEVATIONS SHOWN

PROTECT ALL SLOPES WITH 6-IN (MIN) OF MULCH; SEED IF NEEDED. (TYP OF ALL SLOPES)

EAST EDGE OF LINER SEE DETAIL 3 / 18 OP7

WETLAND DISCHARGE STRUCTURE SEE DETAIL 4 / 21 OP7

REMOVE EXIST. PIPE AND STRUCTURE

LEGEND

- TWO-WAY TRAFFIC FLOW
- ONE-WAY TRAFFIC FLOW
- FILL PROGRESSION DIRECTION
- SURFACE RUNOFF FLOW DIRECTION

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
MAY 27 2005
SOUTHWEST DISTRICT TAMPA

REV	DATE	DESCRIPTION	BY

JOSEPH H. ONEAL, P.E.
CERTIFICATE NO. 52089

DRAWING TITLE: PHASE II - SECTION I FILL SEQUENCE NO. 7

PROJECT TITLE: HARDEE COUNTY LANDFILL OPERATIONS PLAN

CLIENT: HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

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) 622-6157
FLORIDA CERTIFICATE OF AUTHORIZATION NO. 00004892

PROJ. NO.	DWN: BY:	CHK: BY:	QA: BY:	APP: BY:
09199033.09	JHO	JHO	JHO/CEH	CEH
DSN. BY: JHO				

CADD FILE: 993309OPS

DATE: MAY 2005

SCALE: AS SHOWN

DRAWING NO. OP 7 of 27

G:\SCS\GAINS\09199033.09\CADD\OP\OP7A.DWG, 5/26/2005 1:24:14PM, Lenovo, HP5Si-PS 110, By: 15769