

**CELL #5
SITE INSPECTION REPORTS
PICTURES
TEST RESULTS
TEST LOCATION MAPS**

Project #: 80540-001-02

Prepared For:

Angelo's Aggregate Materials

Prepared By:

Universal Engineering Sciences
9802 Palm River Road
Tampa, Florida 33619
(813) 740-8506

Reviewed By,

Universal Engineering Sciences, Inc.
Cert. of Authorization No. 00000549

Mark K. Hardy P.E.

Tampa Branch Manager

Professional Engineer No. 57233

Date:



UNIVERSAL

ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

302 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

**Test Performed in Accordance
with the Following Test
procedures.**

Density's - ASTM D-2397
Standard Proctor - ASTM D-698
200 Wash - AASHTO T-11
Permeability - ASTM D-2434



UNIVERSAL

ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection

502 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

DADE CITY LANDFILL CELL #5

Sample #	Field Moisture	Permeability
1 - 1	5.40%	7.82 10 ⁻⁹
1 - 2	12.90%	4.09 10 ⁻⁹
1 - 3	12.50%	8.18 10 ⁻⁹
1 - 4	13.20%	7.82 10 ⁻⁹
1 - 5	10.30%	8.24 10 ⁻⁹
1 - 6	13.20%	4.18 10 ⁻⁹
1 - 7	5.40%	7.82 10 ⁻⁹
2 - 1	14.90%	3.49 10 ⁻⁹
2 - 2	12.50%	1.67 10 ⁻⁸
2 - 3	13.20%	3.47 10 ⁻⁹
2 - 4	13.40%	4.03 10 ⁻⁹
2 - 5	15.00%	6.41 10 ⁻⁹
2 - 6	11.70%	4.11 10 ⁻⁹
2 - 7	15.40%	3.47 10 ⁻⁹
3 - 1	13.40%	1.23 10 ⁻⁹
3 - 2	16.60%	3.93 10 ⁻⁹
3 - 3	14.10%	7.42 10 ⁻⁹
3 - 4	15.80%	1.64 10 ⁻⁹
3 - 5	5.40%	2.60 10 ⁻⁹
3 - 6	5%	1.23 10 ⁻⁹
3 - 7	5.40%	7.72 10 ⁻⁹

UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences

Construction Materials Testing • Threshold Inspection • Private Provider Inspection

302 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 10/11/2005

Project : Dade City Landfill

Work Order # : 14096

Project # : 80540-001-02

Technician : Mario

Report # : SI#1

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Cloudy

Compaction Equipment Used : 2 - Fully Loaded End Dumps Other Equipment in Use : 1 - Bull Dozer

1 - TrackHoe Excavator _____

Permeability and Density Test Performed

[illegible]

Photographs (explain activity for each)

[illegible]



UNIVERSAL ENGINEERING SCIENCES

**Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection**

802 Palm River Road • Tampa, Fl 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 10/12/2005

Project : Dade City Landfill

Work Order # : 14109

Project # : 80540-001-02

Technician : Mario

Report # : SI#2

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Cloudy

Compaction Equipment Used : 2 - Fully Loaded End Dumps Other Equipment in Use : 1 - Bull Dozer

Other Equipment in Use : 1 - Bull Dozer

1 - TrackHoe Excavator

Permeability and Density Test Performed

Location	% Compaction	Permeability	200 wash
1 - 2	110.9%	10 -9	53.9%
1 - 3	112.5%	10 -9	51.6%
1 - 4	112.7%	10 -9	50.9%

Photographs (explain activity for each)

[illegible]





UNIVERSAL ENGINEERING SCIENCES

**Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection**

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 10/14/2005

Project : Dade City Landfill

Work Order # : 14141

Project # : 80540-001-02

Technician : Mario

Report # : SI#4

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 2

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps Other Equipment in Use : 1 - Bull Dozer

1 - TrackHoe Excavator

Permeability and Density Test Performed

[illegible]

Photographs (explain activity for each)

[illegible]





UNIVERSAL ENGINEERING SCIENCES

**Consultants in: Geotechnical Engineering • Environmental Sciences
Construction Materials Testing • Threshold Inspection • Private Provider Inspection**

9802 Palm River Road • Tampa, Fl 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 10/18/2005

Project : Dade City Landfill

Work Order # : 14178

Project # : 80540-001-02

Technician : Mario

Report # : SI#6

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 1 & 2

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - Fully Loaded End Dumps Other Equipment in Use : 1 - Bull Dozer

1 - TrackHoe Excavator

Permeability and Density Test Performed

Location	% Compaction	Permeability	200 wash
2 - 1	120.4%	10 -9	46.1%
2 - 2	114.4%	10 -8	42.3%
2 - 3	117.9%	10 -9	62.8%

Photographs (explain activity for each)

[illegible]

DEP
FEB 03 2006
SOUTHWEST DISTRICT





Construction Materials Testing • Threshold Inspection • Private Provider Inspection

9802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Report # : SI#7

Construction Activity Observed

Weather : Clear

1 - End Dump

Permeability and Density Test Performed

Photographs (explain activity for each)

Photo #		
---------	--	--















9802 Palm River Road • Tampa, Fl 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Report # : SI#11

Weather : Clear

1 - End Dump

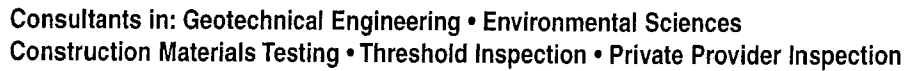
200 wash

[illegible]







[illegible]









DEP
FEB 03 2006
SOUTHWEST DISTRICT













8802 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Date: 11/18/2005

Work Order # : 14540

Technician : Mario

Report # : SI#19

Area Constructed : Cell # 5

Material Used : Clay

Lift # 1

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - End Dumps fully loaded Other Equipment in Use : 1 - TrackHoe Excavator

1 - Bull Dozer

Location	% Compaction	Permeability	200 wash
1 - 7	121.3	10 -9	52.4%

[illegible]

UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences

Construction Materials Testing • Threshold Inspection • Private Provider Inspection

302 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 11/19/2005

Project : Dade City Landfill

Work Order # : 14544

Project # : 80540-001-02

Technician : Mario

Report # : SI#20

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 2

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - End Dumps fully loaded Other Equipment in Use : 1 - TrackHoe Excavator

1 - Bull Dozer

Permeability and Density Test Performed

Location	% Compaction	Permeability	200 wash
2 - 7	127.4	10 -9	54%

Photographs (explain activity for each)

[illegible]



Construction Materials Testing • Threshold Inspection • Private Provider Inspection

302 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Date: 11/21/2005

Work Order # : 14545

Technician : Mario

Report # : SI#21

Construction Activity Observed

Material Used : Clay

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - End Dumps fully loaded Other Equipment in Use : 1 - TrackHoe Excavator

1 - Bull Dozer

Permeability and Density Test Performed

Location	% Compaction	Permeability	200 wash
----------	--------------	--------------	----------

2 - 5	129.2	10 - 9	47.9%
-------	-------	--------	-------

Photographs (explain activity for each)

Photo #	21A	Bull Dozer pushing material for third lift. (Facing South)
---------	-----	--

Photo #	22A	End Dump unloading material for third lift, and contractor checking grade. (Facing South)
---------	-----	---

Photo #	23A	TrackHoe loading end dump with material for third lift. (Facing South)
---------	-----	--

Photo #	

Photo #	
---------	--

Photo #	
---------	--

Photo #	
---------	--

Photo #	

Photo #	
---------	--

Photo #	

Photo #	
---------	--







UNIVERSAL

ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences

Construction Materials Testing • Threshold Inspection • Private Provider Inspection

302 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 11/23/2005Project : Dade City Landfill

Work Order # : 14570

Project # : 80540-001-02

Technician : Mario

Report # : SI#23

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 1 & 3

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : _____ Other Equipment in Use : 1 - TrackHoe Excavator

1 - Bull Dozer

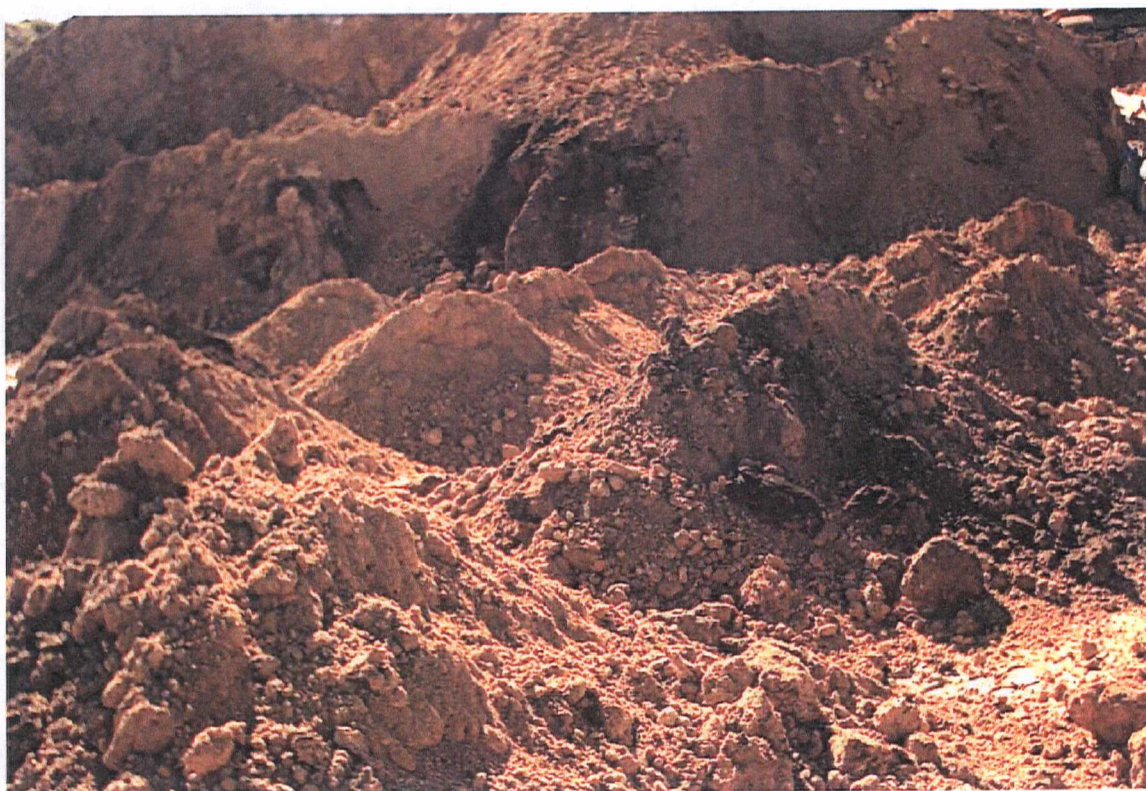
2 - End Dumps

Permeability and Density Test Performed

Location	% Compaction	Permeability	200 wash
1 - 1	104.7	10 -9	46.3%

Photographs (explain activity for each)

[illegible]







UNIVERSAL ENGINEERING SCIENCES

Consultants in: Geotechnical Engineering • Environmental Sciences

Construction Materials Testing • Threshold Inspection • Private Provider Inspection

302 Palm River Road • Tampa, FL 33619-4438 • (813) 740-8506 • Fax (813) 740-8706

Client : Angelo's Aggregate Materials

Date: 11/28/2005

Project : Dade City Landfill

Work Order # : 14601

Project # : 80540-001-02

Technician : Mario

Report # : SI#24

Construction Activity Observed

Area Constructed : Cell # 5

Material Used : Clay

Lift # 3

Lift Thickness : 12"

Weather : Clear

Compaction Equipment Used : 2 - End Dumps Fully Loaded Other Equipment in Use : 1 - TrackHoe Excavator

1 - Trash Compactor	1 - Bull Dozer
---------------------	----------------

Permeability and Density Test Performed

Location	% Compaction	Permeability	200 wash
3 - 6	112.2	10 -8	47.8%
3 - 7	112.6	10 -9	42%
3 - 5	105.1	10 -9	37.9%
3 - 1	108.5	10 -9	55.7%

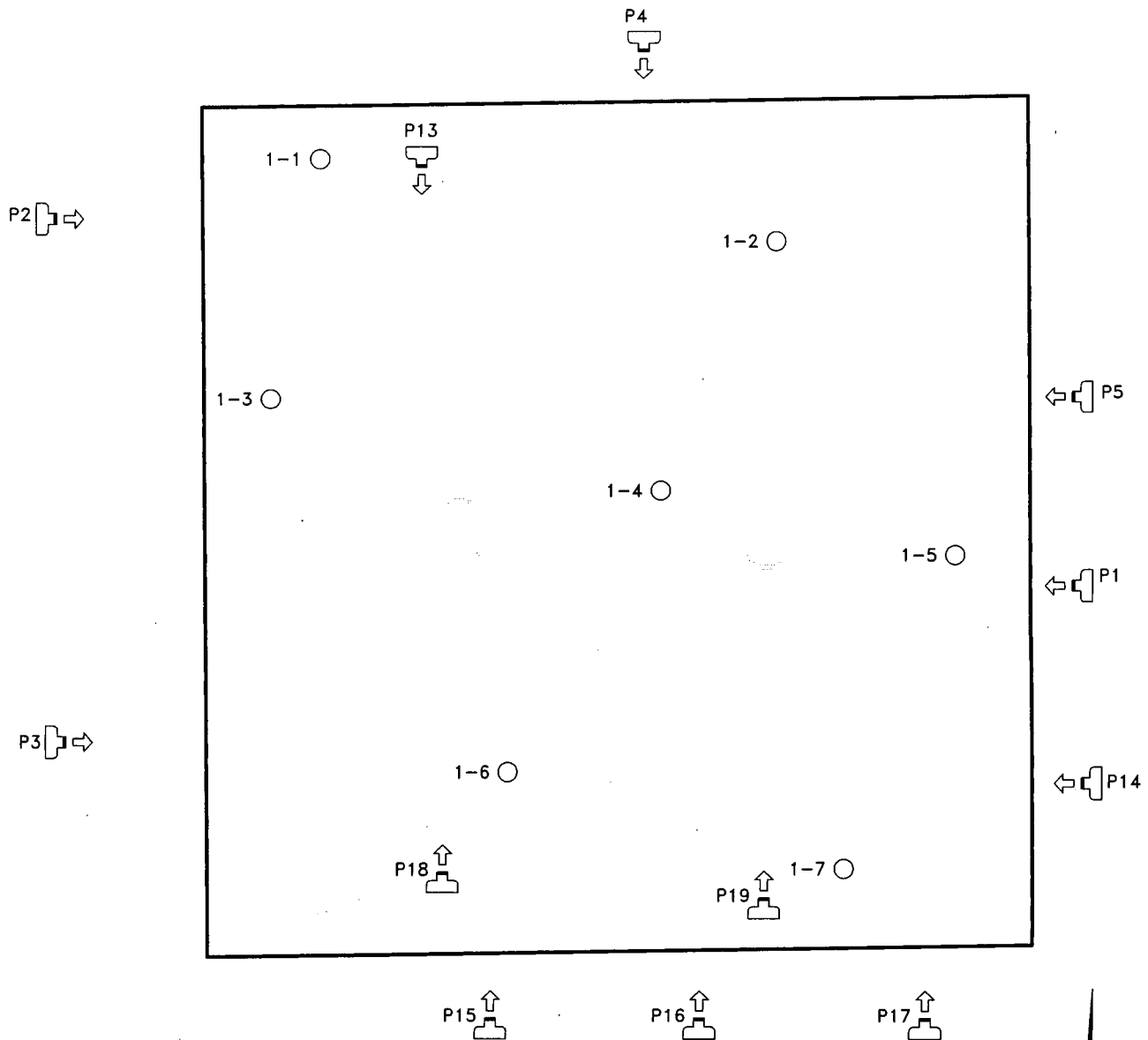
Photographs (explain activity for each)

[illegible]









LEGEND:

- 1-1 ○ LIFT #1 PERM TEST LOCATION & TEST NUMBER
- 2-1 △ LIFT #2 PERM TEST LOCATION & TEST NUMBER
- 3-1 ⊕ LIFT #3 PERM TEST LOCATION & TEST NUMBER
- P1 ↑ APPROXIMATE PHOTO DIRECTION LOCATION

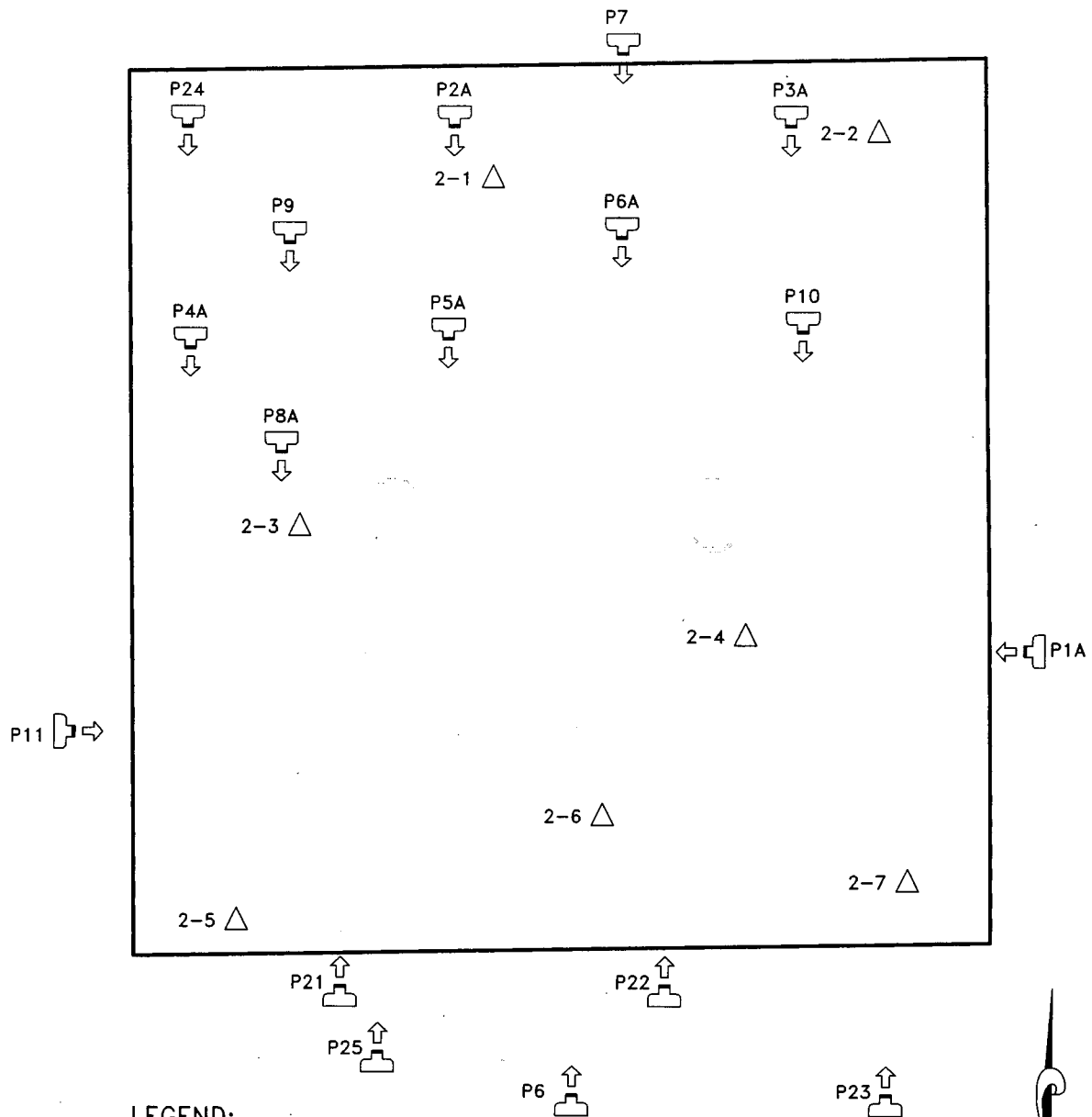


UNIVERSAL
ENGINEERING SCIENCES

DADE CITY LANDFILL - CELL 5
ENTERPRISE ROAD
DADE CITY, PASCO COUNTY, FLORIDA

PERMEABILITY TEST LOCATIONS

DRAWN BY: J.C.	DATE: JAN. 25, 2006	CHECKED BY: C.H.	DATE: JAN. 25, 2006
SCALE: NOT TO SCALE	PROJECT NO: 80540-001-02	REPORT NO:	APPENDIX:



LEGEND:

- 1-1 ○ LIFT #1 PERM TEST LOCATION & TEST NUMBER
- 2-1 △ LIFT #2 PERM TEST LOCATION & TEST NUMBER
- 3-1 ⊕ LIFT #3 PERM TEST LOCATION & TEST NUMBER
- P1 ↑ APPROXIMATE PHOTO DIRECTION LOCATION

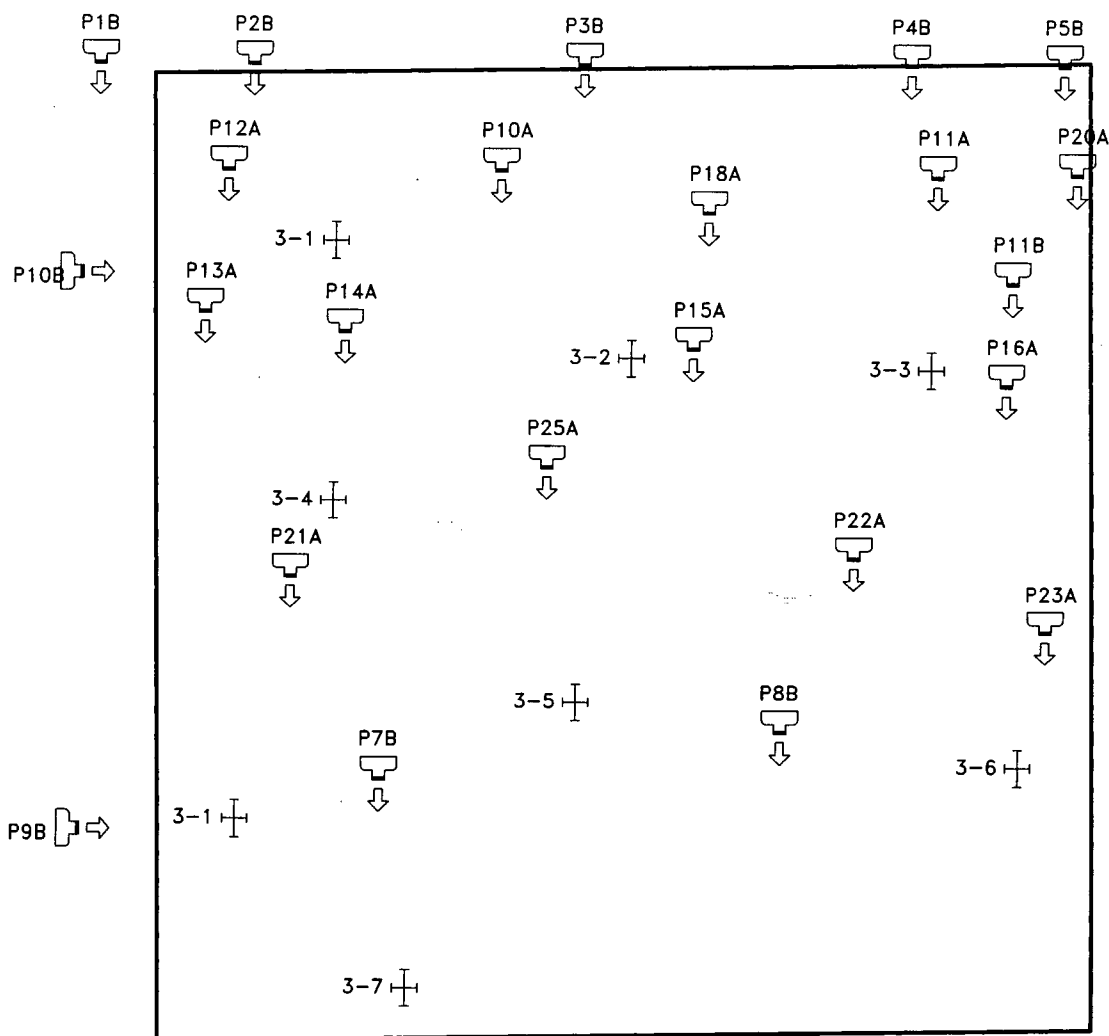


UNIVERSAL
ENGINEERING SCIENCES

DADE CITY LANDFILL - CELL 5
ENTERPRISE ROAD
DADE CITY, PASCO COUNTY, FLORIDA

PERMEABILITY TEST LOCATIONS

DRAWN BY: J.C.	DATE: JAN. 25, 2006	CHECKED BY: C.H.	DATE: JAN. 25, 2006
SCALE: NOT TO SCALE	PROJECT NO: 80540-001-02	REPORT NO:	APPENDIX:



LEGEND:

- 1-1 ○ LIFT #1 PERM TEST LOCATION & TEST NUMBER
- 2-1 △ LIFT #2 PERM TEST LOCATION & TEST NUMBER
- 3-1 ⊕ LIFT #3 PERM TEST LOCATION & TEST NUMBER
- P1 ↑ APPROXIMATE PHOTO DIRECTION LOCATION



UNIVERSAL
ENGINEERING SCIENCES

DADE CITY LANDFILL - CELL 5
ENTERPRISE ROAD
DADE CITY, PASCO COUNTY, FLORIDA

PERMEABILITY TEST LOCATIONS

DRAWN BY: J.C.	DATE: JAN. 25, 2006	CHECKED BY: C.H.	DATE: JAN. 25, 2006
SCALE: NOT TO SCALE	PROJECT NO: 80540-001-02	REPORT NO:	APPENDIX: