IHSS GROUP 000-5
PRESENT LANDFILL (IHSS-114)

ACCELERATED ACTION FOR THE PRESENT LANDFILL ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE CONSTRUCTION CERTIFICATION REPORT

ATTACHMENT A OF THE FINAL CLOSEOUT REPORT

VOLUME V

Prepared for:

KAISER-HILL COMPANY, LLC
ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
12101 Airport Way, Unit B
Broomfield, CO 80021-2583

Prepared by:

TETRA TECH, INC.
1900 South Sunset Street, Suite 1-F
Longmont, Colorado 80501

Tetra Tech Job No. 19-4886.001.00

September 2005

RECEIVED
OCT 12 2005

TETRA TECH, INC.

ADMIN RECORD

Tetra Tech, Inc. is an Equal Opportunity Employer

Y/323

KAISER•HILL
COMPANY

Final Closeout Report for IHSS Group 000-5 Present Landfill (IHSS-114)

Volume V

Environmental Restoration
Rocky Flats Environmental
Technology Site

September 2005

APPENDIX H

HOLD POINT/RELEASE DOCUMENTATION

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of Re-Grade Surface for 6" Cushion Soil Placement

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 10-19-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting See Map Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

Robert N. Davis
CTR SIGNATURE — DATE 10/28/04

[signature]
CQAE SIGNATURE (or Representative) — DATE 10-19-04

[signature]
QCSM SIGNATURE (or Representative) — DATE 10-19-04

NA
COLORADO LINING — DATE

ION CONTROL POINTS

EAST COORDINATE	DESIGN ELEVATION
20400.0	+ 5983.4'
20400.0	+ 5986.3'
20400.0	+ 5989.3'
20400.0	+ 5983.9'
[illegible]	+ 5983.6'
[illegible]	+ 5982.0'
[illegible]	+ 5978.9'
20500.0	+ 5980.2'
20500.0	+ 5981.7'
20500.0	+ 5983.2'
20500.0	● 5984.9'
20500.0	+ 5983.6'
20600.0	+ 5980.9'
20600.0	+ 5981.1'
20600.0	+ 5979.5'
20600.0	+ 5978.0'
20600.0	+ 5976.5'
20600.0	+ 5975.6'
20600.0	+ 5975.0'
20600.0	+ 5974.8'
20700.0	+ 5971.1'
20700.0	+ 5971.3'
20700.0	● 5971.6'
20700.0	+ 5972.8'
20700.0	+ 5974.3'
20700.0	+ 5975.8'
20700.0	+ 5977.4'
20800.0	+ 5973.7'
20800.0	+ 5972.1'
20800.0	+ 5970.6'
20800.0	+ 5967.1'
20900.0	+ 5963.1'
20900.0	+ 5968.4'
20900.0	+ 5970.4'
21000.0	+ 5965.7'
21100.0	+ 5965.1'
19550.0	+ 5994.3'
19550.0	+ 5994.6'
19550.0	+ 5992.6'
19600.0	+ 5993.4'
19600.0	● 5994.4'
19650.0	+ 5992.6'
19650.0	+ 5994.6'
19650.0	+ 5996.5'
19650.0	+ 5994.2'
19650.0	+ 5992.3'
19650.0	+ 5990.5'
19700.0	+ 5991.2'
19700.0	● 5995.1'
19700.0	+ 5994.7'
19750.0	+ 5992.9'
19750.0	+ 5994.9'
19750.0	+ 5996.9'
19750.0	+ 5992.0'
19750.0	+ 5990.1'
19750.0	● 5988.3'
19800.0	+ 5989.1'
19800.0	+ 5992.7'
19800.0	● 5995.0'
19800.0	+ 5990.9'
19850.0	+ 5991.0'
19850.0	+ 5993.2'
19850.0	+ 5995.2'
[illegible]	● 5997.2'
[illegible]	+ 5991.7'
[illegible]	+ 5989.8'
[illegible]	+ 5988.0'
19850.0	+ 5986.1'
19900.0	+ 5986.9'
19900.0	+ 5990.6'
19900.0	+ 5995.3'
19900.0	+ 5991.0'
19950.0	+ 5991.2'
19950.0	+ 5994.9'
19950.0	+ 5996.7'
19950.0	+ 5989.5'
19950.0	+ 5987.6'
19950.0	● 5985.8'
20000.0	+ 5984.7'
20000.0	● 5988.4'
20000.0	+ 5997.8'
20000.0	+ 5994.1'
20000.0	+ 5990.4'
20050.0	● 5989.6'
20050.0	+ 5991.5'
20050.0	+ 5993.3'
20050.0	● 5995.2'
20050.0	+ 5997.0'
20050.0	+ 5989.1'
20050.0	+ 5987.1'
20050.0	● 5985.1'
20100.0	+ 5985.5'
20100.0	+ 5989.5'
20100.0	● 5995.9'
20100.0	+ 5992.6'
20100.0	+ 5988.9'
20150.0	+ 5988.1'
20150.0	● 5990.0'
20150.0	+ 5991.6'
20150.0	+ 5993.1'
20150.0	+ 5994.6'
20150.0	+ 5989.9'
20150.0	● 5987.9'
20150.0	+ 5985.9'
20150.0	+ 5983.9'
20150.0	+ 5981.9'
20200.0	● 5982.4'
20200.0	+ 5986.3'
20200.0	+ 5990.3'
20200.0	+ 5993.2'
20200.0	+ 5990.3'
20200.0	+ 5987.0'
20250.0	+ 5987.4'
20250.0	+ 5988.9'
20250.0	+ 5990.4'
20250.0	+ 5991.9'
20250.0	+ 5990.7'
20250.0	+ 5988.7'
20250.0	+ 5986.8'
20250.0	● 5984.8'
20250.0	+ 5982.8'
20250.0	+ 5980.8'
[illegible]	+ 5979.2'
[illegible]	+ 5983.2'
[illegible]	+ 5987.2'
[illegible]	+ 5989.4'
20300.0	+ 5990.5'
20300.0	+ 5987.6'
20350.0	+ 5984.7'
20350.0	+ 5986.2'
20350.0	+ 5987.7'
20350.0	+ 5989.2'

CONSTRUCTION CONTROL POINTS

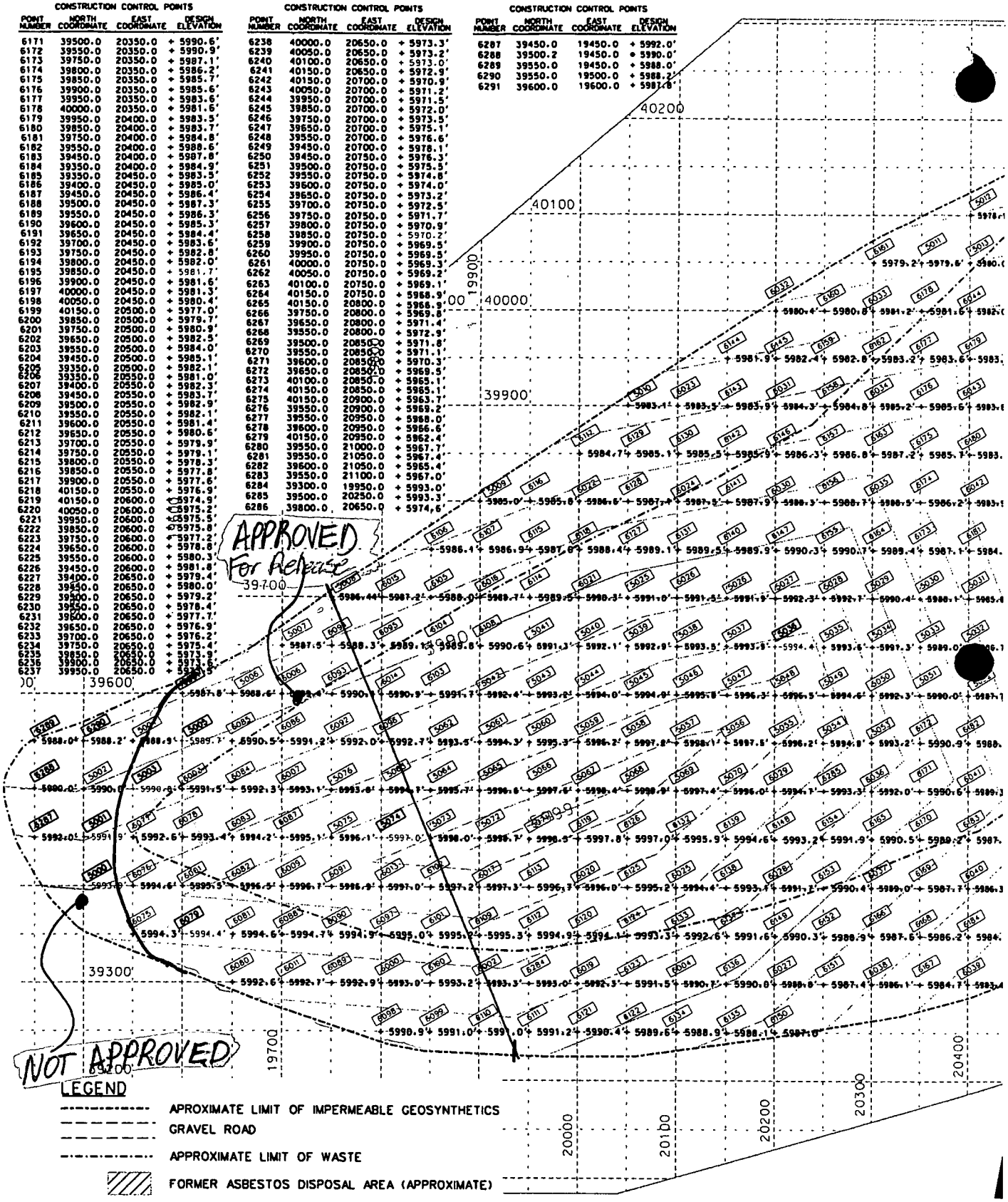
POINT NUMBER	NORTH COORDINATE	EAST COORDINATE	DESIGN ELEVATION
6171	39500.0	20350.0	+ 5990.6'
6172	39550.0	20350.0	+ 5990.9'
6173	39750.0	20350.0	+ 5987.1'
6174	39800.0	20350.0	+ 5986.2'
6175	39850.0	20350.0	+ 5985.7'
6176	39900.0	20350.0	+ 5985.6'
6177	39950.0	20350.0	+ 5983.6'
6178	40000.0	20350.0	+ 5981.6'
6179	39950.0	20400.0	+ 5983.5'
6180	39850.0	20400.0	+ 5983.7'
6181	39750.0	20400.0	+ 5984.8'
6182	39550.0	20400.0	+ 5988.6'
6183	39450.0	20400.0	+ 5987.8'
6184	39350.0	20400.0	+ 5984.9'
6185	39350.0	20450.0	+ 5983.5'
6186	39400.0	20450.0	+ 5985.0'
6187	39450.0	20450.0	+ 5986.4'
6188	39500.0	20450.0	+ 5987.3'
6189	39550.0	20450.0	+ 5986.3'
6190	39600.0	20450.0	+ 5985.3'
6191	39650.0	20450.0	+ 5984.4'
6192	39700.0	20450.0	+ 5983.6'
6193	39750.0	20450.0	+ 5982.8'
6194	39800.0	20450.0	+ 5982.0'
6195	39850.0	20450.0	+ 5981.7'
6196	39900.0	20450.0	+ 5981.6'
6197	40000.0	20450.0	+ 5981.3'
6198	40050.0	20450.0	+ 5980.4'
6199	40150.0	20500.0	+ 5977.0'
6200	39850.0	20500.0	+ 5979.7'
6201	39750.0	20500.0	+ 5980.9'
6202	39650.0	20500.0	+ 5982.5'
6203	39550.0	20500.0	+ 5984.0'
6204	39450.0	20500.0	+ 5985.1'
6205	39350.0	20500.0	+ 5982.1'
6206	39350.0	20550.0	+ 5981.0'
6207	39400.0	20550.0	+ 5982.3'
6208	39450.0	20550.0	+ 5983.7'
6209	39500.0	20550.0	+ 5982.9'
6210	39550.0	20550.0	+ 5982.1'
6211	39600.0	20550.0	+ 5981.4'
6212	39650.0	20550.0	+ 5980.6'
6213	39700.0	20550.0	+ 5979.9'
6214	39750.0	20550.0	+ 5979.1'
6215	39800.0	20550.0	+ 5978.3'
6216	39850.0	20550.0	+ 5977.8'
6217	39900.0	20550.0	+ 5977.6'
6218	40150.0	20550.0	+ 5976.9'
6219	40150.0	20600.0	+ 5974.9'
6220	40050.0	20600.0	+ 5975.2'
6221	39950.0	20600.0	+ 5975.5'
6222	39850.0	20600.0	+ 5975.8'
6223	39750.0	20600.0	+ 5977.2'
6224	39650.0	20600.0	+ 5978.8'
6225	39550.0	20600.0	+ 5980.3'
6226	39450.0	20600.0	+ 5981.8'
6227	39400.0	20650.0	+ 5979.4'
6228	39450.0	20650.0	+ 5980.0'
6229	39500.0	20650.0	+ 5979.2'
6230	39550.0	20650.0	+ 5978.4'
6231	39600.0	20650.0	+ 5977.7'
6232	39650.0	20650.0	+ 5976.9'
6233	39700.0	20650.0	+ 5976.2'
6234	39750.0	20650.0	+ 5975.4'
6235	39850.0	20650.0	+ 5973.9'
6236	39900.0	20650.0	+ 5973.6'
6237	39950.0	20650.0	+ 5973.3'

CONSTRUCTION CONTROL POINTS

POINT NUMBER	NORTH COORDINATE	EAST COORDINATE	DESIGN ELEVATION
6238	40000.0	20650.0	+ 5973.3'
6239	40050.0	20650.0	+ 5973.2'
6240	40100.0	20650.0	+ 5973.0'
6241	40150.0	20650.0	+ 5972.9'
6242	40150.0	20700.0	+ 5970.9'
6243	40050.0	20700.0	+ 5971.2'
6244	39950.0	20700.0	+ 5971.5'
6245	39850.0	20700.0	+ 5972.0'
6246	39750.0	20700.0	+ 5973.5'
6247	39650.0	20700.0	+ 5975.1'
6248	39550.0	20700.0	+ 5976.6'
6249	39450.0	20700.0	+ 5978.1'
6250	39450.0	20750.0	+ 5976.3'
6251	39500.0	20750.0	+ 5975.5'
6252	39550.0	20750.0	+ 5974.8'
6253	39600.0	20750.0	+ 5974.0'
6254	39650.0	20750.0	+ 5973.2'
6255	39700.0	20750.0	+ 5972.5'
6256	39750.0	20750.0	+ 5971.7'
6257	39800.0	20750.0	+ 5970.9'
6258	39850.0	20750.0	+ 5970.2'
6259	39900.0	20750.0	+ 5969.5'
6260	39950.0	20750.0	+ 5969.5'
6261	40000.0	20750.0	+ 5969.3'
6262	40050.0	20750.0	+ 5969.2'
6263	40100.0	20750.0	+ 5969.1'
6264	40150.0	20750.0	+ 5968.9'
6265	40150.0	20800.0	+ 5966.9'
6266	39750.0	20800.0	+ 5969.8'
6267	39650.0	20800.0	+ 5971.4'
6268	39550.0	20800.0	+ 5972.9'
6269	39500.0	20850.0	+ 5971.8'
6270	39550.0	20850.0	+ 5971.1'
6271	39600.0	20850.0	+ 5970.3'
6272	39650.0	20850.0	+ 5969.5'
6273	40100.0	20850.0	+ 5965.1'
6274	40150.0	20850.0	+ 5965.1'
6275	40150.0	20900.0	+ 5963.7'
6276	39550.0	20900.0	+ 5969.2'
6277	39550.0	20950.0	+ 5968.0'
6278	39600.0	20950.0	+ 5966.6'
6279	40150.0	20950.0	+ 5962.4'
6280	39550.0	21000.0	+ 5967.7'
6281	39550.0	21050.0	+ 5967.4'
6282	39600.0	21050.0	+ 5965.4'
6283	39550.0	21100.0	+ 5967.0'
6284	39300.0	19950.0	+ 5993.0'
6285	39500.0	20250.0	+ 5993.3'
6286	39800.0	20650.0	+ 5974.6'

CONSTRUCTION CONTROL POINTS

POINT NUMBER	NORTH COORDINATE	EAST COORDINATE	DESIGN ELEVATION
6287	39450.0	19450.0	+ 5992.0'
6288	39500.2	19450.0	● 5990.0'
6289	39550.0	19450.0	+ 5988.0'
6290	39550.0	19500.0	+ 5988.2'
6291	39600.0	19600.0	+ 5981.8'



LEGEND

- APROXIMATE LIMIT OF IMPERMEABLE GEOSYNTHETICS
- GRAVEL ROAD
- APPROXIMATE LIMIT OF WASTE
- FORMER ASBESTOS DISPOSAL AREA (APPROXIMATE)
- 10 FOOT CONTOUR
- 2 FOOT CONTOUR
- GRID COORDINATE SYSTEM (N 20500, E 20000)
- CONTROL POINT NUMBER (5000)
- + 5992.6' CONTROL POINT ELEVATION

0'

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 10-25-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting See Map Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — 10/26/04
CTR SIGNATURE — DATE

10-25-04
CQAE SIGNATURE (or Representative) — DATE

10-25-04
QCSM SIGNATURE (or Representative) — DATE

NA
COLORADO LINING — DATE

ION CONTROL POINTS

EAST COORDINATE	DESIGN ELEVATION
20400.0	+ 5983.4'
20400.0	+ 5986.3'
20400.0	+ 5988.3'
20[illegible]	+ 5983.9'
2[illegible]	+ 5983.6'
2[illegible]	+ 5982.0'
20[illegible]	+ 5978.9'
20500.0	+ 5980.2'
20500.0	+ 5981.7'
20500.0	+ 5983.2'
20500.0	+ 5984.9'
20500.0	+ 5983.6'
20600.0	+ 5980.9'
20600.0	+ 5981.1'
20600.0	+ 5979.5'
20600.0	+ 5978.0'
20600.0	+ 5976.5'
20600.0	+ 5975.6'
20600.0	+ 5975.0'
20600.0	+ 5974.8'
20700.0	+ 5971.1'
20700.0	+ 5971.3'
20700.0	+ 5971.6'
20700.0	+ 5972.8'
20700.0	+ 5974.3'
20700.0	+ 5975.8'
20700.0	+ 5977.4'
20800.0	+ 5973.7'
20800.0	+ 5972.1'
20800.0	+ 5970.6'
20800.0	+ 5967.1'
20900.0	+ 5963.1'
20900.0	+ 5968.4'
20900.0	+ 5970.4'
21000.0	+ 5965.7'
21100.0	+ 5965.1'
19550.0	+ 5994.3'
19550.0	+ 5994.6'
19550.0	+ 5992.6'
19600.0	+ 5993.4'
19600.0	+ 5994.4'
19650.0	+ 5992.6'
19650.0	+ 5994.6'
19650.0	+ 5996.5'
19650.0	+ 5994.2'
19650.0	+ 5992.3'
19650.0	+ 5990.5'
19700.0	+ 5991.2'
19700.0	+ 5995.1'
19700.0	+ 5994.7'
19750.0	+ 5992.9'
19750.0	+ 5994.9'
19750.0	+ 5996.9'
19750.0	+ 5992.0'
19750.0	+ 5990.1'
19750.0	+ 5988.3'
19800.0	+ 5989.1'
19800.0	+ 5992.7'
19800.0	+ 5995.0'
19800.0	+ 5990.9'
19850.0	+ 5991.0'
19850.0	+ 5993.2'
19[illegible]	+ 5995.2'
1[illegible]	+ 5997.2'
1[illegible]	+ 5991.7'
19[illegible]	+ 5989.8'
19850.0	+ 5988.0'
19850.0	+ 5986.1'
19900.0	+ 5986.9'
19900.0	+ 5990.6'
19900.0	+ 5995.3'
19900.0	+ 5991.0'
19950.0	+ 5991.2'
19950.0	+ 5994.9'
19950.0	+ 5996.7'
19950.0	+ 5989.5'
19950.0	+ 5987.6'
19950.0	+ 5985.8'
20000.0	+ 5984.7'
20000.0	+ 5988.4'
20000.0	+ 5997.8'
20000.0	+ 5994.1'
20000.0	+ 5990.4'
20050.0	+ 5989.6'
20050.0	+ 5991.5'
20050.0	+ 5993.3'
20050.0	+ 5995.2'
20050.0	+ 5997.0'
20050.0	+ 5989.1'
20050.0	+ 5987.1'
20050.0	+ 5985.1'
20100.0	+ 5985.5'
20100.0	+ 5989.5'
20100.0	+ 5995.9'
20100.0	+ 5992.6'
20100.0	+ 5988.9'
20150.0	+ 5988.1'
20150.0	+ 5990.0'
20150.0	+ 5991.6'
20150.0	+ 5993.1'
20150.0	+ 5994.6'
20150.0	+ 5989.9'
20150.0	+ 5987.9'
20150.0	+ 5985.9'
20150.0	+ 598[illegible]
20150.0	+ 598[illegible]
20200.0	+ 5982
20200.0	+ 5986
20200.0	+ 5990
20200.0	+ 599[illegible]
20200.0	+ 5991
20200.0	+ 5987
20250.0	+ 5987
20250.0	+ 5988.
20250.0	+ 5990.
20250.0	+ 5991.5
20250.0	+ 5990.7
20250.0	+ 5988.7'
20250.0	+ 5986.8'
20250.0	+ 5984.8'
20250.0	+ 5982.8'
207[illegible]	+ 5980.8'
20[illegible]	+ 5979.2'
20[illegible]	+ 5983.2'
203[illegible]	+ 5987.2'
20300.0	+ 5989.4'
20300.0	+ 5990.5'
20300.0	+ 5987.6'
20350.0	+ 5984.7'
20350.0	+ 5986.2'
20350.0	+ 5987.7'
20350.0	+ 5989.2'

CONSTRUCTION CONTROL POINTS

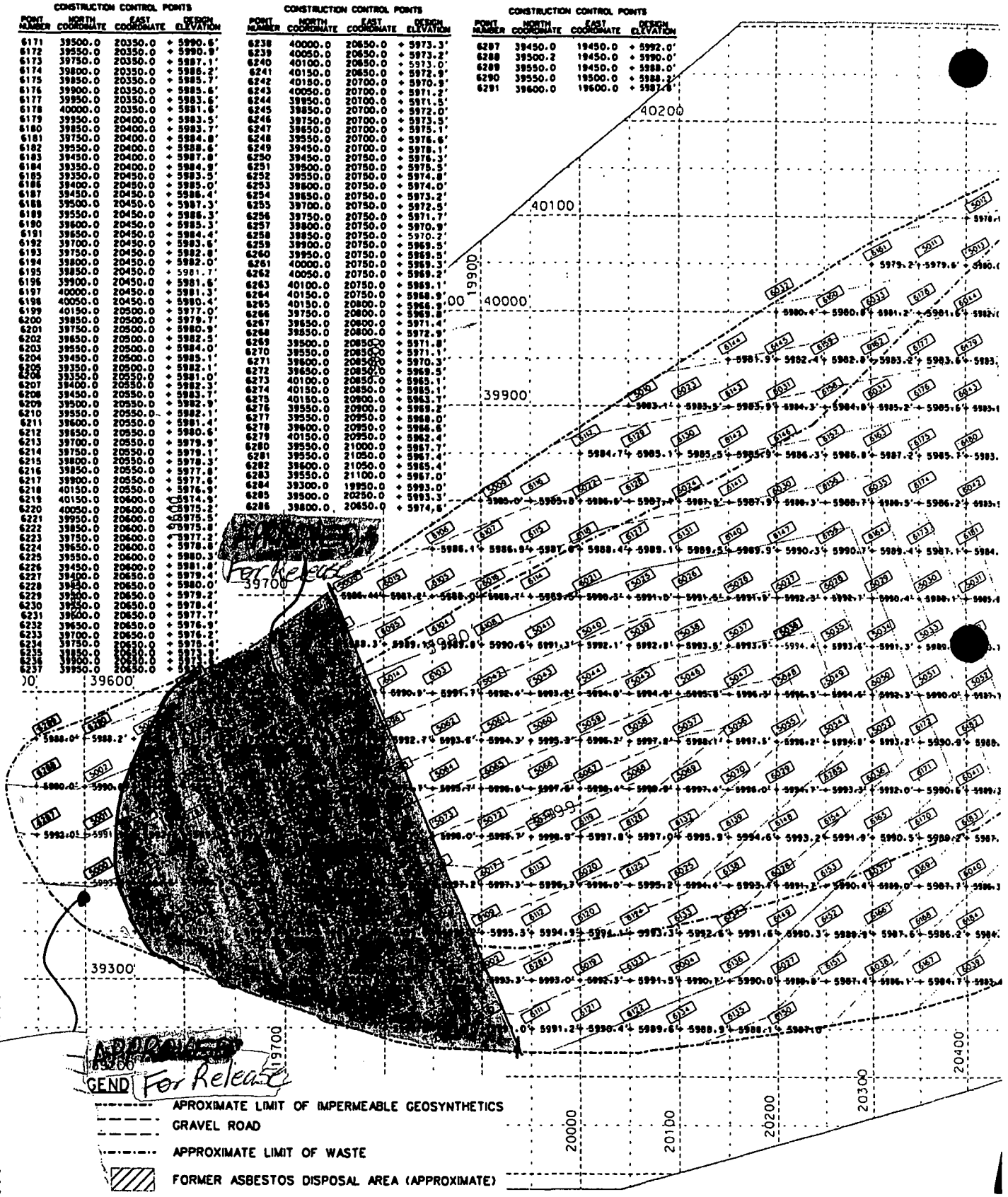
POINT NUMBER	NORTH COORDINATE	EAST COORDINATE	DESIGN ELEVATION
6171	39500.0	20350.0	+ 5990.6'
6172	39550.0	20350.0	+ 5990.9'
6173	39750.0	20350.0	+ 5987.1'
6174	39800.0	20350.0	+ 5986.2'
6175	39850.0	20350.0	+ 5985.7'
6176	39900.0	20350.0	+ 5985.6'
6177	39950.0	20350.0	+ 5983.6'
6178	40000.0	20350.0	+ 5981.6'
6179	39950.0	20400.0	+ 5983.5'
6180	39850.0	20400.0	+ 5983.7'
6181	39750.0	20400.0	+ 5984.8'
6182	39550.0	20400.0	+ 5988.6'
6183	39450.0	20400.0	+ 5987.8'
6184	39350.0	20400.0	+ 5984.9'
6185	39350.0	20450.0	+ 5983.5'
6186	39400.0	20450.0	+ 5985.0'
6187	39450.0	20450.0	+ 5986.4'
6188	39500.0	20450.0	+ 5987.3'
6189	39550.0	20450.0	+ 5986.3'
6190	39600.0	20450.0	+ 5985.3'
6191	39650.0	20450.0	+ 5984.4'
6192	39700.0	20450.0	+ 5983.6'
6193	39750.0	20450.0	+ 5982.8'
6194	39800.0	20450.0	+ 5982.0'
6195	39850.0	20450.0	+ 5981.7'
6196	39900.0	20450.0	+ 5981.6'
6197	40000.0	20450.0	+ 5981.3'
6198	40050.0	20450.0	+ 5980.4'
6199	40150.0	20500.0	+ 5977.0'
6200	39850.0	20500.0	+ 5979.7'
6201	39750.0	20500.0	+ 5980.9'
6202	39650.0	20500.0	+ 5982.5'
6203	39550.0	20500.0	+ 5984.0'
6204	39450.0	20500.0	+ 5985.1'
6205	39350.0	20500.0	+ 5982.1'
6206	39350.0	20550.0	+ 5981.0'
6207	39400.0	20550.0	+ 5982.3'
6208	39450.0	20550.0	+ 5983.7'
6209	39500.0	20550.0	+ 5982.9'
6210	39550.0	20550.0	+ 5982.1'
6211	39600.0	20550.0	+ 5981.4'
6212	39650.0	20550.0	+ 5980.6'
6213	39700.0	20550.0	+ 5979.9'
6214	39750.0	20550.0	+ 5979.1'
6215	39800.0	20550.0	+ 5978.3'
6216	39850.0	20550.0	+ 5977.8'
6217	39900.0	20550.0	+ 5977.6'
6218	40150.0	20550.0	+ 5976.9'
6219	40150.0	20600.0	+ 5974.9'
6220	40050.0	20600.0	+ 5975.2'
6221	39950.0	20600.0	+ 5975.5'
6222	39850.0	20600.0	+ 5975.8'
6223	39750.0	20600.0	+ 5977.2'
6224	39650.0	20600.0	+ 5978.8'
6225	39550.0	20600.0	+ 5980.3'
6226	39450.0	20600.0	+ 5981.8'
6227	39400.0	20650.0	+ 5979.4'
6228	39450.0	20650.0	+ 5980.0'
6229	39500.0	20650.0	+ 5979.2'
6230	39550.0	20650.0	+ 5978.4'
6231	39600.0	20650.0	+ 5977.7'
6232	39650.0	20650.0	+ 5976.9'
6233	39700.0	20650.0	+ 5976.2'
6234	39750.0	20650.0	+ 5975.4'
6235	39850.0	20650.0	+ 5973.9'
6236	39900.0	20650.0	+ 5973.[illegible]
6237	39950.0	20650.0	+ 5[illegible]

CONSTRUCTION CONTROL POINTS

POINT NUMBER	NORTH COORDINATE	EAST COORDINATE	DESIGN ELEVATION
6238	40000.0	20650.0	+ 5973.3'
6239	40050.0	20650.0	+ 5973.2'
6240	40100.0	20650.0	+ 5973.0'
6241	40150.0	20650.0	+ 5972.9'
6242	40150.0	20700.0	+ 5970.9'
6243	40050.0	20700.0	+ 5971.2'
6244	39950.0	20700.0	+ 5971.5'
6245	39850.0	20700.0	+ 5972.0'
6246	39750.0	20700.0	+ 5973.5'
6247	39650.0	20700.0	+ 5975.1'
6248	39550.0	20700.0	+ 5976.6'
6249	39450.0	20700.0	+ 5978.1'
6250	39450.0	20750.0	+ 5976.3'
6251	39500.0	20750.0	+ 5975.5'
6252	39550.0	20750.0	+ 5974.8'
6253	39600.0	20750.0	+ 5974.0'
6254	39650.0	20750.0	+ 5973.2'
6255	39700.0	20750.0	+ 5972.5'
6256	39750.0	20750.0	+ 5971.7'
6257	39800.0	20750.0	+ 5970.9'
6258	39850.0	20750.0	+ 5970.2'
6259	39900.0	20750.0	+ 5969.5'
6260	39950.0	20750.0	+ 5969.5'
6261	40000.0	20750.0	+ 5969.3'
6262	40050.0	20750.0	+ 5969.2'
6263	40100.0	20750.0	+ 5969.1'
6264	40150.0	20750.0	+ 5968.9'
6265	40150.0	20800.0	+ 5966.9'
6266	39750.0	20800.0	+ 5969.8'
6267	39650.0	20800.0	+ 5971.4'
6268	39550.0	20800.0	+ 5972.9'
6269	39500.0	20850.0	+ 5971.8'
6270	39550.0	20850.0	+ 5971.1'
6271	39600.0	20850.0	+ 5970.3'
6272	39650.0	20850.0	+ 5969.5'
6273	40100.0	20850.0	+ 5965.1'
6274	40150.0	20850.0	+ 5965.1'
6275	40150.0	20900.0	+ 5963.7'
6276	39550.0	20900.0	+ 5969.2'
6277	39550.0	20950.0	+ 5968.0'
6278	39600.0	20950.0	+ 5966.6'
6279	40150.0	20950.0	+ 5962.4'
6280	39550.0	21000.0	+ 5967.7'
6281	39550.0	21050.0	+ 5967.4'
6282	39600.0	21050.0	+ 5965.4'
6283	39550.0	21100.0	+ 5967.0'
6284	39300.0	19950.0	+ 5993.0'
6285	39500.0	20250.0	+ 5983.3'
6286	39800.0	20650.0	+ 5974.6'

CONSTRUCTION CONTROL POINTS

POINT NUMBER	NORTH COORDINATE	EAST COORDINATE	DESIGN ELEVATION
6287	39450.0	19450.0	+ 5992.0'
6288	39500.2	19450.0	+ 5990.0'
6289	39550.0	19450.0	+ 5988.0'
6290	39550.0	19500.0	+ 5988.2'
6291	39600.0	19600.0	+ 5987.0'



For Release

For Release

GEND

APROXIMATE LIMIT OF IMPERMEABLE GEOSYNTHETICS

GRAVEL ROAD

APPROXIMATE LIMIT OF WASTE

FORMER ASBESTOS DISPOSAL AREA (APPROXIMATE)

10 FOOT CONTOUR

2 FOOT CONTOUR

N 40500
E 20000
GRID COORDINATE SYSTEM

5000
CONTROL POINT NUMBER

+ 5992.6'
CONTROL POINT ELEVATION

0'

— REGRADE 11-03-04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-03-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface regrade released to the points attached. / See map. Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

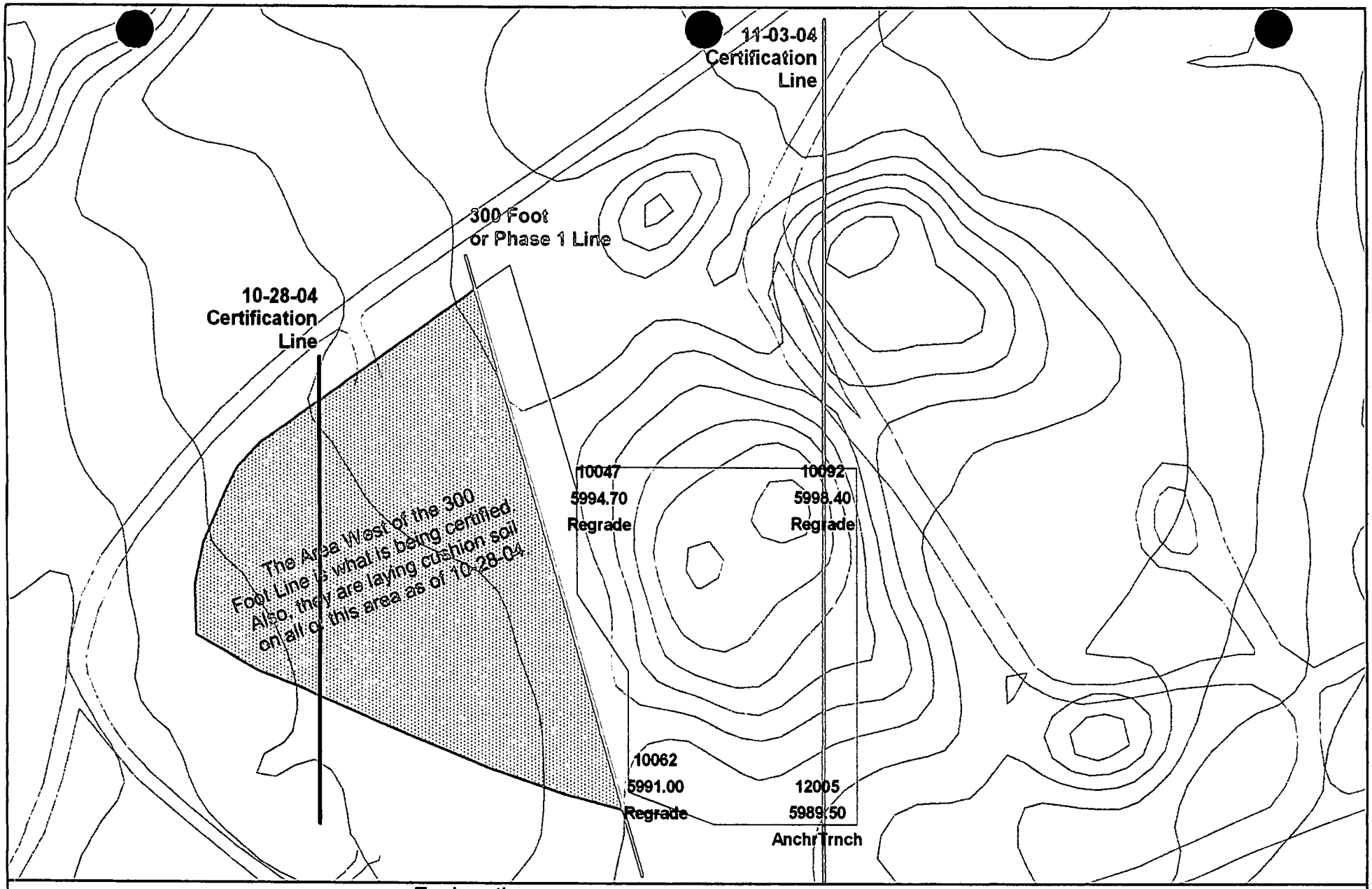
AUTHORIZATION:

[signature] 11/04/04
CTR SIGNATURE DATE

[signature] 11-03-04
CQAE SIGNATURE (or Representative) DATE

[signature] 11-03-04
QCSM SIGNATURE (or Representative) DATE

N/A
COLORADO LINING DATE



Present Landfill
Accelerated Action

N

Explanation:

- Dirt Roads
- 2ft Contours
- Certification Area (11-03-04)

Scale:
60 0 60 Feet

Certification 11-03

Printed on: (11.4.2004) 8:28

Stoller

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

5
11-~~04~~-04 JAE

DATE: 10-5-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface See map Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

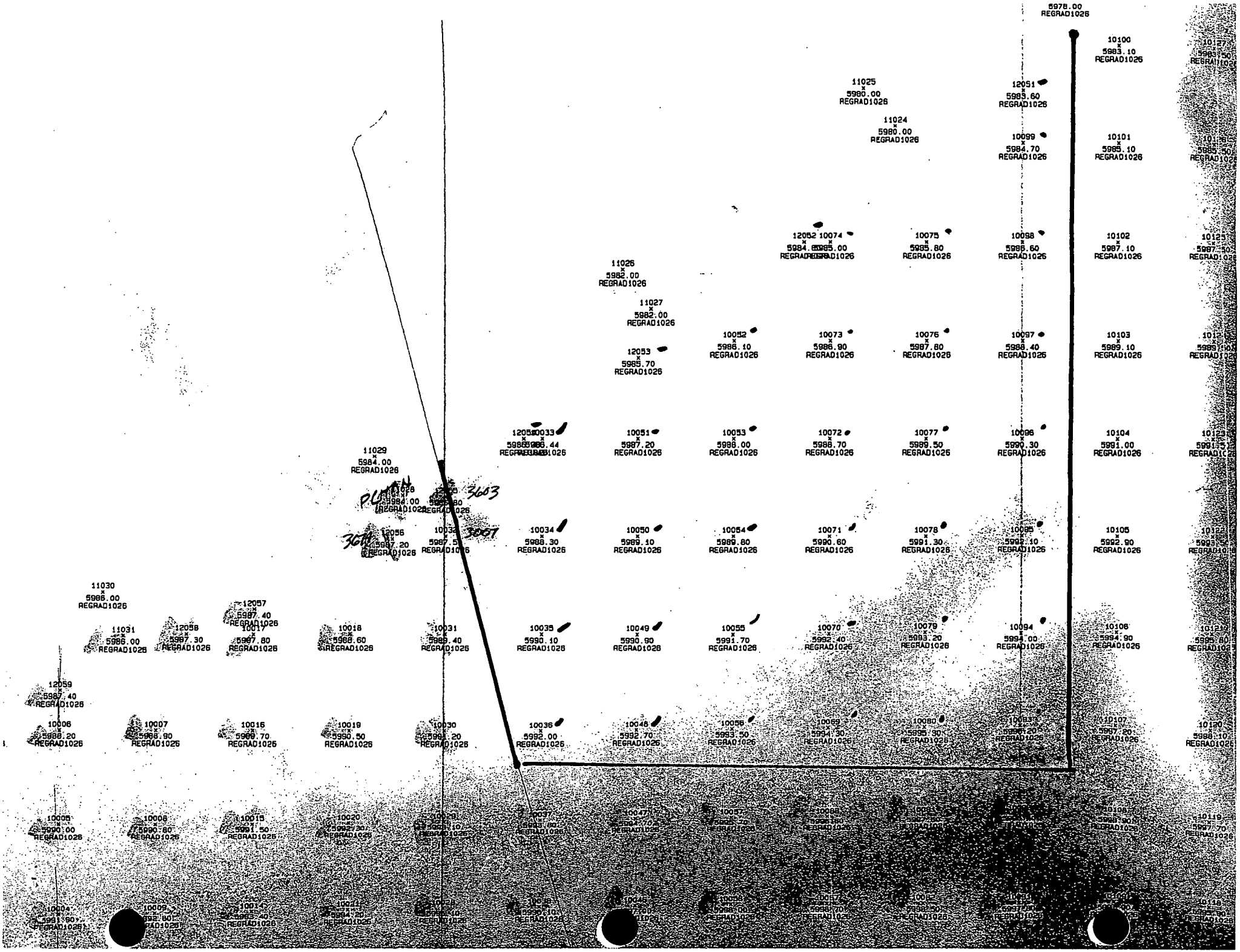
AUTHORIZATION:

[signature] 10/07/04
CTR SIGNATURE DATE

[signature] 10-5-04
CQAE SIGNATURE (or Representative) DATE 11-5-04 JAE

[signature] ~~10~~-5-04
CSM SIGNATURE (or Representative) DATE

N/A
COLORADO LINING DATE


5978.00
REGRAD1026
10100
5983.10
REGRAD1026
11025
5980.00
REGRAD1026
12051
5983.60
REGRAD1026
11024
5980.00
REGRAD1026
10099
5984.70
REGRAD1026
10101
5985.10
REGRAD1026
12052 10074
5985.00
10075
5985.80
REGRAD1026
10098
5986.60
REGRAD1026
10102
5987.10
REGRAD1026
11026
5982.00
REGRAD1026
11027
5982.00
REGRAD1026
10052
5986.10
REGRAD1026
10073
5986.90
REGRAD1026
10076
5987.80
REGRAD1026
10097
5988.40
REGRAD1026
10103
5989.10
REGRAD1026
12053
5985.70
REGRAD1026
10051
5987.20
REGRAD1026
10053
5988.00
REGRAD1026
10072
5988.70
REGRAD1026
10077
5989.50
REGRAD1026
10096
5990.30
REGRAD1026
10104
5991.00
REGRAD1026
11029
5984.00
REGRAD1026
3603
3607
10034
5988.30
REGRAD1026
10050
5989.10
REGRAD1026
10054
5989.80
REGRAD1026
10071
5990.60
REGRAD1026
10078
5991.30
REGRAD1026
10105
5992.90
REGRAD1026
11030
5986.00
REGRAD1026
12057
5987.40
REGRAD1026
11031
5986.00
REGRAD1026
12058
5987.30
REGRAD1026
10017
5987.80
REGRAD1026
10018
5988.60
REGRAD1026
10031
5989.40
REGRAD1026
10035
5990.10
REGRAD1026
10049
5990.90
REGRAD1026
10055
5991.70
REGRAD1026
10070
5992.40
REGRAD1026
10079
5993.20
REGRAD1026
10094
5994.00
REGRAD1026
10106
5994.90
REGRAD1026
12059
5987.40
REGRAD1026
10006
5988.20
REGRAD1026
10007
5988.90
REGRAD1026
10016
5989.70
REGRAD1026
10019
5990.50
REGRAD1026
10030
5991.20
REGRAD1026
10036
5992.00
REGRAD1026
10048
5992.70
REGRAD1026
10056
5993.50
REGRAD1026
10080
5995.30
REGRAD1026
10107
5997.20
REGRAD1026
10120
5998.10
REGRAD1026
10005
5990.00
REGRAD1026
10008
5990.80
REGRAD1026
10015
5991.50
REGRAD1026
10119
5997.70
REGRAD1026

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-9-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): See attached Point list Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 11/11/04
CQAE SIGNATURE (or Representative)	DATE 11-9-04
XCSM SIGNATURE (or Representative)	DATE 11-09-04
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-15-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39550 N Northing/Easting 39750 N Northing/Easting 20050 E Northing/Easting 20300 E	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

Robert M. Davis — CTR SIGNATURE — DATE 11/18/04

Marshall Massey — CQAE SIGNATURE (or Representative) — DATE 11/15/04

QCSM SIGNATURE (or Representative) — DATE 11-15-04

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT: RFETS PLF Construction
CONTRACTOR: K-H
CTR: Bob Davis, P.E.

DATE: 11-16-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): See attached point list Northing/Easting 40073.370 N Northing/Easting 39800 N Northing/Easting 20050.010 E Northing/Easting 20300 E	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 11/18/04
CTR SIGNATURE DATE

[signature] 11-16-04
CQAE SIGNATURE (or Representative) DATE

[signature] 11-16-04
CSM SIGNATURE (or Representative) DATE

N/A
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-10-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Eastings 20350 & 20400, whole cap N-S Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 12/14/04
CQAE SIGNATURE (or Representative)	DATE 12-12-04
CCSM SIGNATURE (or Representative)	DATE 12-10-04
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-11-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Easting 20450 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	N-S whole cap GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 12/14/04

CQAE SIGNATURE (or Representative) — DATE 12-12-04

SM SIGNATURE (or Representative) — DATE 12-11-04

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-11-05

SUBGRADE / REGRADE

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39800 SOUTH Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 03/14/05

Marshall Masson — SQAE SIGNATURE (or Representative) — DATE 3/11/05

Matt Carkondi — QCSM SIGNATURE (or Representative) — DATE 3/11/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-16-05

SUBGRADE / REGRADE

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): 1" line to liner to anchor trench Northing/Easting 39800 North Flats from A Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

[signature] 03/19/05
CTR SIGNATURE DATE

[signature] 3-16-05
CQAE SIGNATURE (or Representative) DATE

[signature] 3/16/05
QCSM SIGNATURE (or Representative) DATE

COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-18-05

SUBGRADE / REGRADE

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39850 & NORTH DOWN EAST FACE Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

[signature] 03/19/05
CTR SIGNATURE DATE

Marshall Massey 3/18/05
CQAE SIGNATURE (or Representative) DATE

[signature] 3/18/05
QCSM SIGNATURE (or Representative) DATE

COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-1-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting West of 39850 Northing/Easting East of 20750 Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 04/07/05

Marshall Massey — CQAE SIGNATURE (or Representative) — DATE 4/1/05

[illegible] — QCSM SIGNATURE (or Representative) — DATE 4/1/05

COLORADO LINING — DATE

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of 6" Cushion Soil for GCL Placement

HOLD POINT/RELEASE FORM

PROJECT: RFETS PLF Construction
CONTRACTOR: K-H
CTR: Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): ~~Northing~~/Easting 19550 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 10/29/04
CQAE SIGNATURE (or Representative)	DATE 10-28-04
QCSM SIGNATURE (or Representative)	DATE 10/28/04
COLORADO LINING	DATE 10-28-04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-5-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): See map SITE Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): See map Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 10/12/04

QQAE SIGNATURE (or Representative) — DATE 10-5-04

QCSM SIGNATURE (or Representative) — DATE 10-5-04

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-8-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Previously Signed off Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): cushion west of 19750 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	See attached map & circled points GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis CTR SIGNATURE	11/09/04 DATE
Marshall Marsar CQAE SIGNATURE (or Representative)	11/8/04 DATE
[illegible] CCSM SIGNATURE (or Representative)	11-8-04 DATE
[illegible] COLORADO LINING	11-8-04 DATE

10063

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-9-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	See attached punch list GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 11/11/04
CTR SIGNATURE — DATE

[illegible] — 11-9-04
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 11-09-04
QCSM SIGNATURE (or Representative) — DATE

[illegible] — 11-09-04
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-16-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 20000 E Northing/Easting 19950 E Northing/Easting 39876 N Northing/Easting 39250 N JAE JAE	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting 20000 E Northing/Easting 19950 E Northing/Easting 39876 N Northing/Easting 39250 N	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 11/23/04
CQAE SIGNATURE (or Representative)	DATE 11-16-04
CQM SIGNATURE (or Representative)	DATE 11-16-04
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 11-18

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): See attached Northing/Easting _____ Northing/Easting point list Northing/Easting _____ Northing/Easting _____	From Easting 20000 to easting 20100 GCL placement whole cap N-S.
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 11/22/04

CQAE SIGNATURE (or Representative) — DATE 11-18-04

QCSM SIGNATURE (or Representative) — DATE 11-18-04

COLORADO LINING — DATE

Re-Cert

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-07-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): See attached point list Northing/Easting _____ Northing/Easting 20100 Northing/Easting _____ Northing/Easting _____	Released to Easting MM 20100 N to S, whole width of landfill cap GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert M. Davis — CTR SIGNATURE — DATE 12/09/04

Marshall Mauney — CQAE SIGNATURE (or Representative) — DATE 12-7-04

[illegible] — CSM SIGNATURE (or Representative) — DATE 12-7-04

[illegible] — COLORADO LINING — DATE 12-7-04

~~Re-Cert~~ New

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-7-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	~~fo~~ GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	released to ~~GDN~~ ~~to~~ N&S whole cap GCL placement to E-20 200
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

JAE
GCL

AUTHORIZATION:

[signature] 012/09/04
CTR SIGNATURE DATE

[signature] 12/09/05
CQAE SIGNATURE (or Representative) DATE

[signature]
QCSM SIGNATURE (or Representative) DATE

[signature]
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT: RFETS PLF Construction
CONTRACTOR: K-H
CTR: Bob Davis, P.E.

DATE: 12-8-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): See attached Northing/Easting _____ Northing/Easting Point list Northing/Easting _____ Northing/Easting _____	N-S whole cap to 20300 Easting GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 12/09/04

CQAE SIGNATURE (or Representative) — DATE 12-8-04

CSM SIGNATURE (or Representative) — DATE 12-8-04

COLORADO LINING — DATE 12-8-04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-13-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Easting 20350 GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 12/16/04

CQAE SIGNATURE (or Representative) — DATE 12-13-04

QCSM SIGNATURE (or Representative) — DATE 12-13-04

COLORADO LINING — DATE 12-13-04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-13-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): See attached point list Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Eastings 20500 & 20550 GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — 12/16/04
CTR SIGNATURE — DATE

Marshall Masson — 12/13/04
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 12-13-04
CCM SIGNATURE (or Representative) — DATE

_____ — _____
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-14-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 12/16/04

CQAE SIGNATURE (or Representative) — DATE 12-15-04

OCSM SIGNATURE (or Representative) — DATE 12-15-04

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-15-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Easting 20450 GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 12/16/04

CQAE SIGNATURE (or Representative) — DATE 12-15-04

CSM SIGNATURE (or Representative) — DATE 12-15-04

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-18-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Easting 20500 N-S GCL placement a hole cap See attached point list
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 12/20/04

CQAE SIGNATURE (or Representative) — DATE 12-18-04

QCSM SIGNATURE (or Representative) — DATE 12-18-04

COLORADO LINING — DATE 12-18-04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 12-18-04

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Easting 20550 N-S whole cap GCL placement See attached point list
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 12/20/04

CQAE SIGNATURE (or Representative) — DATE 12-18-04

CBM SIGNATURE (or Representative) — DATE 12-18-04

COLORADO LINING — DATE 12-18-04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-21-05

6" CUSHION

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39800 South Northing/Easting EAST OF 20750 Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 03/24/05

Marshall Massey — CQAE SIGNATURE (or Representative) — DATE 3/21/05

Matt Cushing — QCSM SIGNATURE (or Representative) — DATE 3/21/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-23-05

6" Cushion

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39800 Northing/Easting 39900 Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 03/24/2005

CQAE SIGNATURE (or Representative) — DATE 3/23/05

QCSM SIGNATURE (or Representative) — DATE 3/23/05

COLORADO LINING — DATE

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of GCL for FML Placement

#20

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-1 Northing/Easting Northing/Easting S-4 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-5 Northing/Easting Northing/Easting S-11 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-12 11-3-04 Northing/Easting Northing/Easting S-13 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-14 11-4-04 Northing/Easting Northing/Easting S-27 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-28 Northing/Easting Northing/Easting S-36 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-37 11-5-04 Northing/Easting Northing/Easting S-45 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-46 11-8-04 Northing/Easting Northing/Easting S-55 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-56 Northing/Easting Northing/Easting S-63 Northing/Easting	FML placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) — DATE 10-28-04

QCSM SIGNATURE (or Representative) — DATE 10/28/04

10/29/2004

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-64 11-9-04 Northing/Easting Northing/Easting S-75 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-76 11-9-04 Northing/Easting Northing/Easting S-84 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-85 11-9-04 Northing/Easting Northing/Easting S-89 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-90 11-16-04 Northing/Easting Northing/Easting S-97 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-98 11-16-04 Northing/Easting Northing/Easting S-102 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-103 11-17-04 Northing/Easting Northing/Easting S-112 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-113 11-17-04 Northing/Easting Northing/Easting S-118 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-119 11-17-04 Northing/Easting Northing/Easting S-122 Northing/Easting	FML placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) DATE 11/17/04

QCSM SIGNATURE (or Representative) DATE 11/17/04

11/18/04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-123 11-18 Northing/Easting Northing/Easting S-138 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-139 11-18-04 Northing/Easting Northing/Easting S-148 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-149 11-19-04 Northing/Easting Northing/Easting S-164 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-165 12-7-04 Northing/Easting Northing/Easting S-175 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-176 12-7-04 Northing/Easting Northing/Easting S-187 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-188 Northing/Easting Northing/Easting S-192 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-193 Northing/Easting Northing/Easting S 204 Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-194 Northing/Easting Northing/Easting S-210 Northing/Easting	FML placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) — DATE 12-8-04

QCSM SIGNATURE (or Representative) — DATE 12-8-04

12/9/04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting 5-211 Northing/Easting ____ Northing/Easting 5-222 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting 5-223 Northing/Easting ____ Northing/Easting 5-228 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting 5-229 Northing/Easting ____ Northing/Easting 5-240 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting 5-241 Northing/Easting ____ Northing/Easting 5-245 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting 5-246 Northing/Easting ____ Northing/Easting 5-258 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): 12-12-04 Northing/Easting 5-259 Northing/Easting ____ Northing/Easting 5-271 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting 5-272 Northing/Easting ____ Northing/Easting 5-278 Northing/Easting ____	FML placement
GCL Material and Placement 12-12-04 Active area defined by the following (or attach map): Northing/Easting 5-279 Northing/Easting ____ Northing/Easting 5-291 Northing/Easting ____	FML placement

AUTHORIZATION:

COAE SIGNATURE (or Representative) — DATE 12-14-04

QCSM SIGNATURE (or Representative) — DATE 12-14-04

12/15/04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement 12-14-04 Active area defined by the following (or attach map): Northing/Easting S-292 Northing/Easting ____ Northing/Easting S-298 Northing/Easting ____	FML placement
GCL Material and Placement 12-15-04 Active area defined by the following (or attach map): Northing/Easting S-299 Northing/Easting ____ Northing/Easting S-311 Northing/Easting ____	FML placement
GCL Material and Placement 12-15-04 Active area defined by the following (or attach map): Northing/Easting S-302 Northing/Easting ____ Northing/Easting S-317 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-318 Northing/Easting ____ Northing/Easting S-323 Northing/Easting ____	FML placement
GCL Material and Placement 12-16-04 Active area defined by the following (or attach map): Northing/Easting S-324 Northing/Easting ____ Northing/Easting S-344 Northing/Easting ____	FML placement
GCL Material and Placement 12-19-04 Active area defined by the following (or attach map): Northing/Easting S-345 Northing/Easting ____ Northing/Easting S-371 Northing/Easting ____	FML placement
GCL Material and Placement 12-19-04 Active area defined by the following (or attach map): Northing/Easting S-372 Northing/Easting ____ Northing/Easting S-377 Northing/Easting ____	FML placement
GCL Material and Placement 12-21-04 Active area defined by the following (or attach map): Northing/Easting S-378 Northing/Easting ____ Northing/Easting S-396 Northing/Easting ____	FML placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) — DATE 12-21-04

QCSM SIGNATURE (or Representative) — DATE 12-21-04

12/22/04

1

(1)

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement 2/11/05 Active area defined by the following (or attach map): Northing/Easting S-397 Northing/Easting S-414 Northing/Easting Northing/Easting	FML placement
GCL Material and Placement 2/12/05 Active area defined by the following (or attach map): Northing/Easting S-417 Northing/Easting S-426 Northing/Easting Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-427 Northing/Easting S-438 Northing/Easting Northing/Easting	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-439 Northing/Easting S-462 Northing/Easting Northing/Easting	FML placement
GCL Material and Placement 3-22-05 Active area defined by the following (or attach map): Northing/Easting S-463 Northing/Easting Northing/Easting S-490 Northing/Easting	FML placement
GCL Material and Placement 3.22.05 Active area defined by the following (or attach map): Northing/Easting S-491 Northing/Easting Northing/Easting S-504 Northing/Easting	FML placement
GCL Material and Placement 3-23-05 Active area defined by the following (or attach map): Northing/Easting S-505 Northing/Easting Northing/Easting S-519 Northing/Easting	FML placement
GCL Material and Placement 3-23-05 Active area defined by the following (or attach map): Northing/Easting S-510 Northing/Easting Northing/Easting S-525 Northing/Easting	FML placement

AUTHORIZATION:

CQA SIGNATURE (or Representative) 3/23/05 DATE

QCSM SIGNATURE (or Representative) 3/23/05 DATE

Robert Davis 03/23/05

(2)

HOLD POINT/RELEASE FORM

PROJECT: RFETS PLF Construction
CONTRACTOR: K-H
CTR: Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GCL Material and Placement 3-29-05 Active area defined by the following (or attach map): Northing/Easting S-522 Northing/Easting ____ Northing/Easting S-539 Northing/Easting ____	FML placement
GCL Material and Placement 3-30-05 Active area defined by the following (or attach map): Northing/Easting S-540 Northing/Easting ____ Northing/Easting S-566 Northing/Easting ____	FML placement
GCL Material and Placement 4-3-05 Active area defined by the following (or attach map): Northing/Easting S-567 Northing/Easting ____ Northing/Easting S-656 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting S-657 Northing/Easting ____ Northing/Easting S-665 Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) — DATE 4/7/05

QCSM SIGNATURE (or Representative) — DATE 4/7/05

PMD 04/09/05

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of FML for GDN Placement

#21

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-1 11-8-04 Northing/Easting Northing/Easting P-13 Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-14 11-15-04 Northing/Easting Northing/Easting P-20 Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-21 11-16-04 Northing/Easting Northing/Easting P-26 Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-27 Northing/Easting Northing/Easting P-32-38-A Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting E P-38-39 Northing/Easting Northing/Easting E P-44-45 Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting E P-39-39 Northing/Easting Northing/Easting E P-44-45 Northing/Easting	GDN placement Re-inflation after snow removal
FML Material and Placement 12-12-04 Active area defined by the following (or attach map): Northing/Easting P-46-51 Northing/Easting Northing/Easting Northing/Easting	GDN placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) DATE 12-12-04

QCSM SIGNATURE (or Representative) DATE 12-12-04

12/14/04

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
FML Material and Placement Active area defined by the following (or attach map): East Seam Northing/Easting P52 - P57 Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement 12-15-04 Active area defined by the following (or attach map): Northing/Easting P-58 P-64 Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): West Seam Northing/Easting P-64 Northing/Easting 12-17-04 Northing/Easting P-74 Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-75 Northing/Easting Northing/Easting P-102-103-104 Northing/Easting	GDN placement
FML Material and Placement Recert Active area defined by the following (or attach map): Northing/Easting P-52 Northing/Easting Northing/Easting P-104 Northing/Easting	recert After seam-removal GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) DATE

QCSM SIGNATURE (or Representative) DATE

(3)

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-102 Northing/Easting Middle P-111 Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-112 Northing/Easting P-119 Northing/Easting FR119 Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting [illegible] Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-120 Northing/Easting 3-29-05 Northing/Easting Northside P-140 - Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-140 Northing/Easting Northing/Easting P-197A Northing/Easting	GDN placement MAM
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting P-198 Northing/Easting Northing/Easting P-202 Northing/Easting	GDN placement MAM
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement

AUTHORIZATION:

Marshall Mason
CQAE SIGNATURE (or Representative) DATE 4/7/05

[signature]
QCSM SIGNATURE (or Representative) DATE 4/7/05

RWD 04/09/05

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of GDN for 10" Cushion Soil Placement

#22

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting T-1 11-15-04 Northing/Easting Northing/Easting T-31 Northing/Easting	MAM Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting T-32 Northing/Easting Northing/Easting T-W-42 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ~~E-T-42~~ E-T42 Northing/Easting Northing/Easting W-T-57 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting E-T-42 Northing/Easting Northing/Easting W-T-57 Northing/Easting	Recert after Silica Removal Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting E-T-57 Northing/Easting Northing/Easting W-T-130 Northing/Easting	MAM Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting E-T-130 Northing/Easting Northing/Easting W-T-149 Northing/Easting	MAM Rock cushion layer placement
GDN Material and Placement 12-16-04 Active area defined by the following (or attach map): Northing/Easting W-T-150 Northing/Easting Northing/Easting W-T-186 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting E-T-42 Northing/Easting Northing/Easting W-T-57 Northing/Easting	Recert After wind Storage Rock cushion layer placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) DATE 1-4-05

QCSM SIGNATURE (or Representative) DATE 1-04-05

01/06/05

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting J-57 Northing/Easting Northing/Easting J-303-307 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting J-303-307 Northing/Easting Northing/Easting J-~~365~~-368/370 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement

AUTHORIZATION:

CQAE SIGNATURE (or Representative) DATE

QCSM SIGNATURE (or Representative) DATE

(4)

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting T- 431 Northing/Easting Northing/Easting T- 491 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting T-492 Northing/Easting Northing/Easting T-625 Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement

AUTHORIZATION:

Marshall Mazzur
CQAE SIGNATURE (or Representative) — DATE 4/7/05

QCSM SIGNATURE (or Representative) — DATE 4/7/05

RWD 07/09/05

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of 10" Cushion Soil for Biota Placement

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1/03/05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Easting 19600 N-S whole car See attached Rock layer placement point list
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE _____ DATE 01/04/05

CQAE SIGNATURE (or Representative) _____ DATE 1-3-05

CSM SIGNATURE (or Representative) _____ DATE 1/3/05

COLORADO LINING _____ DATE _____

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1/04/05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Easting to 19700 N-S whole cap See attached. Rock layer placement point list
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert N. Davis — CTR SIGNATURE — DATE 01/11/05

[illegible] — CQAE SIGNATURE (or Representative) — DATE 1-4-05

Michael [illegible] — QCSM SIGNATURE (or Representative) — DATE 1/4/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

ROJECT RFETS PLF Construction
ONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
DN Material and Placement ctive area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" CUSH Active area defined by the following (or attach map): Northing/Easting 19850 EAST Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] Bob Davis ~~Marco / Jack~~ 01/11/05
CTR SIGNATURE DATE

[signature] Josh 1-9-05
CQAE SIGNATURE (or Representative) DATE

[signature] Michael 1/9/05
CSM SIGNATURE (or Representative) DATE

NA
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1/09/05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Eastin to 19850 N-S whole car be attached Rock layer placement point list
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 01/11/05
CTR SIGNATURE — DATE

[illegible] — 1-9-05
CQAE SIGNATURE (or Representative) — DATE

Michael Potts — 1/9/05
QCSM SIGNATURE (or Representative) — DATE

_____ — _____
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-11-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" CUSH Active area defined by the following (or attach map): Northing/Easting 10950 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert N. Davis — 01/11/05
CTR SIGNATURE — DATE

[illegible] — 1-11-05
COAE SIGNATURE (or Representative) — DATE

[illegible] — 1/11/05
QCSM SIGNATURE (or Representative) — DATE

_____ — _____
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-11-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20,000 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 01/11/05

CQAE SIGNATURE (or Representative) — DATE 1-11-05

QCSM SIGNATURE (or Representative) — DATE 1/11/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-19-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20050 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert N. Davis — CTR SIGNATURE — DATE 01/20/05

[illegible] — COAE SIGNATURE (or Representative) — DATE 1/19/05

[illegible] — QCSM SIGNATURE (or Representative) — DATE 1-19-05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20100 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — 01/20/05
CTR SIGNATURE — DATE

[illegible] — 1-19-05
CQAP SIGNATURE (or Representative) — DATE

[illegible] — 1-19-05
QCSM SIGNATURE (or Representative) — DATE

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-21-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20150 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil Infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 01/25/05

[illegible] — CQAE SIGNATURE (or Representative) — DATE 1-21-05

[illegible] — QCSM SIGNATURE (or Representative) — DATE 1-21-05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-22-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20200 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 01/25/05
CTR SIGNATURE DATE

[signature] 1-22-05
CQAE SIGNATURE (or Representative) DATE

[signature] 1-22-05
QCSM SIGNATURE (or Representative) DATE

_____ _____
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-19-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20050 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert N. Davis — CTR SIGNATURE — DATE 01/20/05

[illegible] — CQAE SIGNATURE (or Representative) — DATE 1/19/05

[illegible] — QCSM SIGNATURE (or Representative) — DATE 1-19-05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE:

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20100 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — 01/20/05
CTR SIGNATURE — DATE

1-19-05
CQAP SIGNATURE (or Representative) — DATE

1-19-05
QCSM SIGNATURE (or Representative) — DATE

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-21-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20150 E Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 01/25/05

[illegible] — CQAE SIGNATURE (or Representative) — DATE 1-21-05

[illegible] — QCSM SIGNATURE (or Representative) — DATE 1-21-05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-22-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20200 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 01/25/05
CQAE SIGNATURE (or Representative)	DATE 1-22-05
QCSM SIGNATURE (or Representative)	DATE 1-22-05
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-25-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20250 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 01/25/05

CQAE SIGNATURE (or Representative) — DATE 1-25-05

QCSM SIGNATURE (or Representative) — DATE 1-25-05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-25-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Active area defined by the following (or attach map): Northing/Easting 20360 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 01/25/05

CQAE SIGNATURE (or Representative) — DATE 1/25/05

QCSM SIGNATURE (or Representative) — DATE 1-25-05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-26-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" CUSHION Active area defined by the following (or attach map): Northing/Easting 20350 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature]	01/28/05
CTR SIGNATURE	DATE
[signature]	1-27-05
CQAE SIGNATURE (or Representative)	DATE
[signature]	1-26-05
QCSM SIGNATURE (or Representative)	DATE
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-27-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Cushion Active area defined by the following (or attach map): Northing/Easting 20400 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	2-5-05 [illegible] 2-5-05 PRH recert. Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 01/28/05
CTR SIGNATURE DATE

[signature] 1-27-05
CQAE SIGNATURE (or Representative) DATE

[signature] 1/27/05
QCSM SIGNATURE (or Representative) DATE

COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-27-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" CUSHION Active area defined by the following (or attach map): Northing/Easting 20450 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	2-5-05 [signature] 2-5-05 Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 01/28/05
CTR SIGNATURE DATE

[signature] 1-27-05
CQAE SIGNATURE (or Representative) DATE

[signature] 1/27/05
QCSM SIGNATURE (or Representative) DATE

_____ _____
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 2-15-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting 20300 Northing/Easting _____ Northing/Easting 20200 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — CTR SIGNATURE — DATE 02/17/05

QAE SIGNATURE (or Representative) — DATE 2-15-05

QCSM SIGNATURE (or Representative) — DATE 2/15/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 2-17-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting 20400 Northing/Easting _____ Northing/Easting 20300 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 02/17/05
CTR SIGNATURE — DATE

2-17-05
CQAE SIGNATURE (or Representative) — DATE

2/17/05
QCSM SIGNATURE (or Representative) — DATE

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 2-25-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" CUSHION Active area defined by the following (or attach map): Northing/Easting 20550 Northing/Easting _____ Northing/Easting 20450 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 03/01/05
CTR SIGNATURE DATE

[signature] 2-25-05
CQAE SIGNATURE (or Representative) DATE

[signature] 2/25/05
QCSM SIGNATURE (or Representative) DATE

_____ _____
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-2-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer 10" Cushion Active area defined by the following (or attach map): Northing/Easting 20600 Northing/Easting _____ Northing/Easting 20550 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 03/04/05
CQAP SIGNATURE (or Representative)	DATE 3-2-05
QCSM SIGNATURE (or Representative)	DATE 3/2/05
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-4-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting 20450 Northing/Easting _____ Northing/Easting 20700 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 03/08/05
CTR SIGNATURE — DATE

Marshall Mason — 3/4/05
QAE SIGNATURE (or Representative) — DATE

Matt Cushner — 3/4/05
QCSM SIGNATURE (or Representative) — DATE

_____ — _____
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-7-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting 20500 Northing/Easting _____ Northing/Easting 20750 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 03/08/05
CTR SIGNATURE — DATE

Marshall Moore — 3/7/05
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 3/7/05
QCSM SIGNATURE (or Representative) — DATE

_____ — _____
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-8-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting 20550 Northing/Easting _____ Northing/Easting 20500 Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 02/08/05
CTR SIGNATURE — DATE

3-8-05
CQAE SIGNATURE (or Representative) — DATE

3/8/05
QCSM SIGNATURE (or Representative) — DATE

_____
COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

CUSHION South of 39750 ON SLOPE

DATE: 4-5-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39750 Northing/Easting Northing/Easting Northing/Easting	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Rock cushion layer placement
Rock Cushion Layer 10" CUSHION Active area defined by the following (or attach map): Northing/Easting SEE DESCRIPTION Northing/Easting Northing/Easting Northing/Easting	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting Northing/Easting Northing/Easting Northing/Easting	Seeding

AUTHORIZATION:

Robert W. Davis — 04/09/05
CTR SIGNATURE — DATE

Marshall Mason — 4/5/05
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 4/5/05
QCSM SIGNATURE (or Representative) — DATE

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

EAST FACE 10" CUSHION

DATE: 4-7-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 20700 Northing/Easting 39800 Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

Robert Davis
CTR SIGNATURE — DATE 04/09/05

CQAE SIGNATURE (or Representative) — DATE 4/8/05

QCSM SIGNATURE (or Representative) — DATE 4/7/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

100' X 300'
CUSHION CERT

DATE: 4-7-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting 39450 Northing/Easting 20750 Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert M Davis
CTR SIGNATURE — DATE 04/09/05

Marshall Massey
CQAE SIGNATURE (or Representative) — DATE 4/7/05

[illegible]
QCSM SIGNATURE (or Representative) — DATE 4/7/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

FINAL CERTIFICATE FOR ALL 10" CUSHION

DATE: 4-17-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 21100.12 & WEST Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis
CTR SIGNATURE — DATE 4/18/05

CQAE SIGNATURE (or Representative) — DATE 4/17/05

QCSM SIGNATURE (or Representative) — DATE 4/17/05

COLORADO LINING

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of Biota for 22" Rocky Flats Alluvium Placement

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 1-22-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer BIOTA Active area defined by the following (or attach map): Northing/Easting 19850 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE	DATE 01/25/05
COSM SIGNATURE (or Representative)	DATE 1-22-05
OCSM SIGNATURE (or Representative)	DATE 1-22-05
COLORADO LINING	DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 2-1-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting 20200 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 02/03/05
CTR SIGNATURE DATE

[signature] 2-1-05
CQAE SIGNATURE (or Representative) DATE

[signature] 2/1/05
QCSM SIGNATURE (or Representative) DATE

_____ _____
COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-21-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): 20,900 & WEST TO 20,700 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert L. Davis — 04/26/05
CTR SIGNATURE — DATE

[illegible] — 4/21/05
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 4/21/05
QCSM SIGNATURE (or Representative) — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-27-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 20800 4 EAST Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — 04/26/05
CTR SIGNATURE — DATE

[illegible] — 4/21/05
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 4/21/05
QCSM SIGNATURE (or Representative) — DATE

COLORADO

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-23-05

Blota Final Certification

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting 20800 & North Northing/Easting 41000 & West Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature]
CTR SIGNATURE — DATE 04/26/05

[signature]
CQAE SIGNATURE (or Representative) — DATE 4/23/05

[signature]
QCSM SIGNATURE (or Representative) — DATE 4/23/05

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of 22" Rocky Flats Alluvium for 2" Previously Vegetated Rocky Flats Alluvium Placement

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-21-05

22" BOB DAVIS SOG

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
22" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting E 20000 to E 20150 & [illegible] OF N 39950 Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] 07/24/05
CTR SIGNATURE DATE

[signature] 3/21/05
CQAE SIGNATURE (or Representative) DATE

[signature] 3/21/05
QCSM SIGNATURE (or Representative) DATE

COLORADO LINING DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-23-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 20,200 Northing/Easting 20,450 Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
22" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting 20,200 Northing/Easting 20,450 Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 03/24/05

CQAP SIGNATURE (or Representative) — DATE 3/23/05

QCSM SIGNATURE (or Representative) — DATE 3/23/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-17-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface 39700 & South ft Active area defined by the following (or attach map): Northing/~~Easting~~ 20650 Northing/Easting 20650 & West Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
22" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting 39700 & South ft Northing/Easting 20650 & West Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 4/19/05

CQAE SIGNATURE (or Representative) — DATE 4-17-05

QCSM SIGNATURE (or Representative) — DATE 4/17/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-18-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting 39749 ℄ NORTH Northing/Easting 2600 ℄ WEST Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

22

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 04/20/05

Marshall Mason — CQAE SIGNATURE (or Representative) — DATE 4/18/05

[illegible] — QCSM SIGNATURE (or Representative) — DATE 4/18/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-19-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): 22" Northing/Easting 39200 & South Northing/Easting 20650 & West Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert N. Davis — 04/20/05
CTR SIGNATURE — DATE

4-19-05
ZQAE SIGNATURE (or Representative) — DATE

4/19/05
QCSM SIGNATURE (or Representative) — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Consiruction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-21-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 20,500 ¢ WEST Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

22"

AUTHORIZATION:

CTR SIGNATURE — DATE 04/26/05

CQAE SIGNATURE (or Representative) — DATE 4/21/05

QCSM SIGNATURE (or Representative) — DATE 4/21/05

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-25-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): 22" Northing/Easting 20550 E/West Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert C. Davis — CTR SIGNATURE — DATE 04/26/05

Marshall Massey — CQAE SIGNATURE (or Representative) — DATE 4/25/05

QCSM SIGNATURE (or Representative) — DATE 4/25/05

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 5-5-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting 20650 ft WEST Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

12"

AUTHORIZATION:

Robert C. Davis — 05/11/05
CTR SIGNATURE — DATE

[illegible] — 5/5/05
DQAE SIGNATURE (or Representative) — DATE

[illegible] — 5/5/05
QCSM SIGNATURE (or Representative) — DATE

COLORADO LINING

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

FINAL CERTIFICATION FOR 22''

DATE: 5-6-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer 22'' Active area defined by the following (or attach map): Northing/Easting 39300 East Northing/Easting 21100 West Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert W. Davis — 05/11/05
CTR SIGNATURE — DATE

Marshall Mann — 5/7/05
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 5/7/05
QCSM SIGNATURE (or Representative) — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

22" East ~~Hotel~~ End of South Horn

DATE: 5-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer 22" Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 21150 + West Northing/Easting _____ Northing/Easting _____	Soil Infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert A. Davis
CTR SIGNATURE — DATE 05/11/05

Marshall Masonry
CQAE SIGNATURE (or Representative) — DATE 5/9/05

[signature]
QCSM SIGNATURE (or Representative) — DATE 5-9-05

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of 2" Previously Vegetated Rocky Flats Alluvium for Ripping and Discing of Surface

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-21-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
24" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting 19425 Northing/Easting 19700 Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] — CTR SIGNATURE — DATE 03/24/05

[signature] — CQAE SIGNATURE (or Representative) — DATE 3/21/05

[signature] — QCSM SIGNATURE (or Representative) — DATE 3/21/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-22-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
24" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting 19,700 Northing/Easting 20,150 Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] — CTR SIGNATURE — DATE 03/24/05

[signature] — CQAE SIGNATURE (or Representative) — DATE 3-22-05

[signature] — QCSM SIGNATURE (or Representative) — DATE 3/22/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3/29/05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
74" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting 20200 Northing/Easting 20350 Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis
CTR SIGNATURE — DATE 04/01/05

CQAE SIGNATURE (or Representative) — DATE 3/29/05

QCSM SIGNATURE (or Representative) — DATE 3/29/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 3-30-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
24" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting 20350 Northing/Easting 20450 Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

[signature] — CTR SIGNATURE — DATE 04/01/05

[signature] — CQAE SIGNATURE (or Representative) — DATE 3/30/05

[signature] — QCSM SIGNATURE (or Representative) — DATE 3/30/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

FINAL 2" CERT

DATE: 5-8-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): 2" Northing/Easting 39305 & NORTH Northing/Easting 21150 & WEST Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert C. Davis — 05/11/05
CTR SIGNATURE — DATE

Marshall Marano — 5/8/05
CQAE SIGNATURE (or Representative) — DATE

_____ — 5-10-05
QCSM SIGNATURE (or Representative) — DATE

COLORADO LINING

HOLD POINT/RELEASE FORM

East End of South Hem 2"

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 5-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
2" **Rock Layer** ~~Active area defined by the following (or attach map):~~ ~~Northing/Easting _____ Northing/Easting _____~~ ~~Northing/Easting _____ Northing/Easting _____~~ 21150 & West	Soil Infiltration layer placement
2" **Soil Infiltration Layer** Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 21150 & West Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert N. Davis — 05/11/05
CTR SIGNATURE — DATE

Marshall Mason — 5/9/05
QCAE SIGNATURE (or Representative) — DATE

5-9-05
QCSM SIGNATURE (or Representative) — DATE

RFETS Present Landfill Accelerated Action Construction

Hold Point Release Forms

Certification of Perimeter Channel Surface for Washed Rock/Riprap Placement

REGRADE
EAST FACE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

LAST 2 POINTS IN PERIMETER CHANNEL
=
LAST 2 POINTS ON REDESIGN

DATE: 3-29-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): ~~Northing/Easting~~ point # 11072 ~~Northing/Easting~~ point # 11073 Northing/Easting point # 12504 ~~Northing/Easting~~ point # 12505	JR GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

CTR SIGNATURE — DATE 03/30/2005

CQAE SIGNATURE (or Representative) — DATE 3/29/05

QCSM SIGNATURE (or Representative) — DATE 3/29/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

TOP OF REGRADE NORTH P. Chavez

DATE: 4-6-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/~~Easting~~ 40325 ~~Northing~~/Easting 21002 Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert M. Davis
CTR SIGNATURE — DATE 04/07/05

Marshall Maemo
CQAE SIGNATURE (or Representative) — DATE 4/6/05

[signature]
QCSM SIGNATURE (or Representative) — DATE 4/6/05

COLORADO LINING — DATE

HOLD POINT/RELEASE FORM

Inside Perimeter Chain S&E/SE Wing

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 4-8-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39543 Northing/Easting ~~5907~~ 21235 Northing/Easting ____ Northing/Easting ____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting ____ Northing/Easting ____ Northing/Easting ____ Northing/Easting ____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 4/12/05

[signature] — CQAE SIGNATURE (or Representative) — DATE 4-8/05

[signature] — QOSM SIGNATURE (or Representative) — DATE 4-8-05

COLORADO LINING

South P-Channel Regrade

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 5-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting 39622 Northing/Easting 21113 Northing/Easting 39567 Northing/Easting 21148	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

#12505
12504

AUTHORIZATION:

Robert M. Davis
CTR SIGNATURE — DATE 05/10/05

Marshall Massey
CQAE SIGNATURE (or Representative) — DATE 5/9/05

[signature]
QCSM SIGNATURE (or Representative) — DATE 5-9-05

South P. Channel West of Dam Road

HOLD POINT/RELEASE FORM

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 5-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
~~Regrade Surface~~ WASHED Rock BEDDING Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 21800 & WEST Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert M. Davis — 5/10/05
CTR SIGNATURE — DATE

Marshall Massey — 5/9/05
CQAE SIGNATURE (or Representative) — DATE

[illegible] — 5-9-05
QCSM SIGNATURE (or Representative) — DATE

HOLD POINT/RELEASE FORM

South
P-Channel
East of Dam Road
Wash Rock

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 5-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
~~Regrade Surface~~ Wash Rock Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 21600 & East Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
Rock Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — 5/10/05
CTR SIGNATURE — DATE

Marshall Marcus — 5-9-05
CQAE SIGNATURE (or Representative) — DATE

_____ — 5-9-05
QCSM SIGNATURE (or Representative) — DATE

HOLD POINT/RELEASE FORM

Rip Rap
South P-Channel

PROJECT RFETS PLF Construction
CONTRACTOR K-H
CTR Bob Davis, P.E.

DATE: 5-9-05

HOLD POINT DESCRIPTION	RELEASE POINT DESCRIPTION
Regrade Surface Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL cushion soil placement
Subgrade (Foundation) Surface and Gas Management System Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GCL placement
GCL Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	FML placement
FML Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	GDN placement
GDN Material and Placement Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock cushion layer placement
Rock Cushion Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Rock layer placement
~~Rock Layer~~ Rip Rap Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting 2180 feet Northing/Easting _____ Northing/Easting _____	Soil infiltration layer placement
Soil Infiltration Layer Active area defined by the following (or attach map): Northing/Easting _____ Northing/Easting _____ Northing/Easting _____ Northing/Easting _____	Seeding

AUTHORIZATION:

Robert Davis — CTR SIGNATURE — DATE 05/10/05

Marshall Massey — CQAE SIGNATURE (or Representative) — DATE 5/9/05

CCSM SIGNATURE (or Representative) — DATE 5-9-05

COLORADO LINING

APPENDIX I

CONTACT RECORDS

PRESENT LANDFILL ACCELERATED ACTION CONSTRUCTION PROJECT

Contact Record File

Rocky Flats Environmental Technology Site

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	December 1, 2004; 8:00 am	
Site Contact(s,:	Bob Birk	Bob Davis
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: Cold Weather Seaming of FML at Present Landfill

Discussion

A proposal to allow cold weather seaming (from 5 to 32 degrees F) of the 60-mil LLDPE installation was provided to the EPA and the CDPHE on November 16, 2004 for their review and approval. On November 19, I received an e-mail from Larry Bruskin/CDPHE with his approval of the cold weather seaming procedures (the e-mail is attached to this contact record). On December 1, 2004, I asked Norm Ng-A-Qui about his review of the procedure and he commented that he approved of the cold seaming procedure.

With this contact record, the construction team will incorporate this cold weather seaming procedure (as provided to the EPA and CDPHE) as a part of the geosynthetics work control processes, and will implement this procedure should the weather conditions fall within the constraints of the procedure. The procedure will become a part of the accelerated action construction specifications for the Present Landfill.

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

FML Cold Weather Seaming Notes

Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
November 2004

Attached is the Standard of Practice for Cold Weather Seaming of Geosynthetics prepared by the Geosynthetic Research Institute (GRI). The construction of the Subtitle C RCRA cover at the Present Landfill is planning to implement this Standard of Practice to install the 60-mil LLDPE over the next several weeks until the FML installation is complete.

In addition to the Standard of Practice, the construction project will adhere to the following:

- The GRI Standard of Practice recommends one trial seam for each 13.5 degrees below freezing. The Present Landfill project will be conducting two trial seams instead of the recommended one.
- The FML will not be placed on frozen soil that has any snow, ice or visible signs of frost heaving lenses at or near the surface.

Except for the above bullets, the Present landfill Project will implement the Standard of Practice as presented by GRI.

We are requesting your review and approval of this Standard of Practice for the Present Landfill Accelerated Construction Project as soon as possible, and preferably by Friday, November 19, 2004.

Please contact Bob Davis (303-966-7026) if you have any questions.

CETCO
LINING TECHNOLOGIES
800.527.9948 www.cetco.com

1500 W. Shure Dr. Arlington Heights, Illinois 60004 USA
Phone: +1-847-392-5800 • Fax: +1-847-506-6150
www.cetco.com

MEMO

To: John Heap

Re: Rocky Flats GCL Installation

From: Bill Urchik

Fax: 847-506-6150
Ph: 800-527-9948

Company: CETCO

No. Pages: 1 – including cover

Date: September 9, 2004

Dear Joe,

Please accept this memo regarding the GCL and Geocomposite installation for the Rocky Flats project. It is acceptable to install both GCL and Geocomposite in cold conditions at this project provided the installation is performed in accordance with the CETCO installation guidelines and the project specifications for Rocky Flats. Section 4.3 of the CETCO GCL installation guidelines provides further information regarding frozen subgrade.

Should you require further information, please do not hesitate to contact me at 1-800-527-9948 x 7939.

Best Regards,

Wm Urchik

William Urchik
Project Engineer
CETCO
Ph: 800.527.9948x7939
Fx: 847.394.7839
bill.urchik@cetco.com

3.7 Rolls should be stored at the job site away from high-traffic areas but sufficiently close to the active work area to minimize handling. The designated storage area should be flat, dry and stable. Moisture protection of the GCL is provided by its packaging; however, an additional tarpaulin or plastic sheet is recommended.

3.8 Rolls should be stacked in a manner that prevents them from sliding or rolling. This can be accomplished by frequent chocking of the bottom layer of rolls. Rolls should be stacked no higher than the height at which they can be safely handled by laborers (typically no higher than four layers or rolls). Rolls should never be stacked on end.

4 SUBGRADE PREPARATION

4.1 Subgrade surfaces consisting of granular soils or gravel may not be acceptable due to their large void fracture and puncture potential. In high head (greater than one foot) applications subgrade soils should possess a particle size distribution such that at least 80 percent of the soil is finer than a #60 sieve (0.250 mm) unless a membrane laminated GCL Bentomat CL, Bentomat CLT, or Claymax CL is used.

4.2 When the GCL is placed over an earthen subgrade, the subgrade surface must be in accordance with the project specifications. Engineer's approval of the subgrade must be obtained prior to installation. The finished surface should be firm and unyielding, without abrupt elevation changes, voids, cracks, ice, or standing water.

4.3 The subgrade surface must be smooth and free of vegetation, sharp-edged rocks, stones, sticks, construction debris, and other foreign matter that could contact the GCL. The subgrade should be rolled with a smooth-drum compactor to remove any wheel ruts, footprints, or other abrupt grade changes. Furthermore, all protrusions extending more than 0.5 inch (12 mm) from the subgrade surface shall be removed, crushed, or pushed into the surface with a smooth-drum compactor. The GCL may be installed on a frozen subgrade, but the subgrade soil in the unfrozen state should meet the above requirements.

5 INSTALLATION

5.1 GCL rolls should be taken to the work area of the site in their original packaging. The orientation of the GCL (i.e., which side faces up) may be important if the GCL has two different types of geosynthetics. Unless otherwise specified the GCL is deployed with the outward side down. The arrow sticker on the plastic sleeve indicates the direction the roll will unwind when placed on the ground, (see figure 5). Prior to deployment, the packaging should be carefully removed without damaging the GCL.

GSE®
GSE Lining Technology, Inc.

19103 Gundle Road
Houston, Texas 77073
800-435-2008
713-443-8564
Fax 281-230-6683

September 15, 2004

Mr. John Heap
Colorado Lining Company
1062 Singing Hills Road
Parker, CO 80138

RE: RFETS Landfill
Cold Weather Seaming Methods

Mr. Heap:

GSE recognizes the Geosynthetic Research Institute's (GRI) methods and specifications as the current industry standard for HDPE geomembranes (smooth & textured). In regards to Cold Weather Seaming Methods, GSE recognizes and utilizes GRI Test Method GM9. GM9 provides guidelines for the field seaming of geomembranes in cold weather temperatures ranging from 0° C to – 15° C (32° F to 5° F).

If you should have any further questions, please do not hesitate to call me at 800 – 435 – 2008, ext. 8655 or Jimmy Youngblood at ext. 2523.

Sincerely,

Terry Baker
GSE Technical Support

Geomembranes

adopted - 1995

GRI Test Method GM9

Standard Practice for

"Cold Weather Seaming of Geomembranes"

1. Scope

1.1 This standard provides guidelines for the field seaming of geomembranes in cold weather. The applicable temperature range of the geomembrane sheet is from 0deg. to -15deg.C (32deg. to 5deg.F). This practice, however, is not to be considered as all-encompassing since each material and site specific condition presents its own challenges and special conditions.

1.2 This practice is focused on thermal fusion and extrusion fillet seaming methods for the seaming of thermoplastic geomembranes.

1.3 This practice is intended to be a guide for those monitoring geomembrane installations as well as an aid to installers for the seaming of geomembranes in cold climates and conditions.

1.4 This standard may involve hazardous operations, equipment and climates. This standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

2. Reference Documents

2.1 ASTM Standards:

2.2 EPA Documents:
EPA/530/SW-91/051, "Inspection Techniques for Fabrication of Geomembrane Field Seams"

EPA/600/R-93/182, "Quality Assurance and Quality Control for Waste Containment Facilities"

3. Terminology

3.1 Definitions of Generic Terms

3.1.1 *geomembrane* - An essentially impermeable geosynthetic composed of one or more

synthetic sheets. (ASTM definition)

3.1.2 *destructive tests* - Tests performed on geomembrane samples cut from a field installation or test strip to verify specification performance requirements, e.g., shear and peel tests of geomembrane seams during which the specimens are tested to failure.

3.1.3 *seam shear test* - A destructive test in which two seamed sheets on opposite sides of the seam are pulled in tension placing the seam in a shear mode of stress.

3.1.4 *seam peel test* - A destructive test in which two seamed sheets on the same side of the seam are pulled in tension placing the seam in a tensile mode of stress.

3.1.5 *Construction Quality Control (CQC)* - A planned system of inspections that is used to directly monitor and control the quality of a construction project. Construction quality control is normally performed by the geosynthetics installer and is necessary to achieve quality in the constructed or installed system. Construction quality control (CQC) refers to measures taken by the installer or contractor to determine compliance with the requirements for materials and workmanship as stated in the plans and specifications for the project.

3.1.6 *Construction Quality Assurance (CQA)* - A planned system of activities that provides the owner and permitting agency assurance that the facility was constructed as specified in the design. Construction quality assurance includes inspections, verifications, audits, and evaluations of materials and workmanship necessary to determine and document the quality of the constructed facility. Construction quality assurance (CQA) refers to measures taken by the CQA organization to determine if the installer or contractor is in compliance with the plans and specifications of the project.

3.2 Description of Terms Specific to This Standard

3.2.1 *field seams* - The seaming of geomembrane rolls or panels together in the field making a continuous liner system. Synonymous with *production seams*.

3.2.2 *trial seams* - Trial sections of seamed geomembranes used to establish machine settings of temperature, pressure and travel rate for a specific geomembrane under a specific set of atmospheric conditions for machine-assisted seaming as well as establishing procedures to be correctly used by the installation personnel.

3.2.3 *test strips* - Synonymous with "trial seams".

3.2.4 *test welds* - Synonymous with "trial seams".

3.2.5 *thermal fusion seams* - A seam which involves the temporary, thermally-induced reorganization in the polymer structure at the surface of two opposing geomembrane sheets which, after the application of pressure and the passage of a certain amount of time, results in the two geomembranes being permanently joined together.

3.2.6 *mouse* - Synonymous term for hot wedge, or hot shoe, seaming device.

3.2.7 *extrusion fillet seams* - A seam between two geomembrane sheets achieved by heat-extruding a ribbon of molten polymer over the overlap areas followed by the application of a

nominal amount of pressure which results in the two geomembrane sheets being permanently joined together.

3.2.8 *gun* - Synonymous term for hand held extrusion fillet seaming device.

4. Significance and Use

4.1 Most federal and state environmental regulations call for special procedures for field seaming of geomembranes when sheet temperatures are less than 0deg.C (32deg.F). This standard practice is meant to give procedural guidance for seaming of geomembranes at sheet temperatures down to -15deg.C (5deg.F). Geomembrane seaming at temperatures below -15deg.C (5deg.F) is not generally recommended from both material and personnel perspectives.

4.2 The standard is focused on the two main types of thermal seaming methods, thermal fusion and extrusion fillet methods, where trial seam tests and production seam tests can be conducted within minutes after the seam is fabricated.

5. Procedure

5.1 Preparation of the geomembrane surfaces to be seamed:

5.1.1 Seaming is not to take place when it is snowing, sleeting or hailing on the geomembrane in the area to be seamed.

5.1.2 In the area to be seamed, all frost must be removed from the opposing surfaces of the geomembrane sheets in the regions where the actual seaming is to be performed.

5.1.3 The residual moisture left after removing frost must be wiped dry.

Note 1: Perhaps the most difficult surfaces to prepare in this regard are textured geomembranes where the texturing extends to the roll edges or roll ends.

5.1.4 The application of heat to remove moisture using a hand held hot air device can be used providing care against excessive heat application is taken. An assessment using trial seams is recommended.

5.1.5 The specific area to be seamed must be free of soil particles and other foreign matter.

5.1.6 For thermal fusion welding, such as the hot wedge method, the under side of the lower sheet should be free of frost so that the lower drive wheels of the device can move evenly and do not slip.

Note 2: It may be necessary to use a rub sheet beneath the area being seamed to separate the geomembrane from frozen soil subgrade.

5.1.7 For fillet extrusion welding the thermal tacking of the sheets together should proceed as with similar welding at temperatures above freezing.

5.1.8 Preheating of the geomembrane area to be seamed is common but the amount of preheat and its timing preceding the actual production seaming is at the option of the installer based upon past

practice and experience. An assessment using trial seams is recommended.

5.2 Thermal fusion seaming (e.g., using a hot wedge welding device):

5.2.1 In general, the rate of seaming, i.e., the speed of the hot wedge device, is usually slower than when seaming at temperatures above 0deg.C (32deg.F). Furthermore, the rate should decrease with decreasing sheet temperature.

5.2.2 Cold temperature seaming requires more frequent trial seams than when welding at temperatures above freezing. For example, if the CQA plan calls for two trial seams a day at temperatures above freezing, the number should be increased by one per day for each 7.5deg.C (13.5deg.F) less than freezing. Trial seams should be made at the discretion of the CQA Engineer.

5.2.3 Cold temperature seaming may also require more destructive tests on production seams than when welding above freezing. For example, in addition to the CQA plan written around above freezing temperatures, additional destructive seam samples may be taken at the end(s) of each continuous production seams.

Note 3: The actual schedule for destructive test samples is at the discretion of the CQA Engineer.

5.2.4 Movable enclosures (i.e., tents) traveling along with the welding device and personnel are particularly effective at sites with high wind. Cold temperature, per se, will not demand the use of protective tents. The decision to use tents is that of the installer and CQC personnel.

5.3 Extrusion fillet seaming:

5.3.1 The necessary grinding of the geomembrane surfaces in preparation of placing extrudate should be no further ahead of the extrusion gun than 10 m (30 ft.), or as stated in the CQA plan.

5.3.2 At the discretion of the parties involved, the profile of the base of the extrusion gun barrel is often shaped more rectangularly than when seaming at temperatures above freezing. The reason for this is to minimize the cooling rate in the thinner extrudate regions, see Figure 1.

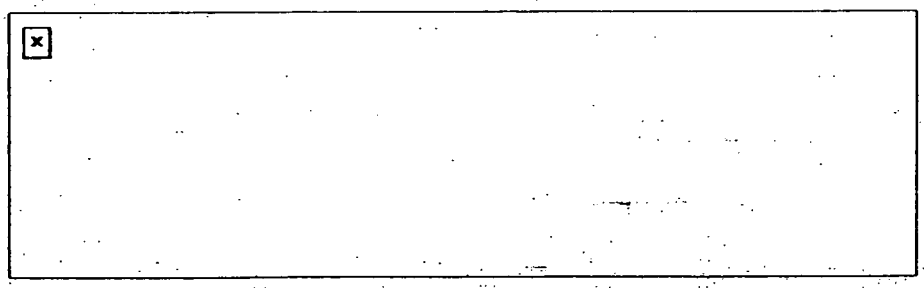


Figure 1 - Extrusion Fillet Patterns

5.3.3 In general, the rate of seaming, i.e., the speed of travel, is slower than when seaming at temperatures above 0deg. (32deg.F). Furthermore, the rate should decrease with decreasing sheet temperatures.

5.3.4 Cold temperature seaming requires more frequent trial seams than when welding at

temperatures above freezing. For example, if the CQA plan calls for two trial seams a day at temperatures above freezing, the number should be increased by one per day for each 7.5deg.C (13.5deg.F) less than freezing. Trial seams should be made at the discretion of the CQA Engineer.

5.3.5 Cold temperature seaming may also require more destructive tests on production seams than when welding above freezing. For example, in addition to the CQA plan written around above freezing temperatures, additional destructive seam samples may be taken at the end(s) of each continuous production seam.

Note 4: The actual schedule for destructive test samples is at the discretion of the CQA Engineer.

5.3.6 Movable enclosures (i.e., tents) traveling along with the welding device and personnel are particularly effective at sites with high wind. Cold temperature, per se, will not demand the use of protective tents. The decision to use tents is that of the installer and CQC personnel.

5.4 Seam Testing

5.4.1 In general, destructive testing of seams (both shear and peel) made in cold temperatures should follow the same protocol and test methods as for temperatures above freezing.

5.4.2 Destructive seam samples for CQA purposes should be taken as described previously and sent to the laboratory for testing at the designated test method conditions for above freezing temperatures.

5.4.3 Seam tests from trial seams can be taken to a field trailer, allowed to equilibrate to the designated test temperature and tested accordingly. However, seam tests from trial seams which are tested with a tensiometer on-site at temperatures less than freezing cannot be compared to geomembrane sheet strengths at room temperature. Numerous invalid results will occur if this procedure is practiced. Instead, the field tensiometer must be used to determine the strength of the unseamed geomembrane sheets at the same temperature as the seam test. The apparent strength will be higher as the temperature of the test specimen decreases. Acceptance of the trial seam is then based on the percentages of sheet strength as prescribed in the CQA plan, e.g., 95% in shear and 62% in peel for HDPE geomembranes.

Note 5: This type of testing whereby the seam test specimen results are compared to a single value of sheet strength is contentious since the value of sheet strength is not statistically reliable. Caution in this regard is necessary.

6. CQA Report

6.1 The report should include hourly temperatures during cold weather seaming which includes the actual temperature of the surface of the geomembrane (using a pyrometer) and the ambient air temperature measured approximately 1 m (3 ft.) above the geomembrane.

6.2 The method of removing frost from the area to be seamed (if any is present), as well as drying and cleaning of the surfaces involved, should be described.

6.3 The condition of the subgrade beneath the area being seamed should be assessed. If a rub sheet is used during the seam process it should be noted.

6.4 Complete identification of the field seaming system used, including material, methods, preheat, seaming rate, use of tents or enclosures and other details of the procedure should be documented.

6.5 The type, nature, number, condition and details of trial seams, as well as the results of such tests, should be detailed.

6.6 The type, nature, number and details of destructive samples and disposition of sections of the sample should be described. Proper identification is required to identify results of CQA laboratory testing in the final as-built plans of the project.

6.7 Any unusual condition with respect to personnel, equipment, sampling and/or testing that may be attributable to the cold weather should be described and documented.

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	December 16, 2004; 8:00 am	
Site Contact(s,:	Bob Birk	Bob Davis
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: East Landfill Pond Sediment Removal Plan Clarification

Discussion

This contact record summarizes and documents discussions on December 16, 2004 with the EPA & CDPHE regarding the procedures for removal of the East Landfill Pond sediments and subsequent placement onto the Present Landfill. This contact record also provides clarification of the scope of work to the construction subcontractor and the QA team for the PLF accelerated action.

From the December 16, 2004 forward, all wet pond sediments will be dewatered in accordance with the existing plan within the boundary of the sediment excavation. To reiterate, sediment will be dewatered with CKD and will be of soil-like nature (no free water) before being placed onto the Present Landfill surface as is currently described in the existing plan. A mix area may be established within the sediment excavation boundary to mix the CKD with the wet sediments. Dry sediments from within the sediment excavation boundary may be removed in a dry state and placed onto the Present Landfill surface without the addition of CKD.

Wet sediment that has been placed onto the surface of the Present Landfill will be mixed with CKD to form a soil-like nature as described in the existing plan. After mixing is complete, the sediments will be removed from their current location and the subgrade will be inspected and proof-rolled, and subsequently approved by the QA team as sound subgrade suitable for further placement of subgrade preparation materials (Rocky Flats Alluvium or prepared pond sediments).

The QA and K-H construction team will inspect the mixing of the CKD with the sediments several times a day to assure that the CKD is being adequately mixed with the sediments and that the resultant mixture is soil-like and that no free water exists within the mixture.

Contact Record Prepared by: Bob Davis

Required Distribution:		Additional Distribution:
M. Aguilar, USEPA	D. Mayo, K-H RISS	B. Davis, K-H RISS
H. Ainscough, CDPHE	J. Mead, K-H ESS	B. Koehler, K-H RISS
S. Bell, DOE-RFPO	S. Nesta, K-H RISS	P. Smith, USEPA
J. Berardini, K-H	L. Norland, K-H RISS	
B. Birk, DOE-RFPO	K. North, K-H ESS	
L. Brooks, K-H ESS	E. Pottorff, CDPHE	
L. Butler, K-H RISS	A. Primrose, K-H RISS	

G. Carnival, K-H RISS	R. Schassburger, DOE-RFPO	_____
N. Castaneda, DOE-RFPO	S. Serreze, K-H RISS	_____
C. Deck, K-H Legal	D. Shelton, K-H ESS	_____
N. Demos, SSOC	C. Spreng, CDPHE	_____
S. Gunderson, CDPHE	S. Surovchak, DOE-RFPO	_____
M. Keating, K-H RISS	J. Walstrom, K-H RISS	_____
L. Kimmel, USEPA	K. Wiemelt, K-H RISS	_____
D. Kruchek, CDPHE	C. Zahm, K-H Legal	_____
J. Legare, DOE-RFPO		_____

Davis, Robert W.

From: Davis, Robert W.
Sent: Tuesday, November 23, 2004 1:37 PM
To: 'Smith, Patricia'; 'Ng-A-Qui, Norm'; 'Bruskin, Larry'; Spreng, Carl
Cc: Davis, Robert W.; 'Thompson, Randy'; 'Underwood, Randy'; Birk, Bob
Subject: East Pond Sediments Removal Plan

Attached is the plan for the removal of the sediments from the East Landfill Pond including the confirmation sampling following sediment removal. The Word file is the text of the plan. The "pdf" file is the figure that accompanies the text. The EPL sampling file is the confirmation sampling plan.

East Landfill Pond Sediment Re...

east-west.pdf

ELP sampling

Please call me if you have any questions. Perhaps we can plan on discussing this at our next Construction Meeting on December 2, 2004.

Thanks!!

Bob Davis
Environmental Restoration
Office: 303-966-7026
Cell: 303-994-2390
e-mail: Robert.Davis@rfets.gov

East Landfill Pond Sediment Removal Plan
Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
November 23, 2004

INTRODUCTION

The Final IM/IRA for the Present Landfill outlined the removal of the sediment in the East Landfill Pond and placement under the RCRA Subtitle C cover as follows:

- Remove the water currently in the pond. This water will be pumped to the A-series ponds or to the on-site incidental water management system. This activity has been completed.
- Remove the vegetation along the banks of the pond only as needed to remove the sediments. This activity has been completed.
- Remove the sediments down to native material and place the removed sediments within the existing surface soils of the landfill and within the boundary of the RCRA Subtitle C-compliant cover. Cement or other pozzolanic material will be used to dewater the sediments if they are too wet at the time of placement.
- Confirmation samples will be taken after the sediments are removed. The samples will be evaluated in support of a RCRA contained-out determination to demonstrate that no hazardous wastes remain in the pond. Additionally, data will be evaluated and incorporated into the comprehensive risk assessment (note: this RCRA process will proceed independently of the accelerated action certification process).
- After removal of the sediments, water will be placed back into the pond to a level conducive for wetland plant growth and new wetland plants will be planted according to the Wetland Mitigation Plan, Appendix G of the final IM/IRA.

The following sections describe the work to dewater the sediments, sediment removal and placement, and confirmation sampling of the remaining soils in the East Landfill Pond. Sediments will be removed starting from Elevation 5921 (the bottom of the East Landfill Pond Emergency Spillway) to the bottom of the pond at it's deepest location (near the center of the existing dam).

SEDIMENT SOLIDIFICATION

The sediment in the East Landfill Pond will be dewatered with the addition and mixing of cement kiln dust (CKD) into the sediment. CKD from the CEMEX (Lyons, CO) cement facility will be used as the dewatering reagent. Since the sediment exists at very different moisture contents (from dry to very wet), the goal of the reagent addition is to transform

the sediments into a soil like texture for transport and placement under the RCRA cover. Mixing of the CKD will take place within the pond by the following process.

- Pot-holing will be conducted to determine the approximate depth of the sediment and approximate moisture content within a given area. Visual observations will be made to determine the depth to native material and general moisture content.
- With the depth information, an area of solidification will be determined to accept a truckload of CKD at a mix ratio of about 5% (by weight CKD to Sediment). For example: If the sediment is 1-foot thick with a density of about 75 pounds per cubic foot, then one truckload of CKD (15 tons) would be mixed into an area of about 90 feet by 90 feet.
- Mixing of the CKD into the sediment will be conducted with a track-mounted hoe.
- The dewatered sediment will be allowed to cure for at least one day.
- The cured sediment/CKD mixture will then be visually observed by the on-site engineering team, QC team and QA team. If the mixture exhibits a soil like texture that can be compacted without releasing water by physical observation, the material will then be removed from the pond for placement and compaction on top of the landfill surface. If the observations indicate that the material is too wet to place and compact, additional CKD will be added in 5% increments until the desired texture is obtained.

EXCAVATION AND PLACEMENT

The dewatered sediment will be excavated shortly after mixing (within a few workdays after mixing) and trucked to the placement area atop the Present Landfill. The attached figure is the approximate area of placement. Upon placement in about 8-inch lifts, the sediments will be roll compacted by the on-site smooth drum roller with a minimum of four complete passes of the compactor. Proof-rolling as currently specified will be conducted after the sediment has been placed and compacted as a final check for strength. If compaction is not achieved as evident by the proof-rolling process or if water is released during the compaction process, additional CKD will be added to the mixture, and recompacted and proof-rolled. The CKD to sediment ratio will also be increased at the pond mixing area based on the field compaction results.

Placement will begin and focus on the far-western edge of the area shown on the drawing. Placement of the sediments will progress in stages in an easterly direction and be placed at a maximum height of two feet based on the preliminary grading plans of the eastern portion of the landfill. The area of sediment placement will be surveyed during and after the placement to develop a permanent record of sediment location beneath the landfill cover.

CONFIRMATION SAMPLING

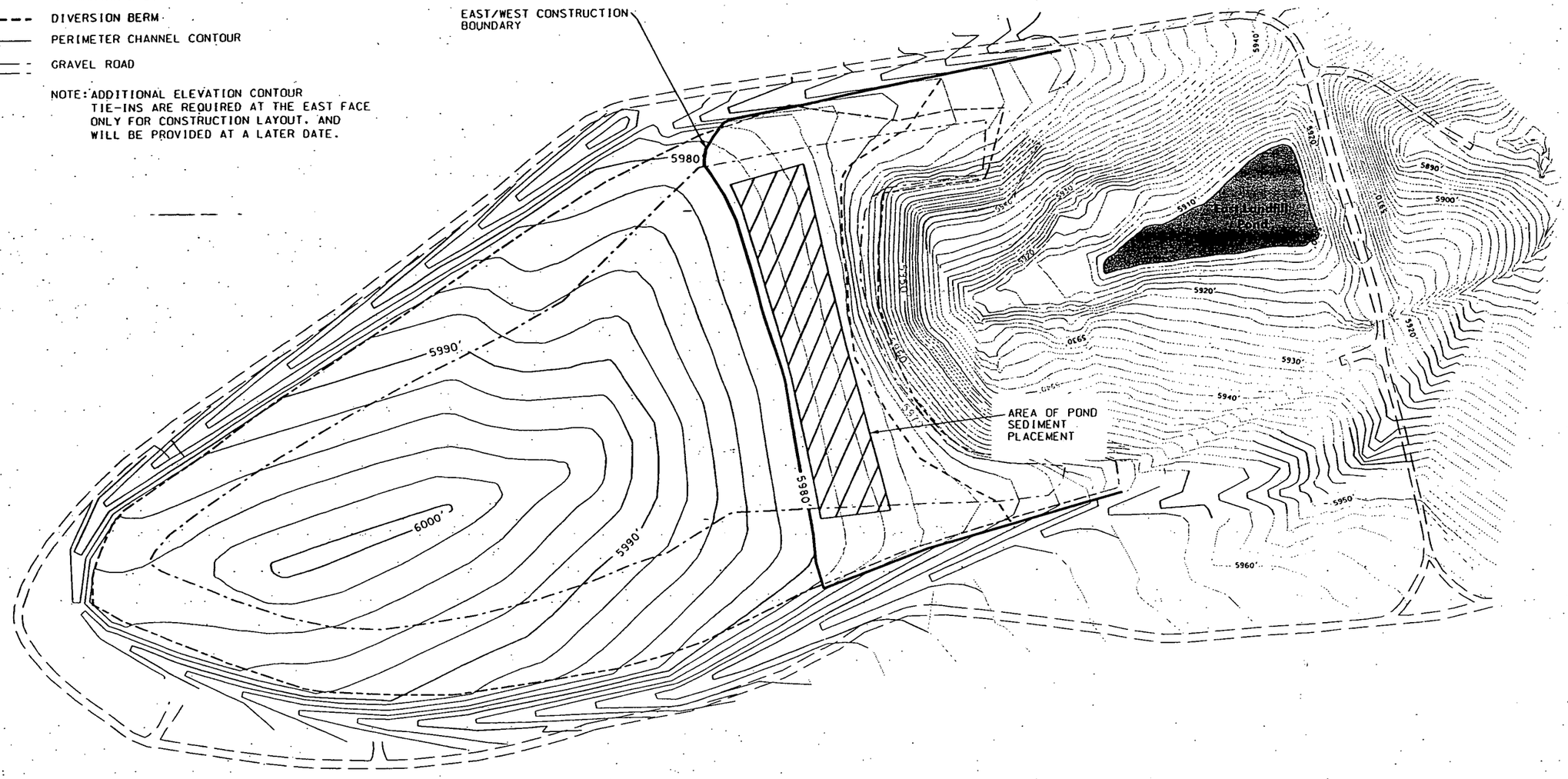
Confirmation sampling will be conducted after the sediment has been removed from the East Landfill Pond according to the Confirmation Sampling Plan (See Attachment A).

QUAN.	DESCRIPTION	MATERIAL

LEGEND

- 10 FOOT CONTOURS
- 2 FOOT CONTOURS
- EXISTING TOPOGRAPHY, MAJOR CONTOURS
- EXISTING TOPOGRAPHY, MINOR CONTOURS
- APPROXIMATE LIMIT OF IMPERMEABLE GEOSYNTHETICS
- APPROXIMATE LIMIT OF WASTE
- DIVERSION BERM
- PERIMETER CHANNEL CONTOUR
- GRAVEL ROAD

NOTE: ADDITIONAL ELEVATION CONTOUR TIE-INS ARE REQUIRED AT THE EAST FACE ONLY FOR CONSTRUCTION LAYOUT, AND WILL BE PROVIDED AT A LATER DATE.



N

0' 100 200'

ISSUE	DESCRIPTION			PROJECT/WCF NO.
KEYWORDS	TOLERANCES	DESIGN COMPANY		U.S. DEPARTMENT OF ENERGY ROCKY FLATS OFFICE GOLDEN, COLORADO
1.	FRACT. ±	DESIGNED BY R. THOMPSON		Rocky Flats Environmental Technology Site GOLDEN, COLORADO
2.	ANGLE ±	DRAWN BY A. SMOTHER		DESIGN TOP OF FINAL COVER
3.	DEC. ±	CHECKED BY R. ARCHIBALD		PRESENT LANDFILL ACCELERATED ACTION 95% DESIGN
4.	UNLESS NOTED OTHERWISE	INDEPENDENT VERIFIER M. HEINSTEIN		
5.	REMOVE BURRS AND SHARP EDGES	APPROVED BY R. THOMPSON		
BLDG./FACILITY	NEXT ASSEMBLY	CLASSIFIER		
ROOM/AREA				
GRID COORD./COL. NO.	SCALE: 1 INCH=200 FEET			SIZE B — DRAWING NUMBER 51781-008 — ISSUE

East Landfill Pond
Sediment Removal
Confirmation Sampling and Analysis Plan
Present Landfill Accelerated Action Construction Project

November 2004

TABLE OF CONTENTS

1.0 INTRODUCTION 1
2.0 EXISTING IHSS INFORMATION 1
3.0 CONFIRMATION SAMPLING 3
4.0 REFERENCES 3

LIST OF FIGURES

Figure 1 General Location of East Landfill Pond 2
Figure 2 Proposed Sampling Locations for East Landfill Pond – Sediment Removal Project 9

LIST OF TABLES

Table 1 East Landfill Pond - Potential Contaminants of Concern 1
Table 2 East Landfill Pond – Sediment Removal Project Sampling and Analysis Summary 3
Table 3 Sampling Specifications for East Landfill Pond – Sediment Removal Project 4

ACRONYMS

AL	action level
BZ	Buffer Zone
CDPHE	Colorado Department of Public Health and Environment
CRA	Comprehensive Risk Assessment
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
ft	foot
HPGe	high purity germanium
HRR	Historical Release Report
IA	Industrial Area
IHSS	Individual Hazardous Substance Site
K-H	Kaiser-Hill Company, L.L.C.
IABZSAP	Industrial Area and Buffer Zone Sampling and Analysis Plan
IM/IRA	Interim Measure/Interim Remedial Action
N/A	not applicable
NLR	no longer representative
PCOC	potential contaminant of concern
Pond	East Landfill Pond
RCRA	Resource Conservation and Recovery Act
RFCA	Rocky Flats Cleanup Agreement
RFETS	Rocky Flats Environmental Technology Site
SAP	Sampling and Analysis Plan
SVOC	semi-volatile organic compound
WRW	wildlife refuge worker

1.0 INTRODUCTION

This Confirmation Sampling and Analysis Plan (SAP) includes specific information, sampling locations, and potential contaminants of concern (PCOCs) for soil beneath the East Landfill Pond at the Present Landfill located in the Rocky Flats Environmental Technology Site (RFETS). This SAP proposes sampling locations at which soil will be collected after Pond sediments have been removed. The East Landfill Pond is shown on Figure 1

This document is a supplement to the Final Interim Measure/Interim Remedial Action (IM/IRA) for Individual Hazardous Substance Site (IHSS) 114 and Resource Conservation and Recovery Act (RCRA) Closure of the RFETS Present Landfill (DOE 2004a). Reasons for the sampling are to provide data for the RFETS Comprehensive Risk Assessment (CRA) and for comparison to Rocky Flats Cleanup Agreement (RFCA) (DOE et al. 2003) wildlife refuge worker (WRW) action levels (ALs).

2.0 EXISTING IHSS INFORMATION

Existing information for IHSS 114, the Present Landfill, is available in the Historical Release Reports (HRR) for the Rocky Flats Plant (DOE 1992-2003). IHSS 114 is the presumed source of PCOCs in East Landfill Pond sediments. The HRR and process knowledge indicate that East Landfill Pond sediments may contain radionuclide, metal, or semi-volatile organic compound (SVOC) contamination. PCOCs are listed in Table 1.

Table 1
East Landfill Pond - Potential Contaminants of Concern

PCOCs	Media	Sources	Sampling Type
Radionuclides	Surface soil	HRR (DOE 1992-2003) and process knowledge	Statistical
Metals	Surface soil	HRR (DOE 1992-2003) and process knowledge	Statistical
SVOCs	Surface soil	HRR (DOE 1992-2003) and process knowledge	Statistical

Because the Kaiser-Hill Company, L.L.C (K-H), the U.S. Department of Energy (DOE), the U.S. Environmental Protection Agency (EPA), and Colorado Department of Public Health and Environment (CDPHE) have agreed that East Landfill Pond sediments will be removed (DOE 2004a) and thereby any historic sampling locations associated with them, a map showing previous soil sampling adjacent to the Pond has not been included in this document. The locations that will be removed will become no longer representative (NLR) and will be recorded in the annual HRR update.

Figure 1
General Location of East Landfill Pond

3.0 CONFIRMATION SAMPLING

The proposed sampling and analysis specifications for the East Landfill Pond – Sediment Removal Project are summarized in Table 2 and listed, by sample location, in Table 3 (on the next page). The proposed sampling locations are shown in Figure 2. Statistical samples at ten locations from 0.0 to 0.5 feet (ft) in depth will be collected beginning at the surface exposed after the removal of the East Landfill Pond sediments. The number and type of samples may change based on field conditions and/or sampling results. Changes to sampling specifications will be considered in consultation with the regulatory agencies.

Table 2
East Landfill Pond – Sediment Removal Project Sampling and Analysis Summary

Category	Total
Number of Sampling Locations	10
Number of Samples	10
Number of Radionuclide Analyses	10
Number of Metal Analyses	10
Number of SVOC Analyses	10

Samples will be collected and analyzed in accordance with the Industrial Area (IA) and Buffer Zone (BZ) SAP (IABZSAP) (DOE 2004b).

Three types of sampling strategies may be used to determine sampling locations: statistical, biased, and geostatistical. A statistical grid is used here. Statistical grids have computer-generated random start points and orientations. The statistical grid size (i.e., the length between grid points) used here is 93 feet. This grid modified from specifications in the IABZSAP (DOE 2004) in order to cover the Pond area but not be economically impractical due to the number of sampling locations.

4.0 REFERENCES

DOE, 1992-2003, Historical Release Reports for the Rocky Flats Plant, Golden, Colorado.

DOE, 2004a, Final Interim Measure/Interim Remedial Action for IHSS 114 and RCRA Closure of the RFETS Present Landfill, Rocky Flats Environmental Technology Site, Golden, Colorado, August.

DOE, 2004b, Industrial Area and Buffer Zone Sampling and Analysis Plan Modification 1, Rocky Flats Environmental Technology Site, Golden, Colorado, May.

DOE, CDPHE, and EPA, 2003, Modifications to the Rocky Flats Cleanup Agreement Attachment 5, Rocky Flats Environmental Technology Site, Golden, Colorado, June.

Table 3
Sampling Specifications for East Landfill Pond – Sediment Removal Project

Location	Easting	Northing	Media	Depth Interval (ft)	Analyte	Onsite Laboratory Method	Offsite Laboratory Method	Comments
CG57-000	2084103.330	752868.954	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CG57-000	2084103.330	752868.954	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CG57-000	2084103.330	752868.954	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CH57-000	2084225.663	752917.250	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CH57-000	2084225.663	752917.250	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CH57-000	2084225.663	752917.250	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.

Location	Easting	Northing	Media	Depth Interval (ft)	Analyte	Onsite Laboratory Method	Offsite Laboratory Method	Comments
CI57-000	2084518.626	752891.508	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI57-000	2084518.626	752891.508	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI57-000	2084518.626	752891.508	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI57-001	2084433.312	752928.526	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI57-001	2084433.312	752928.526	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI57-001	2084433.312	752928.526	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-000	2084507.350	753099.156	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.

Location	Easting	Northing	Media	Depth Interval (ft)	Analyte	Onsite Laboratory Method	Offsite Laboratory Method	Comments
CI58-000	2084507.350	753099.156	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-000	2084507.350	753099.156	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-001	2084470.331	753013.841	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-001	2084470.331	753013.841	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-001	2084470.331	753013.841	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-002	2084385.016	753050.860	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-002	2084385.016	753050.860	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.

Location	Easting	Northing	Media	Depth Interval (ft)	Analyte	Onsite Laboratory Method	Offsite Laboratory Method	Comments
CI58-002	2084385.016	753050.860	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-003	2084347.997	752965.545	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-003	2084347.997	752965.545	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CI58-003	2084347.997	752965.545	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CJ58-000	2084592.664	753062.137	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CJ58-000	2084592.664	753062.137	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CJ58-000	2084592.664	753062.137	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.

Location	Easting	Northing	Media	Depth Interval (ft)	Analyte	Onsite Laboratory Method	Offsite Laboratory Method	Comments
CJ58-001	2084555.645	752976.822	Surface Soil	0.0-0.5	Radionuclides	HPGe	Alpha Spectrometry	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CJ58-001	2084555.645	752976.822	Surface Soil	0.0-0.5	Metal	6200	6010	Statistical location, interval to begin at top of exposed surface after pond sediment removed.
CJ58-001	2084555.645	752976.822	Surface Soil	0.0-0.5	SVOC	8270	8270	Statistical location, interval to begin at top of exposed surface after pond sediment removed.

HPGe = high purity germanium

Figure 2
Proposed Sampling Locations for East Landfill Pond
– Sediment Removal Project

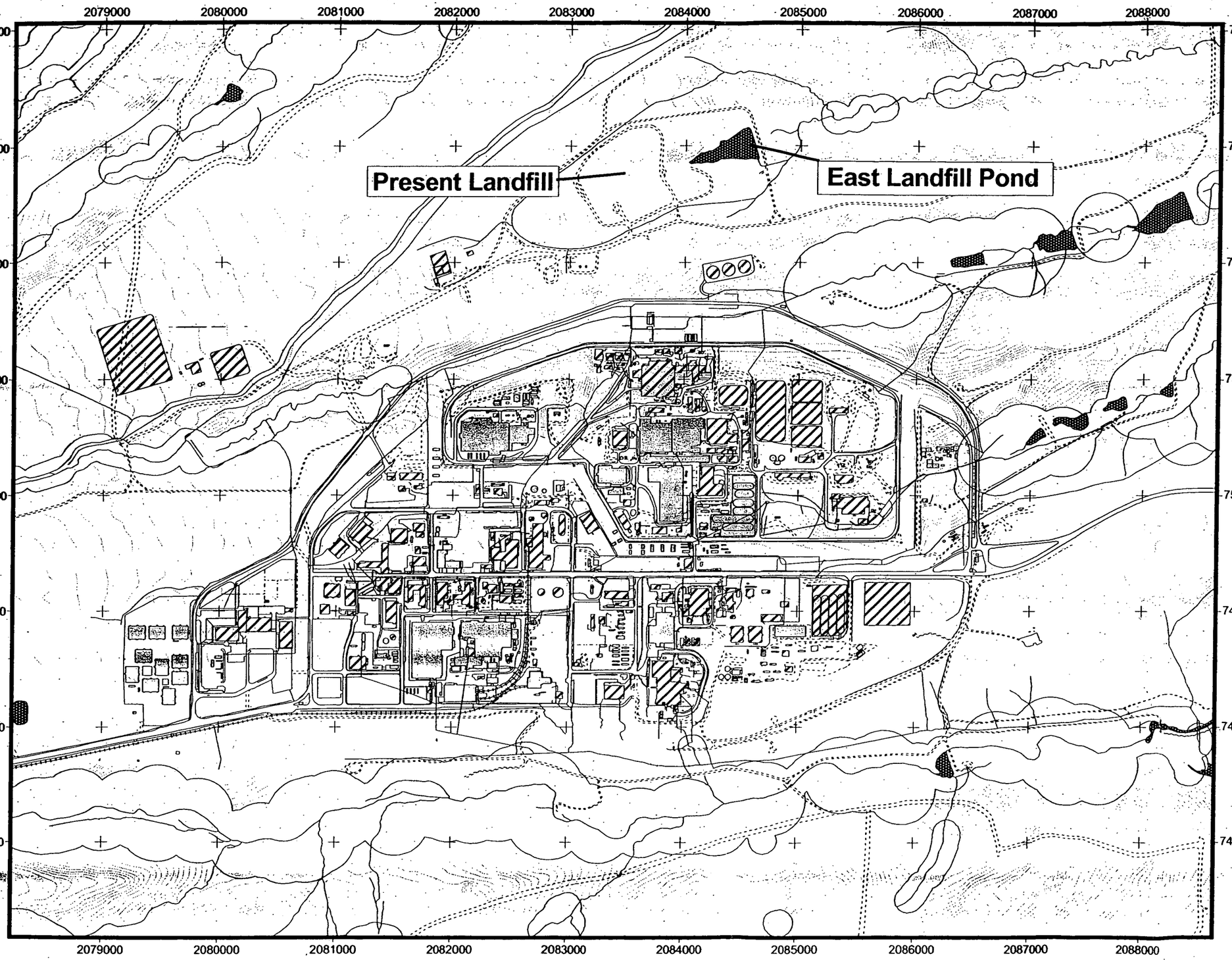


FIGURE 1
General Location
of
East Landfill Pond

KEY

- Demolished building
- Standing building
- Prebble's Meadow Jumping Mouse
- Paved road
- Dirt road
- Railroad
- Fence
- Stream
- Pond
- Contour 5-foot

N
W E
S

250 0 250 500 750 1000 1250 Feet

Scale = 1:10000

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared for:

KAISER•HILL
COMPANY

Prepared by:

RADMS

Date: 11/15/0

File: W/Projects/Fy2004/Present Landfill/
EastLandfillPond/East_Landfill_Pond_SAP.apr

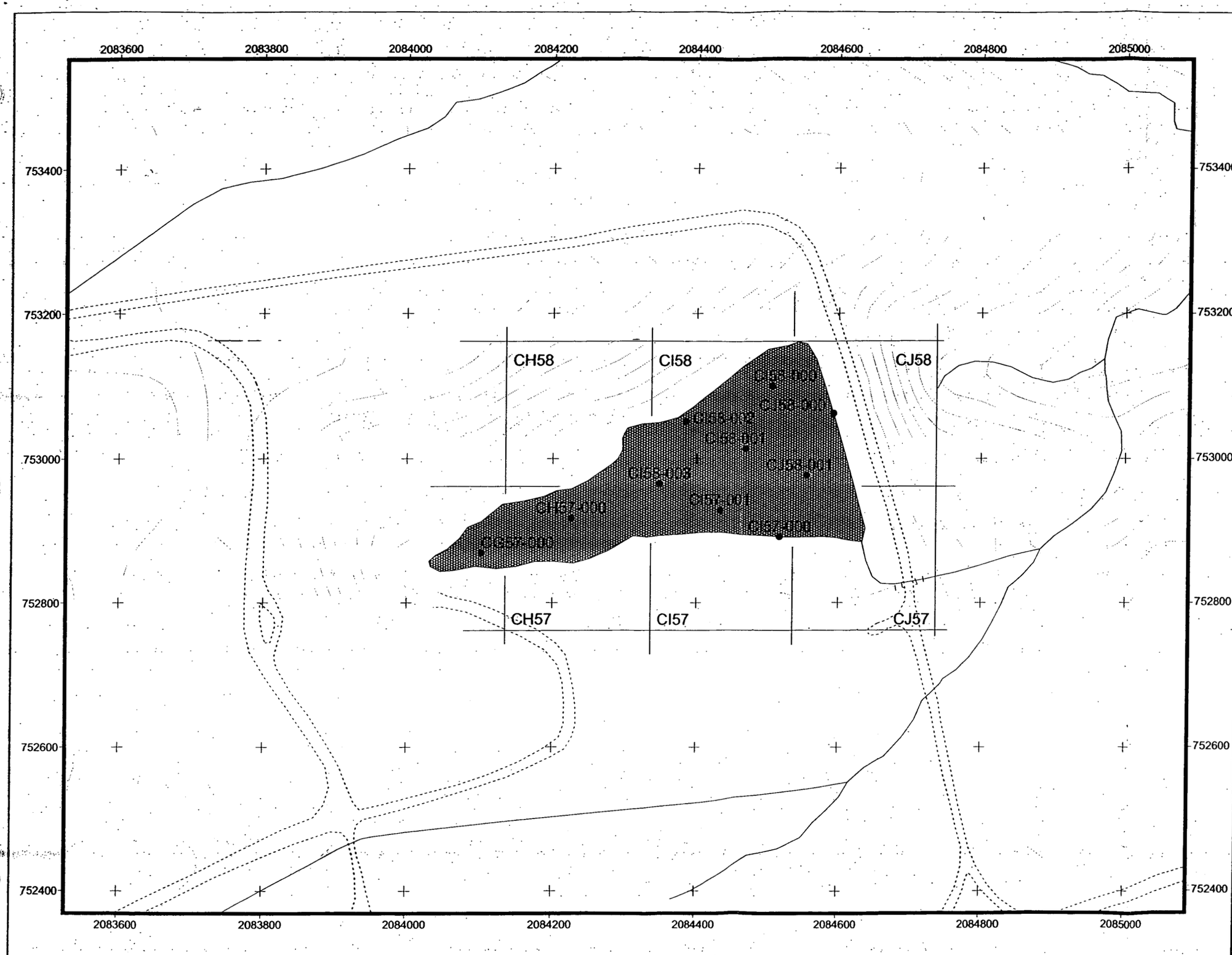


FIGURE 2
Proposed Sampling Locations
for
East Landfill Pond
Sediment Removal Project

KEY

- Proposed Sample Locations
- East Landfill Pond
- Stream
- Dirt road
- Contour 5-foot
- CH58 — Site sample labeling grid

N W E S

50 0 50 100 150 200 Feet

Scale = 1:1500

State Plane Coordinate Projection
Colorado Central Zone
Datum: NAD 27

U.S. Department of Energy
Rocky Flats Environmental Technology Site

Prepared for: KAISER•HILL COMPANY

Prepared by: RADMS Date: 11/15/04

File: W/Projects/Fy2004/Present Landfill/EastLandfillPond/East_Landfill_Pond_SAP.apr

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	January 20, 2005 / 3:00 to 5:00pm	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: East Face Work Plan for the Present Landfill Cover

Discussion

See attached work plan.

Referenced figure in work plan will be provided separately until electronic copy available.

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

SECTION 1 EAST FACE WORK PLAN

Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
January 21, 2005

Objective

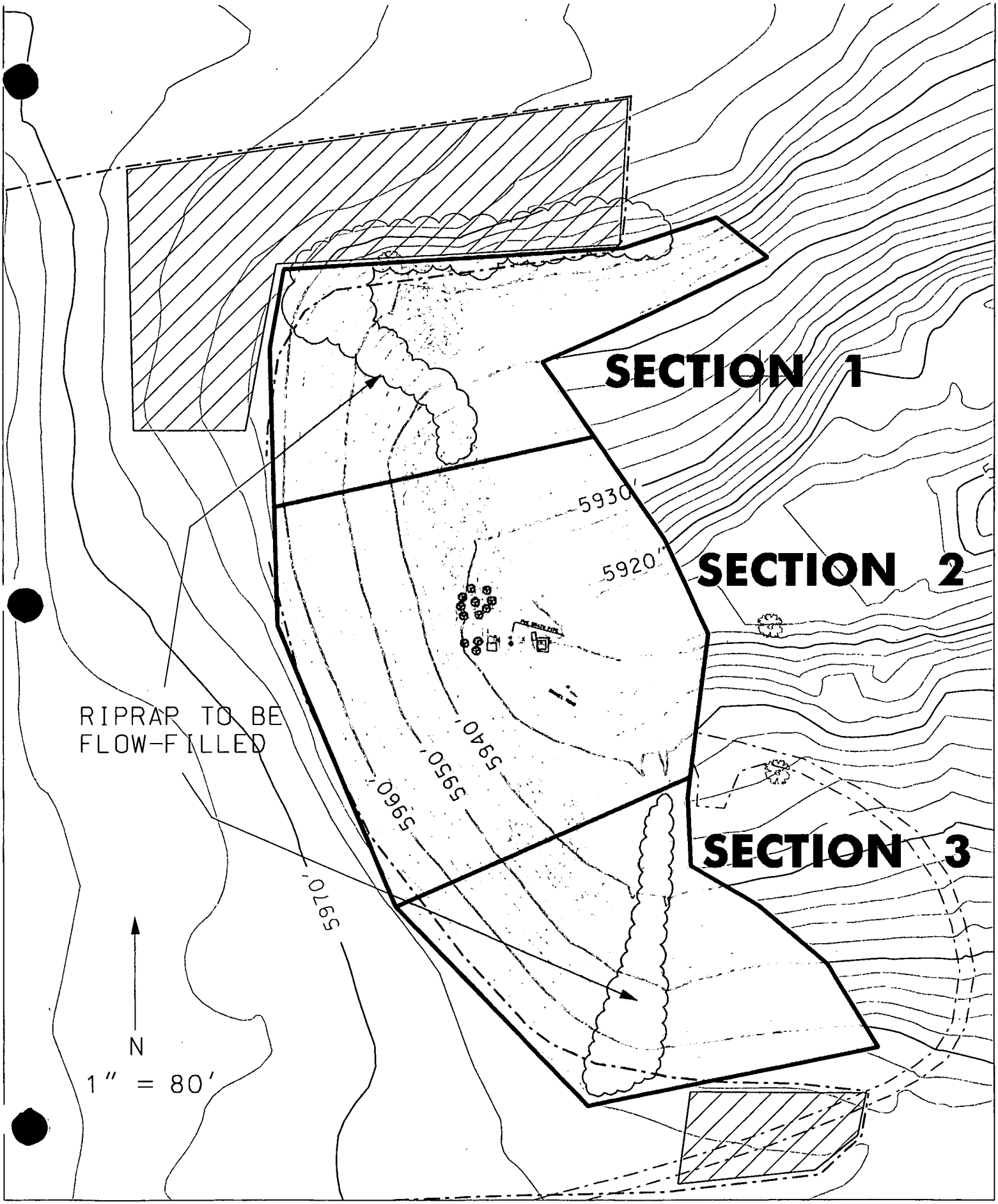
Evaluate subsurface conditions to assess geotechnical parameters that could cause a modification to the east face cover and to establish a stable configuration at the base of the existing slope in preparation for the construction of the fill and geosynthetic liner system.

Scope of Work

1. **Work will be restricted to Section 1 as shown on the attached drawing.**
2. **Clear the area of tress, debris and rocks. The majority of the tree root system will be removed as the actual field conditions allow. The area will not be totally grubbed at this time.**
3. **Project surveyors will stake the location of the proposed toe anchor trench (current design).**
4. **Conduct test pitting to assess the soil and groundwater conditions within the area. The test pitting observations will be logged and photographed by a geotechnical engineer.**
5. **Based on the information gathered during the test pitting, the area will be proof-rolled as specified in the design.**
6. **Based on a combination of the test pitting and proof-rolling, soft areas will be repaired as follows:**

    - **The excavation of soft soils & back-filling with Rocky Flats Alluvium type soils. Backfill will be compacted consistent with functional specifications for the pre-grade preparation on the western areas of the landfill surface.**
    - **Other techniques may be needed for the repair of the soft spots. The design team with communication with the regulatory agencies will determine other techniques to be used.**
    - **Soft areas near the toe of the new design slope will be repaired at least 10-feet past the location of the new toe.**

7. **Based on the information gained in the test pitting and proof-rolling observations, the slope drain system design may need to be modified. If the drain system requires modification, the fieldwork described above will not include the repair of soft spots. Soft spot repair will be included as a part of construction of any modified design of the slope drain system.**


SECTION 1
SECTION 2
SECTION 3
5930'
5920'
5940'
5950'
5960'
5970'
RIPRAP TO BE
FLOW-FILLED
N
1" = 80'

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	January 24, 2005	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: East Face Work Plan for the Present Landfill Cover-Section 3

Discussion
See attached work plan.
Referenced figure in work plan will be provided separately until electronic copy available.

Contact Record Prepared by: Bob Davis

Required Distribution:
M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:
B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

SECTION 3 EAST FACE WORK PLAN

Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
January 21, 2005

Objective

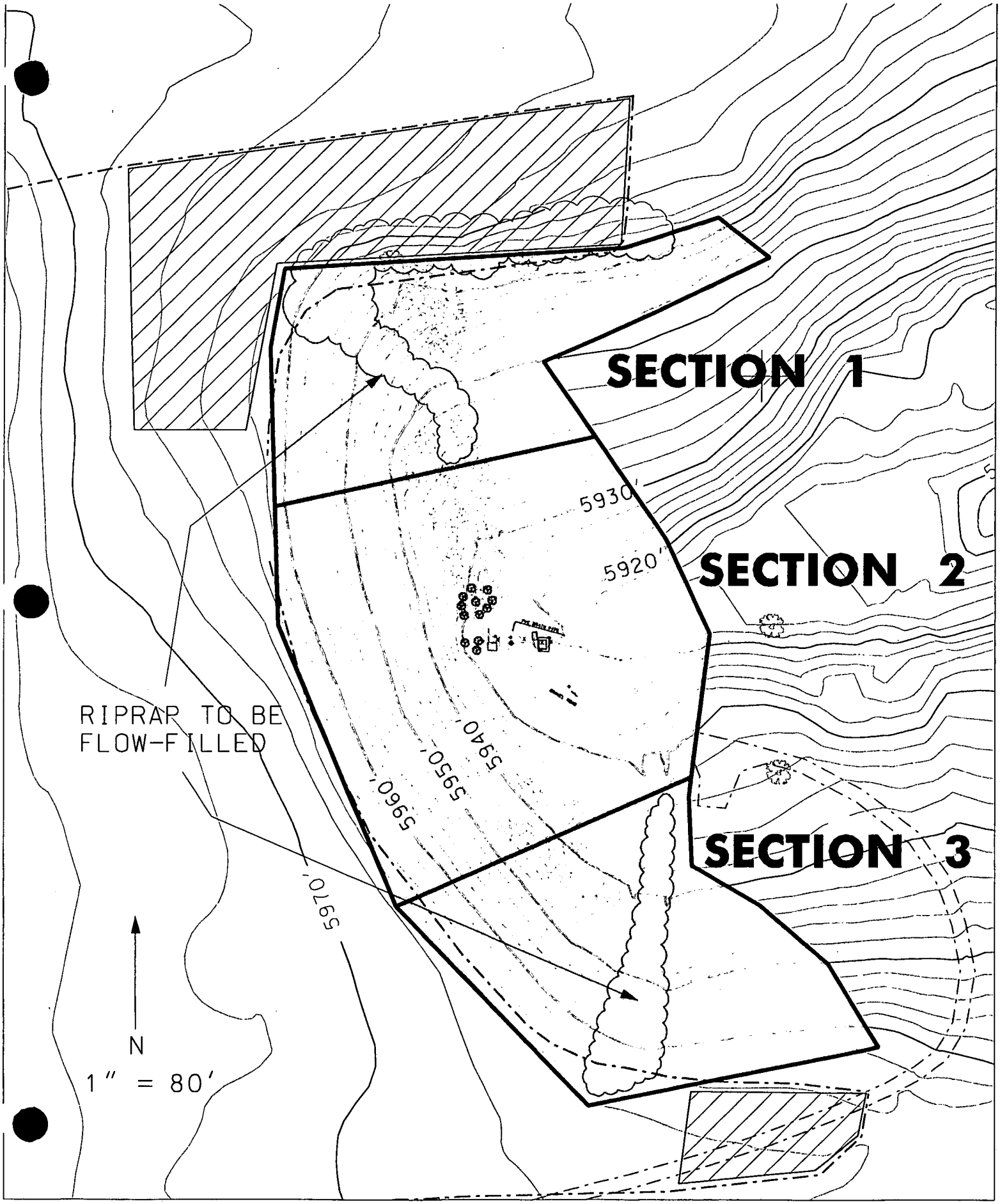
Evaluate subsurface conditions to assess geotechnical parameters that could cause a modification to the east face cover and to establish a stable configuration at the base of the existing slope in preparation for the construction of the fill and geosynthetic liner system.

Scope of Work

1. **Work will be restricted to Section 3 as shown on the attached drawing.**
2. **Clear the area of tress, debris and rocks. The majority of the tree root system will be removed as the actual field conditions allow. The area will not be totally grubbed at this time.**
3. **Project surveyors will stake the location of the proposed toe anchor trench (current design).**
4. **Conduct test pitting to assess the soil and groundwater conditions within the area. The test pitting observations will be logged and photographed by a geotechnical engineer.**
5. **Based on the information gathered during the test pitting, the area will be proof-rolled as specified in the design.**
6. **Based on a combination of the test pitting and proof-rolling, soft areas will be repaired as follows:**

    - **The excavation of soft soils & back-filling with Rocky Flats Alluvium type soils. Backfill will be compacted consistent with functional specifications for the pre-grade preparation on the western areas of the landfill surface.**
    - **Other techniques may be needed for the repair of the soft spots. The design team with communication with the regulatory agencies will determine other techniques to be used.**
    - **Soft areas near the toe of the new design slope will be repaired at least 10-feet past the location of the new toe.**

7. **Based on the information gained in the test pitting and proof-rolling observations, the slope drain system design may need to be modified. If the drain system requires modification, the fieldwork described above will not include the repair of soft spots. Soft spot repair will be included as a part of construction of any modified design of the slope drain system.**


SECTION 1
SECTION 2
SECTION 3
5930'
5920'
5940'
5950'
5960'
5970'
RIPRAP TO BE
FLOW-FILLED
N
1" = 80'

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	February 10, 2005	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: Present Landfill Cover Work Plan for Liner Installation East of 5980 line

Discussion
See attached work plan.

Contact Record Prepared by: Bob Davis

Required Distribution:
M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:
B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

LINER INSTALLATION WORK PLAN

(Between the 5980 line and the crest of the existing slope)
Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
February 3, 2005

Objective

Geosynthetic liner materials have been installed up to the 5980 line at the Present Landfill. East of the 5980 line, pre-grade soils have been placed and proof-rolled, the East Landfill Pond sediments have been placed, compacted and proof-rolled, and the 6-inch cushion soils are being placed, compacted and certified for compaction and grade. This work will provide the certified (by PLF QA) grade and foundation to allow geosynthetic liner installation. This work has been completed up to the crest (edge) of the existing slope.

This Work Plan is to provide the scope of geosynthetic liner installation up to the crest of the existing slope but does not include the installation of the "at crest" anchor trench. This work continues the liner installation work completed east of the 5980 line at the design slopes of the landfill cover and will stop the infiltration of storm events and snow melt near the crest of the east slope.

This work does not include the installation of the "at crest" anchor trench or any of the geosynthetic liner materials down the east face slope (4H : 1V).

Scope of Work

1. **QA certification of the 6-inch soil cushion layer.**
2. **Install GCL, smooth FML and GDN up to/near the existing crest of the east slope.**
3. **Install the 10-inch protective soil cushion layer over the geosynthetic layers. This layer would stop about 10 feet from the edge of the installed geosynthetic layer.**
4. **Install the 1-foot protective rock layer over the 10-inch cushion soil layer. This layer would stop about 10 feet from the edge of the installed 10-inch cushion layer.**
5. **Install the 22-inch soil cover layer over the rock layer. This layer would stop about 10 feet from the edge of the installed rock layer.**
6. **This work will be done in accordance with the design drawings and specifications and with the required surveying and hold point release procedures as is done on all the construction activities.**

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	February 11, 2005	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: East Face Work Plan for the Present Landfill Cover-Section 2

Discussion
See attached work plan.
Referenced figure in work plan will be provided separately until electronic copy available.

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

SECTION 2 EAST FACE WORK PLAN

Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
February 3, 2005

Objective

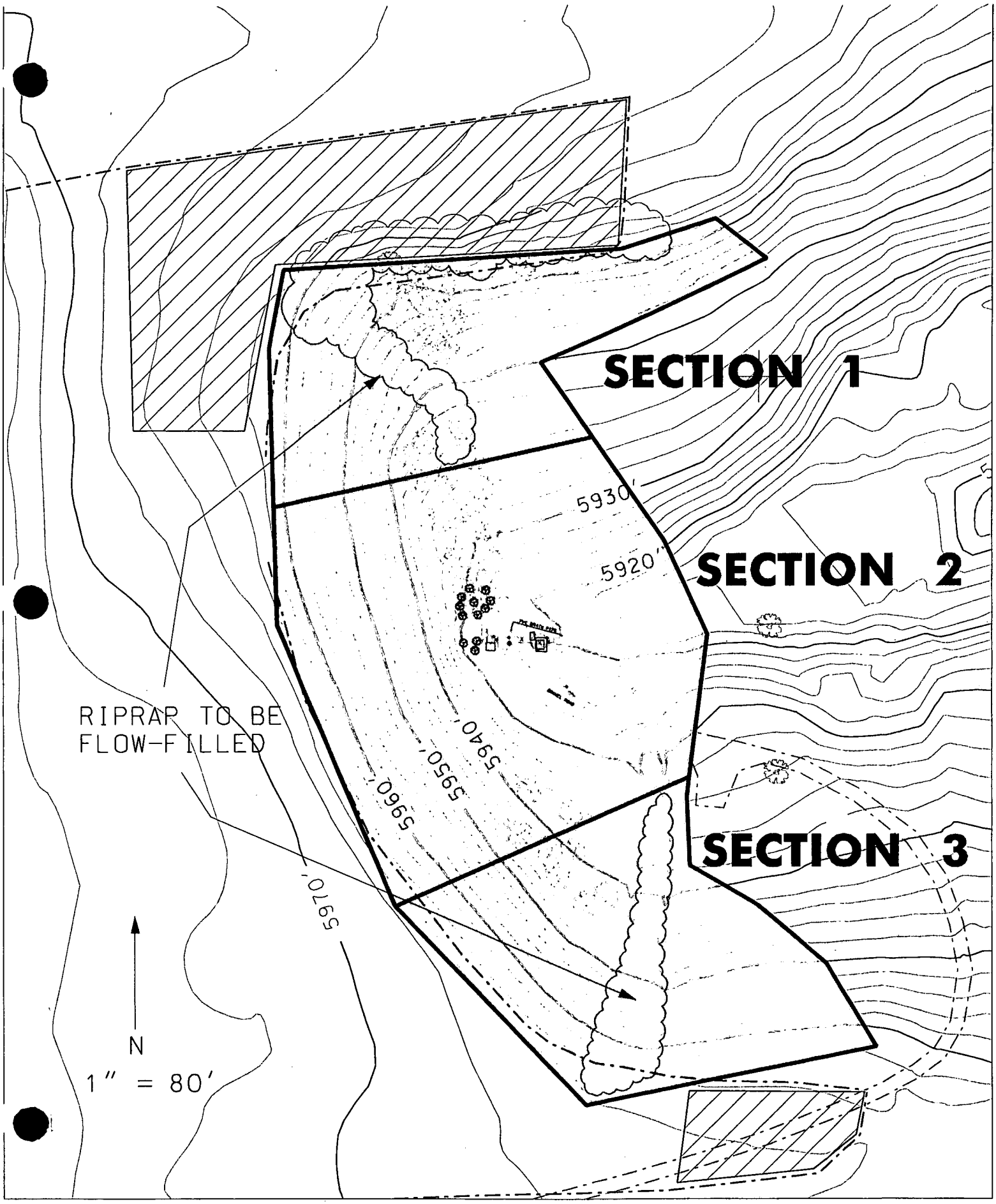
Evaluate subsurface conditions to assess geotechnical parameters that could cause a modification to the east face cover and to establish a stable configuration at the base of the existing slope in preparation for the construction of the fill and geosynthetic liner system.

Scope of Work

1. **Work will be restricted to Section 2 as shown on the attached drawing.**
2. **Berms will be built upslope and downslope as necessary to control surface water run-on and run-off during this work.**
3. **Clear the area of trees, debris and rocks. The majority of the tree root system will be removed as the actual field conditions allow. The area will not be totally grubbed at this time.**
4. **Project surveyors will stake the location of the proposed toe anchor trench (current design).**
5. **Conduct test pitting to assess the soil and groundwater conditions within the area. The test pitting observations will be logged and photographed by a geotechnical engineer.**
6. **Based on the information gathered during the test pitting, the area will be proof-rolled as specified in the design.**
7. **Based on a combination of the test pitting and proof-rolling, soft areas will be repaired to establish a more stable configuration as follows:**

    - **The excavation of soft soils & back-filling with Rocky Flats Alluvium type soils. Backfill will be compacted consistent with functional specifications for the pre-grade preparation on the western areas of the landfill surface.**
    - **Other techniques may be needed for the repair of the soft spots. The design team with communication with the regulatory agencies will determine other techniques to be used.**
    - **Soft areas near the toe of the new design slope will be repaired at least 10-feet past the location of the new toe.**

8. **Based on the information gained in the test pitting and proof-rolling observations, a slope drain system may need to be installed to drain water from behind the modified slope (new 4H: 1V slope).**


SECTION 1
SECTION 2
SECTION 3
5930'
5920'
5940'
5950'
5960'
5970'
RIPRAP TO BE
FLOW-FILLED
N
1" = 80'

Davis, Robert W.

From: Davis, Robert W.
Sent: Thursday, February 17, 2005 7:44 AM
To: 'Smith.Patricia@epamail.epa.gov'
Cc: Birk, Bob; Spreng, Carl; Bruskin, Larry; Ng-A-Qui, Norm; Aguilar.Mark@epamail.epa.gov; Legare, Joe; Sattelberg, Mark; Davis, Robert W.
Subject: RE: East Slope Drain Installation

Pat,

Here is the revised East Slope Drain Installation Detail revised to include a link to the East Slope Work Plans.

PLF Strip Drain Installation N...

PLF Strip Drain Installation D...

Bob Davis
Environmental Restoration
Office: 303-966-7026
Cell: 303-994-2390
E-mail: Robert.Davis@rfets.gov

-----Original Message-----

From: Smith.Patricia@epamail.epa.gov [SMTP:Smith.Patricia@epamail.epa.gov]
Sent: Friday, February 11, 2005 3:31 PM
To: Davis, Robert W.
Cc: Birk, Bob; Spreng, Carl; Bruskin, Larry; Ng-A-Qui, Norm; Aguilar.Mark@epamail.epa.gov; Legare, Joe; Sattelberg, Mark
Subject: Re: East Slope Drain Installation

This looks good. We should link the language of the workplans (section 1,2,3) to it (North, East, South). It appears to me that this supercedes the reference to the drains in January 13, 2005 Drawing 13A, detail 2.

Pat Smith

EPA Region 8, EPR-F
999 18th St, Ste 300
Denver, CO 80202-2466

303-312-6504 ofc
1-800-227-9441
303-312-6067 fax
303-518-9578 cell

"Davis, Robert W."

<Robert.Davis@rfets.gov>
02/11/2005 09:22 AM

To
Patricia Smith/EPR/R8/USEPA/US@EPA, "Ng-A-Qui, Norm" <nng-a-qui@burnsmcd.com>, "Bruskin, Larry" <Larry.Bruskin@state.co.us>, "Spreng, Carl" <Carl.Spreng@state.co.us>

cc
"Birk, Bob" <Bob.Birk@rf.doe.gov>, "Davis, Robert W." <Robert.Davis@rfets.gov>

Subject
East Slope Drain Installation

Pat,

Here is an installation sketch and installation notes for the strip drain system at the east face of the PLF as we discussed in yesterday's meeting.

<<PLF Strip Drain Installation Detail.doc>>
<<PLF Strip Drain Installation Notes.doc>>

Bob Davis
Environmental Restoration
Office: 303-966-7026
Cell: 303-994-2390
E-mail: Robert.Davis@rfets.gov

(See attached file: PLF Strip Drain Installation Detail.doc)(See attached file: PLF Strip Drain Installation Notes.doc) << File: PLF Strip Drain Installation Detail.doc >> << File: PLF Strip Drain Installation Notes.doc >>

PLF Strip Drain Installation Notes
Present Landfill Accelerated Action Construction
Rocky flats Environmental Technology site
February 11, 2005

General Notes:

- All areas of the east face will be cleared and grubbed in accordance with the design specifications (See Work Plans for Section 1, 2 & 3 for east slope of PLF).
- All areas will be assessed for competent soils to support the new 4H: 1V fill by the onsite engineering team. Soft soils will be removed and replaced with Rocky Flats Alluvium soils in accordance with the design specifications for pre-grade fill (See Work Plans for Section 1, 2 & 3 for east slope of PLF).
- Once the area has been cleared/grubbed and competent pre-grade has been established, the areas will be surveyed/mapped. This information coupled with the design drawings for the seep collection system will be used to locate the drainage trench for the strip drains. The onsite design team will determine the locations with input from the design engineers, construction team and QA team. This will include the depth of the drain trench and the elevations and slope of the drain pipe from the trench to the seep treatment system collection manholes.
- The strip drains will be placed as generally shown on the design drawings (Sheet 013B); however, the actual number and location of the strip drains will be determined in the field by the engineering team.
- The strip drains have a flow capacity of over 20 gpm/ft. The water seeps from the entire face of the existing east slope is not expected to be greater than 1 to 3 gpm based on field observation and the evaluation of the hydrogeologic model.
- The flow capacity of the perforated drain pipe is up to 40 gpm.
- The installation of the soil to reach the new 4H: 1V slope will be in accordance with the design specifications. Soil will be placed and compacted in 1-foot lifts and compacted with a minimum of four passes of the on-site sheeps-foot roller.

North Side Notes:

- The cover of the northern side of the east slope will be constructed as shown of the design drawings and specifications.
- The north side of the east slope will require about 2 to 4 feet of excavation of soft soils, and backfilling at the toe of the slope with pre-grade fill soil (Rocky flats Alluvium).
- The drain trench is expected to be located along the toe of the existing slope at about elevation 5950; well above the elevation of the seep treatment system collection manholes.

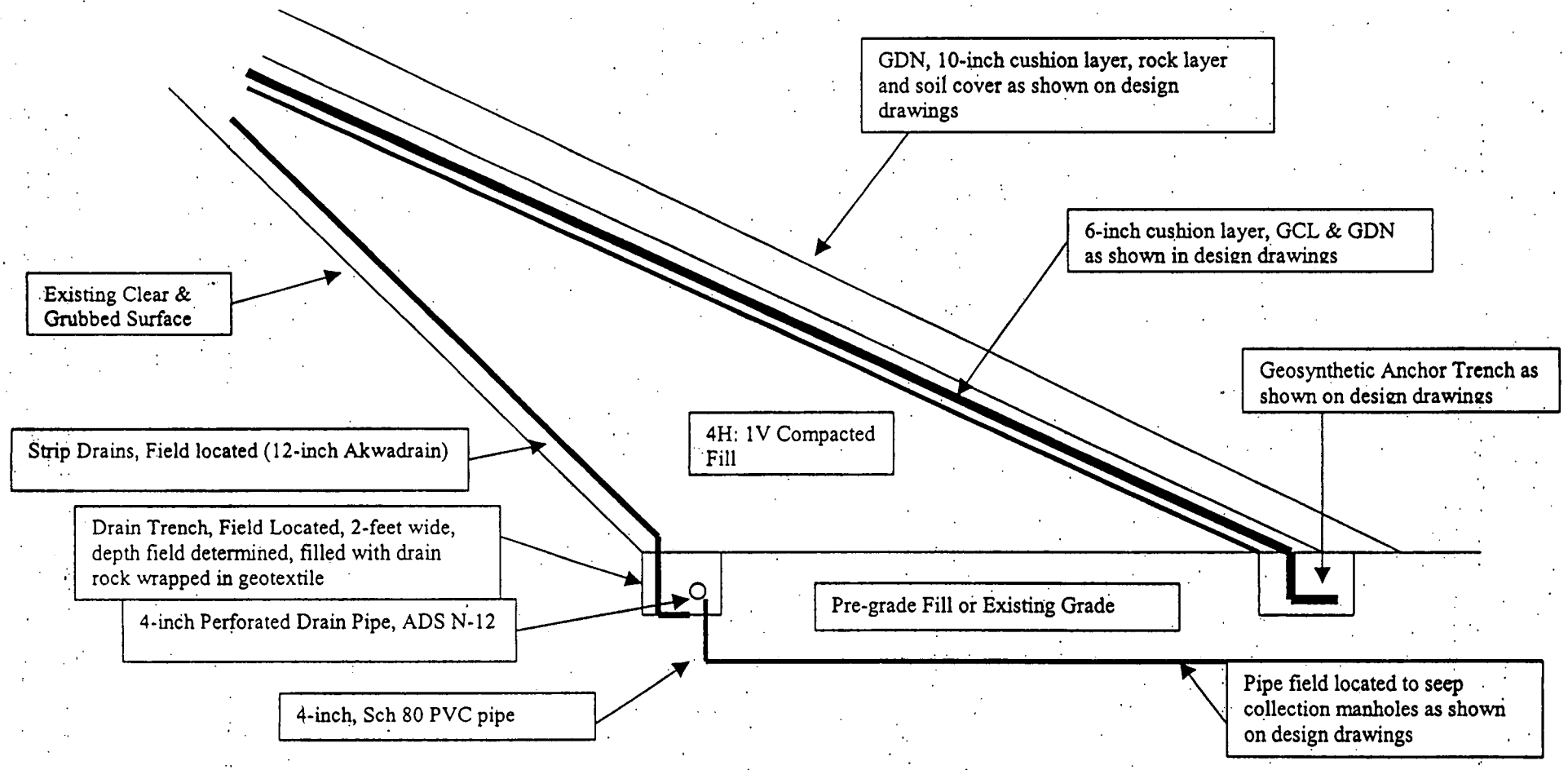
East Side Notes:

- The cover of the northern side of the east slope will be constructed as shown of the design drawings and specifications.
- The existing slope will be cleared and grubbed to remove a minimal amount of material.
- The existing toe of the slope, as shown on the design drawings, will require considerable excavation of soft materials and backfilling (on the order of 6 to 8 feet).
- The trench drain is expected to be located along the toe of the existing slope at about evaluation 5930; well above the elevation of the seep treatment system collection manholes.

South Side Notes:

- The cover of the northern side of the east slope will be constructed as shown of the design drawings and specifications.
- The south side of the east slope will require about 0.5 to 1.5 feet of excavation of soft soils, and limited backfilling at the toe of the slope with pre-grade fill soil (Rocky flats Alluvium).
- The drain trench will be either located along the toe of the existing slope at about elevation 5950 or consist of a collect box centrally located at the toe of the existing slope. This side of the east slope consists of very competent soils and does not exhibit water seepage characteristics.

PLF Strip Drain Installation Detail
Present Landfill Accelerated Action Construction
Rocky Flats Environmental Technology Site
February 11, 2005



Davis, Robert W.

From: Smith.Patricia@epamail.epa.gov
Sent: Friday, February 11, 2005 3:31 PM
To: Davis, Robert W.
Cc: Birk, Bob; Spreng, Carl; Bruskin, Larry; Ng-A-Qui, Norm; Aguilar.Mark@epamail.epa.gov; Legare, Joe; Sattelberg, Mark
Subject: Re: East Slope Drain Installation

This looks good. We should link the language of the workplans (section 1,2,3) to it (North, East, South). It appears to me that this supercedes the reference to the drains in January 13, 2005 Drawing 13A, detail 2.

Pat Smith

EPA Region 8, EPR-F
999 18th St, Ste 300
Denver, CO 80202-2466

303-312-6504 ofc
1-800-227-9441
303-312-6067 fax
303-518-9578 cell

"Davis, Robert W." <Robert.Davis@rfets.gov>

02/11/2005 09:22 AM

To
Patricia Smith/EPR/R8/USEPA/US@EPA,
"Ng-A-Qui, Norm" <nng-a-qui@burnsmcd.com>,
"Bruskin, Larry" <Larry.Bruskin@state.co.us>,
"Spreng, Carl" <Carl.Spreng@state.co.us>

cc
"Birk, Bob" <Bob.Birk@rf.doe.gov>, "Davis, Robert W." <Robert.Davis@rfets.gov>

Subject
East Slope Drain Installation

Pat,

Here is an installation sketch and installation notes for the strip drain system at the east face of the PLF as we discussed in yesterday's meeting.

<<PLF Strip Drain Installation Detail.doc>>

<<PLF Strip Drain Installation Notes.doc>>

Bob Davis
Environmental Restoration
Office: 303-966-7026
Cell: 303-994-2390
E-mail: Robert.Davis@rfets.gov

(See attached file: PLF Strip Drain Installation Detail.doc)(See

PLF Strip Drain Installation D...

PLF Strip Drain Installation N...

attached file: PLF Strip Drain Installation Notes.doc)

Davis, Robert W.

From: Davis, Robert W.
Sent: Monday, February 21, 2005 11:44 AM
To: 'Smith, Patricia'; 'Ng-A-Qui, Norm'; 'Bruskin, Larry'; Spreng, Carl
Cc: Birk, Bob; Davis, Robert W.; 'Thompson, Randy'
Subject: East Slope Strip Drainage Installation

Based on our assessment of the sub-excavation of the east slope area, the location of the lower geosynthetics anchor trench, and existing seep, we have slightly modified the strip drainage system. The strip drains behind the 4H : 1V fill will remain as originally proposed; however, we will not include a drainage ditch at the toe of the existing slopes. This change is supported by the following facts:

- The existing seep collection system would have been disturbed by the drain trench. Without this trench, the existing seep system remains intact without disruption and possible further damage to the system.
- The location of the anchor trenches did not allow sufficient room to place the drainage trenches on the north and south sides of the east slope.
- The final grades of the clear & grubbed surfaces (plus the sub-excavation) are very conducive to a strip drain layout (sufficient slope on all sides).
- Excavation of drainage trenches would increase the chance of slope slumps during construction.
- A seep on the northern side of the east slope is the only other area where water is present to manage, and the flow is estimated at less than 1 gpm.
- The strip drain system alone is capable of over 20 gpm of seepage flow.
- This arrangement allows for a "one pipe outlet" instead of several as originally proposed.

Attached are the drawings showing the revised design of the strip drain system and how this flow enters the seep treatment system.

Seep System 021704.pdf

Cross Section E-E'.pdf

sdcpts.pdf

Bob Davis
Environmental Restoration
Office: 303-966-7026
Cell: 303-994-2390
E-mail: Robert.Davis@rfets.gov

EARTH TECH

A TYCO INTERNATIONAL LTD. COMPANY

CALCULATION SHEET

PAGE 1 OF 1

PROJECT NO. 57378.4020

Prepared by SFP Date 2/17/05

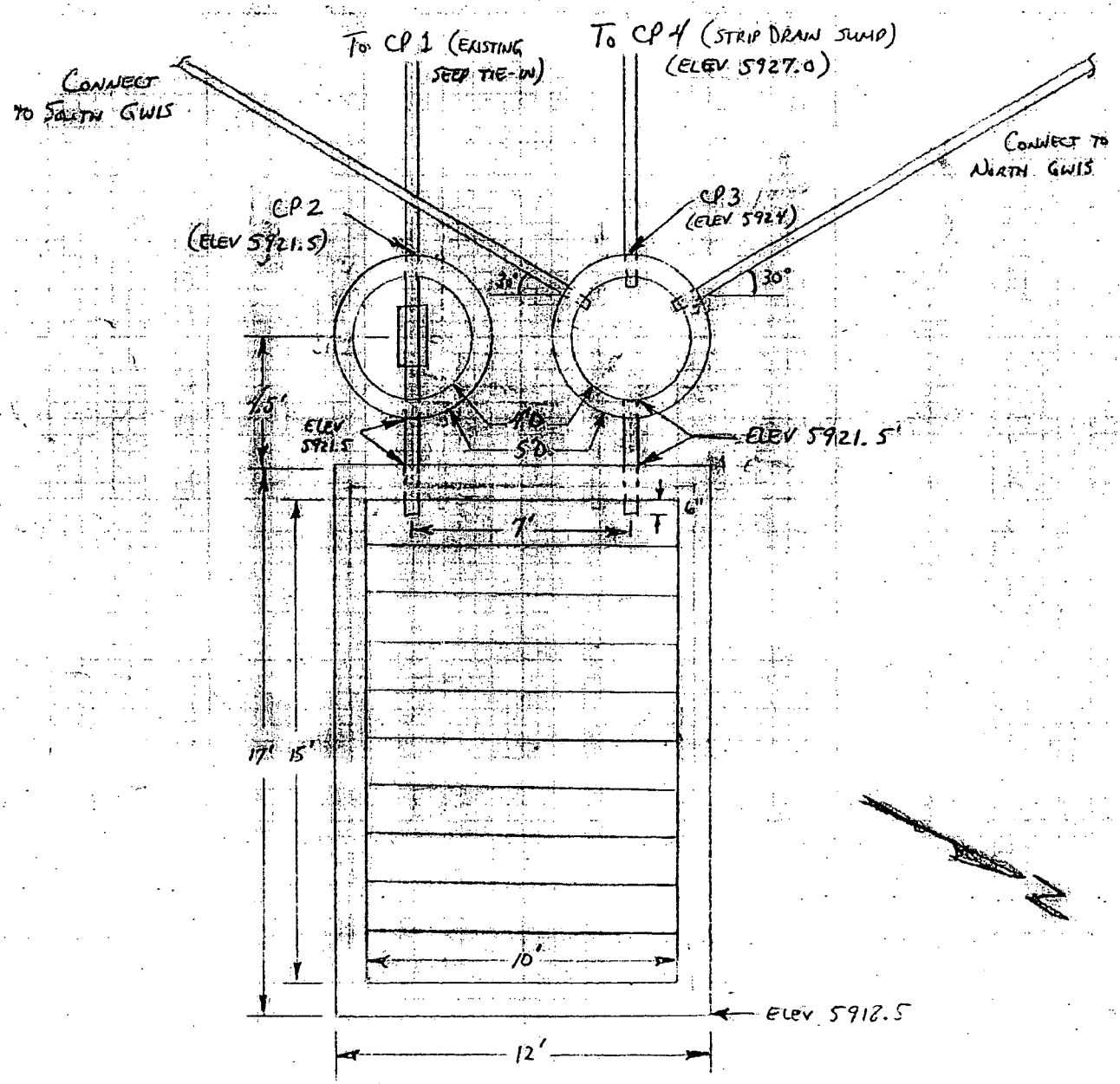
Reviewed by _____ Date _____

Approved by _____ Date _____

CLIENT Kaiser-Hill

PROJECT RFETS PLF

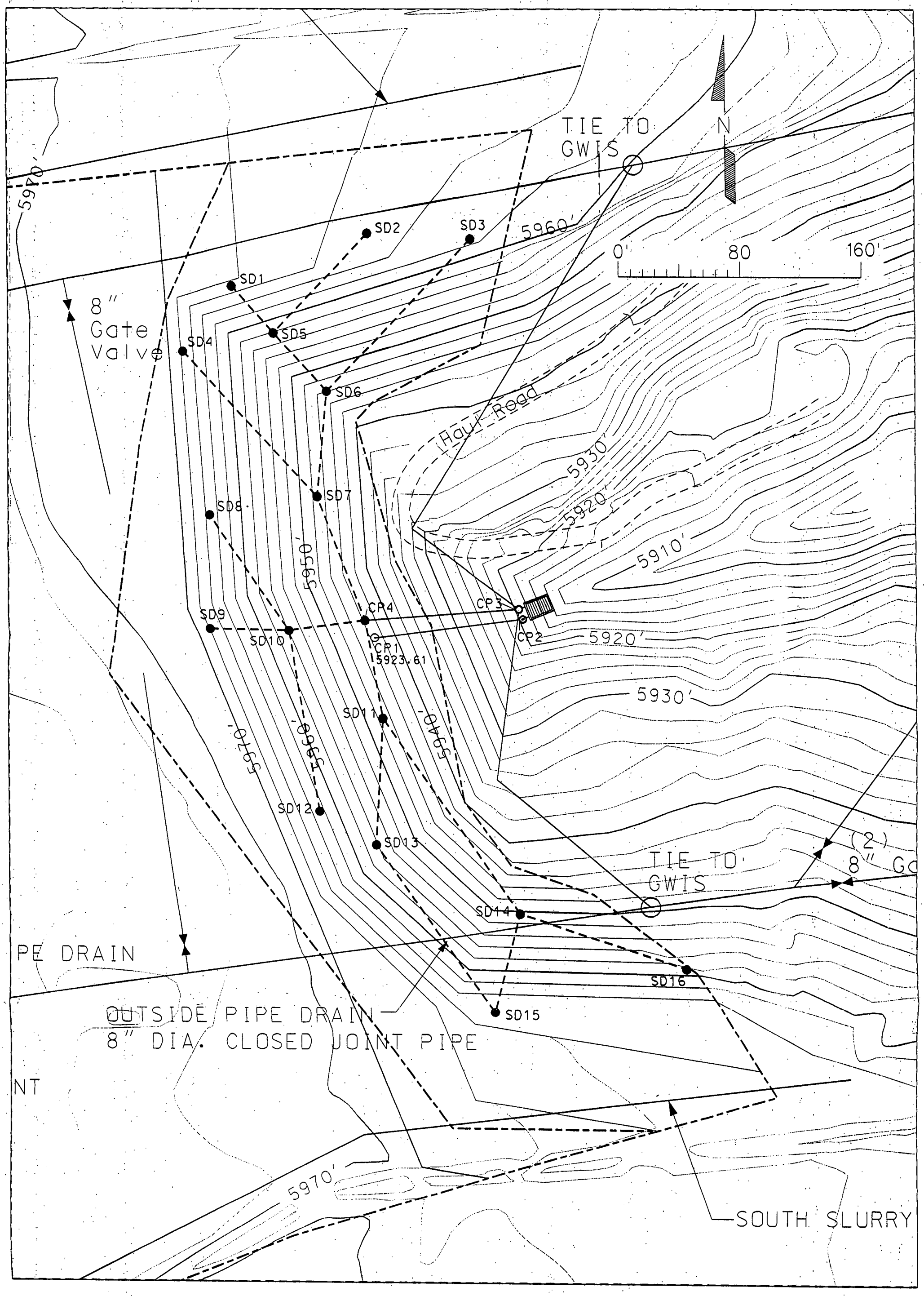
SUBJECT Passive Seep Treatment System

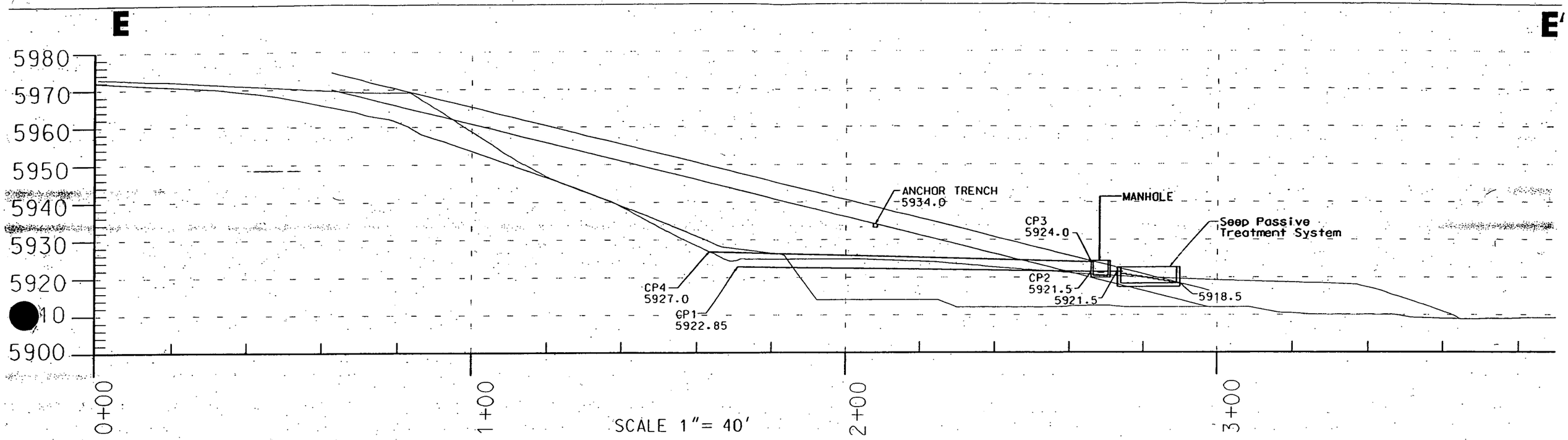


Control Point	Y (N)	X (E)	Z (elev)
CP 1	39865.00	20861.31	5922.85
CP 2	39874.1	20961.0	5921.5
CP 3	39880.7	20958.3	5924.0
CP 4	39873.3	20859.1	5927.0

Rev. 3/99

SCALE: 10 sq./in


TIE TO
GWIS
N
0'
80
160'
5970'
5960'
SD1
SD2
SD3
SD4
SD5
SD6
SD7
SD8
SD9
SD10
SD11
SD12
SD13
SD14
SD15
SD16
8"
Gate
Valve
Haul Road
5930'
5920'
5910'
5950'
CP4
CP3
CP2
CP1
5923.81
5920'
5930'
5940'
5960'
5970'
(2)
8" GC
TIE TO
GWIS
PE DRAIN
OUTSIDE PIPE DRAIN
8" DIA. CLOSED JOINT PIPE
NT
5970'
SOUTH SLURRY



LINE	SURFACE	OFFSET
	Existing Surface 02/10/05	
	EastFace Regrade	
	New Survey Existing Surface 02/17/05	
	Final Grade	

Scaled 1.00 Times Ver.
Scaled 1.00 Times Hor.

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	February 24, 2005 / 3:30 pm (Revised March 24, 2005)	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: Testing of Soil Cover at the Present Landfill

Discussion

The 22-inch soil cover currently placed on the surface of the Present Landfill and the stockpiled soil to be placed as a 2-inch layer on the cover of the Present Landfill will be tested to determine its soil particle size distribution (soil gradation) for each layer. Soil gradation will be determined through ASTM D5519, Method A for the large size fraction of the soil above 3 inches and ASTM D422 for the smaller size fraction of the soil below 3-inches. The testing will be conducted on soil samples at a frequency of 1 QC sample for every 6,500 cubic yards of in-place soils (minimum of 1 sample) and 1 QA sample for every 20 QC samples (minimum of 1 sample).

This testing will also be conducted as additional 22-inch and 2-inch soil cover is placed at the Present Landfill (east of the 5980 finished grade elevation line) with the same methods and frequencies as presented in the above paragraph.

The purpose of these soil tests is to document the soil gradation of the 24-inch soil cover at the Present Landfill. These soil gradation test results will be presented in the Present Landfill Construction Certification Report. These results will be provided to the EPA and CDPHE as they become available. These soil test results will not be used to evaluate the ability of the soil cover to establish or sustain vegetation on the soil cover at the Present Landfill. The earthwork specification and QA/QC plan will be revised to show that these samples will be only for the documentation of the 24-inch cover material gradation, and that the results will be included in the closure certification report.

The EPA and CDPHE agree with the testing plan and purpose for the testing presented in this contact record. It is also agreed that the engineering design and QA/QC plan for the Present Landfill accelerated action have been adhered to during the construction process.

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

Contact Record 6/20/02
Rev. 4/14/04

L. Butler, K-H RISS	A. Primrose, K-H RISS	_____
G. Carnival, K-H RISS	R. Schassburger, DOE-RFPO	_____
N. Castaneda, DOE-RFPO	S. Serreze, K-H RISS	_____
C. Deck, K-H Legal	D. Shelton, K-H ESS	_____
N. Demos, SSOC	C. Spreng, CDPHE	_____
S. Gunderson, CDPHE	S. Surovchak, DOE-RFPO	_____
M. Keating, K-H RISS	J. Walstrom, K-H RISS	_____
L. Kimmel, USEPA	K. Wiemelt, K-H RISS	_____
D. Kruchek, CDPHE	C. Zahm, K-H Legal	_____
J. Legare, DOE-RFPO		_____

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	March 7, 2005 / 10:00 am	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: Seed Mix for the Present Landfill Cover

Discussion

Several discussions concerning the seed mix at the Present Landfill have taken place over the past several months. The DOE, K-H, EPA and CDPHE have agreed to a revised seed mix. The seed mix presented in the PLF design (October 2004) has been revised as shown on the attached table.

The only recent change in the revised seed mix, as discussed on March 7, was the Big Bluestem seed. The Champ variety is not available; therefore, we have replaced the Champ variety with the Kaw variety. This change is also reflected in the attached table.

The EPA and CDPHE agree with this contact record.

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

Seed Mixtures for use in 3 Seed Driller Boxes; Revision 1

March 10, 2005

Mixture 1 (for Use in the Warm Season Seeder Box)						
Fluffy/ Round	**Species**	**Common Name – Variety**	**Sd / sq ft***	**% PLS[t]**	**Lb/ac**	**Role**
F	Andropogon gerardii	Big bluestem – Kaw	4	10.5	1.4	Deep-rooted, warm-season; accessing deep moisture when shallow moisture is deficient
F	Bouteloua curtipendula	Sideoats grama – Vaughn	2	5.3	0.7	Moderately deep-rooted, warm-season; establishes well on restoration sites
F	Chondrosum gracile	Blue grama – Bad River	4	10.5	0.2	Ditto except blue grama is a wide-spreading bunchgrass
F	Sorghastrum nutans	Yellow Indiangrass – Holt	2	5.3	0.5	Deep-rooted, warm-season; accessing deep moisture when shallow moisture is deficient
	Total		12***	31.6	2.8***	

Mixture 2 (for Use in the Cool Season Seeder Box)						
R	Buchloe dactyloides	Buffalograss – Cody	3	7.9	2.3	Warm-season turfgrass of short stature that can be expected to provide important ground cover when drought restricts cover of other species
R	Buchloe dactyloides	Buffalograss – Native**	1	2.6	0.8	Ditto
R	Elymus lanceolatus var. psammophilus	Streambank wheatgrass - Sodar	5	13.2	1.4	Native cool-season turfgrass that can be expected to dependably establish and provide important erosion control
R	Elymus lanceolatus var. lanceolatus	Thickspike wheatgrass-Critana	5	13.2	1.4	Ditto
R	Elymus trachycaulus	Slender wheatgrass – San Luis	3	7.9	0.8	Native bunchgrass of moderate to tall stature that establishes vigorously, providing early cover; can be expected to fade as slower-growing natives progress after the first few years
R	Pascopyrum smithii	Western wheatgrass – Arriba	3	7.9	01.2	Native cool-season turfgrass that can be expected to dependably establish and provide important erosion control
R	Stipa viridula	Green needlegrass – LoDorm	2	5.3	0.5	Native cool-season bunchgrass that establishes dependably
	Total		28***	57.9	9.3***	

Mixture 3 (for Use in the Legume Seeder Box)						
R	Koeleria pyrimidata	Prairie Junegrass – Native**	1	2.6	0.2	Native bunchgrass of the plains, slow to establish but then durable.
R	Poa canbyi (P. secunda)	Canby bluegrass – Canbar	1	2.6	0.5	Native bunchgrass of the plains, slow to establish but then durable.
R	Sporobolus cryptandrus	Sand dropseed - Native	2	5.3	0.01	Native warm-season bunchgrass that establishes well on sites with coarser soil texture. Elective.
	Total		4***	10.5	0.71***	

*Seeds per square foot for drill seeding

Contact Record 6/20/02

Rev. 4/14/04

** Native = source in central Great Plains
*** 38 seeds per square foot, when drilled with a drill with 8-inch furrow spacing results in an average of two seeds per lineal inch of drill furrow.
[1] PLS = pure live seed

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	March 15, 2005 / 8:00 am	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: PLF Cover Soil Seedbed Preparation

Discussion

Several discussions have taken place concerning the placement of soil and the preparation of the seedbed for the final 2-foot soil cover over the entire Present Landfill. There are two primary objectives that impact this work:

1) Certification of the 24-inch soil cover consisting of a 22-inch layer and 2-inch layer for a combined total of 24-inches and
2) Provide a reasonable seedbed to promote the growth of vegetation.

The certification of the 24-inch layer is by far the most critical objective of the two since the role of this layer is to protect the geosynthetic layers below. This protection is provided by the soils selected for the cover that will meet the erosion criteria without the vegetation. Therefore, the following construction plan will be followed to meet the above objectives:

- A 22-inch layer of Rocky Flats Alluvium soil will be placed and graded.
- A 2-inch layer of Rocky Flats Alluvium from the grubbed surface of the PLF interim cover and the grubbed surface soil from the 280 stockpile will be placed and graded to certifiable design grades to obtain the total cover thickness of 24-inches.
- The cover will be ripped in two directions to breakup the soil compaction.
- The cover will be disced to breakup the ripped soil to establish a seedbed for the seeding operations.
- After the discing is complete, the seeding, hydromulching and matting will be conducted.

Contact Record Prepared by: Bob Davis

Required Distribution:		Additional Distribution:
M. Aguilar, USEPA	D. Mayo, K-H RISS	B. Davis, K-H RISS
H. Ainscough, CDPHE	J. Mead, K-H ESS	B. Koehler, K-H RISS
S. Bell, DOE-RFPO	S. Nesta, K-H RISS	P. Smith, USEPA
J. Berardini, K-H	L. Norland, K-H RISS	
B. Birk, DOE-RFPO	K. North, K-H ESS	
L. Brooks, K-H ESS	E. Pottorff, CDPHE	
L. Butler, K-H RISS	A. Primrose, K-H RISS	
G. Carnival, K-H RISS	R. Schassburger, DOE-RFPO	
N. Castaneda, DOE-RFPO	S. Serreze, K-H RISS	
C. Deck, K-H Legal	D. Shelton, K-H ESS	
N. Demos, SSOC	C. Spreng, CDPHE	

S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO

S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	April 7, 2005 / 10:30 am	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: Boot Configuration on Seep System Cleanout Piping

Discussion

Stoller submitted an alternative detail for the of the seep clean-out piping geosynthetic liner penetration (See attached figure).

The penetration detail in the current design drawings is for large settlements within a landfill. Large settlement will not occur in this area since there is no waste present and the fill is structural fill.

Therefore, this detail was acceptable with engineering, QA and the EPA & CDPHE regulatory teams.

This is considered a field change and will be captured in the record drawings of the PLF construction.

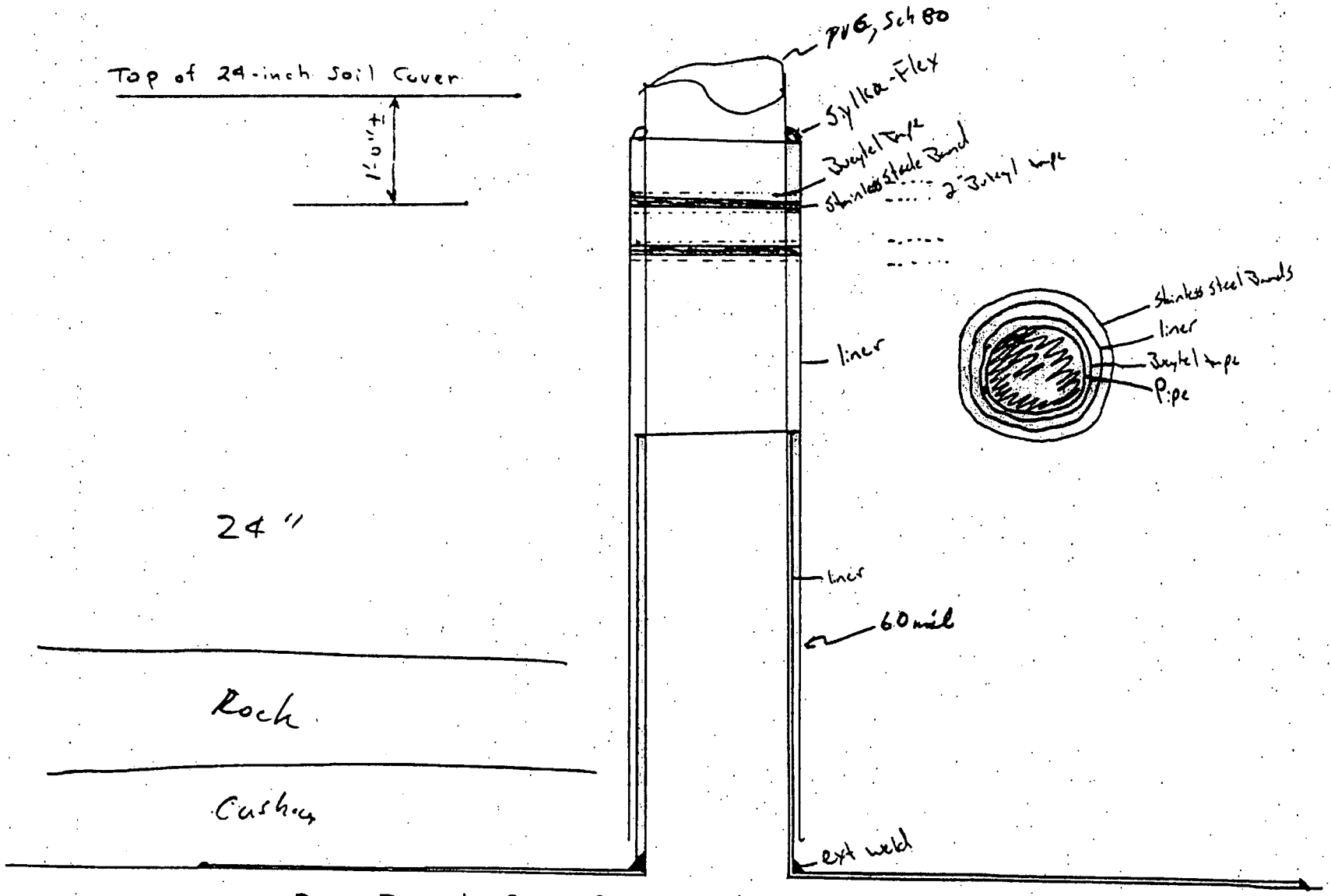
Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA



Boot Detail - Seep System Cleanout Piping (NTS)

Contact Record 6/20/02
Rev. 4/14/04

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	April 14, 2005 / 10:30 am	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: Application of Additional Erosion Matting at the Present Landfill

Discussion

DOE has requested additional erosion matting on the 3 to 5% surface of the Present Landfill. This erosion matting will be coconut mating as manufactured by North American Green (C-125). This matting is not required by the design; however, the application of this matting is acceptable to the design team. The placement of this matting will be captured in the record drawings of the construction and in the CCR.

This contact record does not change the erosion matting within the perimeter channels or the east face as currently designed.

The EPA and CDPHE have stated that this additional erosion matting is acceptable.

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ER REGULATORY CONTACT RECORD

Date/Time:	July 22, 2005; 3:22 pm (with further discussion on July 27, 2005)	
Site Contact(s,:	Bob Birk/DOE	Bob Davis/K-H
Phone:	303 966-5921	303 966-7026
Regulatory Contact:	Pat Smith	Carl Spreng
Phone:	303 312-6504	303 692-3358
Agency:	EPA	CDPHE

Purpose of Contact: East Face Work Plan for the Construction of Stormwater Drainage Channels

Discussion
See attached work plan.

The EPA and CDPHE agree with this contact record/work plan

Contact Record Prepared by: Bob Davis

Required Distribution:

M. Aguilar, USEPA
H. Ainscough, CDPHE
S. Bell, DOE-RFPO
J. Berardini, K-H
B. Birk, DOE-RFPO
L. Brooks, K-H ESS
L. Butler, K-H RISS
G. Carnival, K-H RISS
N. Castaneda, DOE-RFPO
C. Deck, K-H Legal
N. Demos, SSOC
S. Gunderson, CDPHE
M. Keating, K-H RISS
L. Kimmel, USEPA
D. Kruchek, CDPHE
J. Legare, DOE-RFPO
D. Mayo, K-H RISS
J. Mead, K-H ESS
S. Nesta, K-H RISS
L. Norland, K-H RISS
K. North, K-H ESS
E. Pottorff, CDPHE
A. Primrose, K-H RISS
R. Schassburger, DOE-RFPO
S. Serreze, K-H RISS
D. Shelton, K-H ESS
C. Spreng, CDPHE
S. Surovchak, DOE-RFPO
J. Walstrom, K-H RISS
K. Wiemelt, K-H RISS
C. Zahm, K-H Legal

Additional Distribution:

B. Davis, K-H RISS
B. Koehler, K-H RISS
P. Smith, USEPA

EAST FACE WORK PLAN
CONSTRUCTION OF STORMWATER DRAINAGE CHANNELS

Present Landfill Accelerated Action Construction Project
Rocky Flats Environmental Technology Site
July 22, 2005 (with additional discussion on July 27, 2005)

Objective

Construct two rip-rap lined stormwater drainage channels at the East Face of the Present Landfill to:

1. **Allow surface water to flow down the east face slope without causing erosion at the toe of the east face, and**
2. **Allow surface water to flow down the east face slope without interfering with the integrity of the seep treatment system.**

Scope of Work

1. **The construction work will be limited to the area of the two channels as shown on the design drawings.**
2. **The channels will be constructed in accordance with the design provided by Earth Tech and attached to this work plan.**
3. **The construction will be observed by a representative of the Earth Tech design team and the Tetra Tech QA team. This observation will be to document the construction and to verify that the materials of construction and the construction are as shown in the design.**
4. **Additionally, Certifications, Trip Tickets, or Labels well be obtained on the materials of construction to further verify that the materials used were as specified in the design**
5. **Items 3 & 4 above will provide the necessary QA/QC oversight without providing submittals or obtaining MQC/MQA laboratory data of the materials used in this construction. Note that the materials used in the construction are the same materials previously specified in the design of the accelerated action.**
6. **After the construction is complete, Paragon surveyors will survey the constructed channels and the groundwater monitoring wells for inclusion into the as-built drawings.**

APPENDIX J

CONFIRMATION SAMPLING DATA: SEDIMENT POND AREA

Data Summary Report for East Landfill Pond Sediment Removal Project

Supplement to IHSS Group 000-5 IM/IRA and RCRA Closure of the RFETS Present Landfill

September 12, 2005

TABLE OF CONTENTS

1.0 INTRODUCTION 1
1.1 Historical Information and Data 1
2.0 SITE CONFIRMATION 1
2.1 Confirmation Data 2
3.0 NO LONGER REPRESENTATIVE LOCATIONS 2
4.0 PROJECT CONCLUSIONS 2
5.0 REFERENCES 3

LIST OF TABLES

Table 1 East Landfill Pond Sediment Removal Sampling Specifications and Sampling Deviations 4
Table 2 East Landfill Pond Sediment Removal Confirmation Sampling Results Greater Than Background Means Plus Two Standard Deviations or Reporting Limits ... 6

ACRONYMS

AAESE	Accelerated Action Ecological Screening Evaluation
AL	action level
BZ	Buffer Zone
CRA	Comprehensive Risk Assessment
DOE	U.S. Department of Energy
EPA	U.S. Environmental Protection Agency
HRR	Historical Release Report
IA	Industrial Area
IABZSAP	Industrial Area and Buffer Zone Sampling and Analysis Plan
IHSS	Individual Hazardous Substance Site
NLR	no longer representative
PCOC	potential contaminant of concern
RCRA	Resource Conservation and Recovery Act
RFETS or Site	Rocky Flats Environmental Technology Site
RL	reporting limit
SAP	Sampling and Analysis Plan
SVOC	Semi-volatile organic compound
SWD	Soil Water Database
VOC	volatile organic compound
WRW	wildlife refuge worker

1.0 INTRODUCTION

This Data Summary Report summarizes confirmation sampling activities conducted at the East Landfill Pond, which is part of Individual Hazardous Substance Site (IHSS) Group 000-5 at the Rocky Flats Environmental Technology Site (RFETS or Site) in Golden, Colorado. IHSS Group includes IHSS 114, the Present Landfill.

Confirmation activities were planned and executed in accordance with the Industrial Area (IA) and Buffer Zone (BZ) Sampling and Analysis Plan (SAP) (IABZSAP) (DOE 2004a) and East Landfill Pond Sediment Removal Confirmation Sampling and Analysis Plan (DOE 2004b). The East Landfill Pond Sediment Removal Confirmation Sampling and Analysis Plan was approved by the US Environmental Protection Agency (EPA) on November 23, 2004. Ecological effects will be evaluated in the Accelerated Action Ecological Screening Evaluation (AAESE) and the ecological risk assessment portion of the Sitewide Comprehensive Risk Assessment (CRA).

Three historical data points existed for the East Landfill Pond sediment indicating an absence of contamination. An agreement was reached to do the following:

- To excavate the pond sediment, dewater it, and place it within the existing surface soil of the Present Landfill and within the boundaries of the Resource Conservation and Recovery Act (RCRA) Subtitle-C compliant cover.
- Once excavation was complete, collect confirmation samples.

At the Present Landfill, 6- to 18-inches of sediment were removed from the East Landfill Pond and surrounding areas. The area was not backfilled. However, it will be regraded to establish more natural contours.

1.1 Historical Information and Data

Existing information for IHSS 114, the Present Landfill, is available in the Historical Release Report (HRR) for the Rocky Flats Plant (DOE 1992 – 2004), the Operable Unit (OU) 7 RFI/RI Work Plan (DOE 1991) and the Technical Memorandum Final Work Plan operable unit no. 7 Present Landfill (IHSS 114) and Inactive Hazardous Waste Storage Area (IHSS 203) (DOE 1994). The HRR and process knowledge indicate that East Landfill Pond sediments may contain radionuclide, metal, or semi-volatile organic compound (SVOC) contamination.

2.0 SITE CONFIRMATION

Following the sediment removal, ten confirmation samples were collected within the excavation boundary. Samples were analyzed for radionuclides, metals, volatile organic compounds (VOCs) and SVOCs. Sampling specifications for the East Landfill Pond sampling activity and a summary of analyses are located in Table 1. Results of the confirmation sampling can be found in Table 2. Confirmation sampling results indicate that the remaining material contains no action level (AL) exceedances.

The data set was retrieved from the Soil Water Database (SWD) on February 2, 2005.

2.1 Confirmation Data

Confirmation data for the East Landfill Pond sediment removal were collected in accordance with the IABZSAP (DOE 2004a) and the East Landfill Pond Sediment Removal Confirmation Sampling and Analysis Plan (DOE 2004b). Sampling specifications, including media and analytes, are presented in Table 1. Any deviations from the SAP are included in the "comment" column in Table 1. Sampling locations and analytical results greater than background means plus two standard deviations or reporting limits (RLs) are listed in Table 2. As shown, all contaminant concentrations are less than the wildlife refuge worker (WRW) ALs.

The collected confirmation samples are representative of the soils exposed at the surface; therefore, they have been labeled as surface soil samples, despite their depths of 1- to 1.5-feet.

3.0 NO LONGER REPRESENTATIVE LOCATIONS

The sampling locations designated as no longer representative (NLR) for IHSS Group 000-5, Present Landfill (IHSS 114) are listed in Table 1. NLR locations are flagged in the RFETS Soil Water Database (SWD) to ensure they will not be incorporated into the Sitewide CRA or other Site analyses.

Table 1
IHSS Group 000-5, Present Landfill (IHSS 114) NLR Sampling Locations

Location	Northing	Easting	Media	Starting Depth (inches)	Ending Depth (inches)
SED70093	752931	2084128.5	Sediment	0	10
SED70193	752890.12	2084354.12	Sediment	0	10
SED70293	753106.06	2084502	Sediment	0	10

4.0 PROJECT CONCLUSIONS

Results of the confirmation sampling conclude that the remaining media does not contain contamination levels exceeding WRW ALs. No radionuclide results were detected at concentrations greater than background means plus two standard deviations, and the majority of the metal, VOC, and SVOC analyses were detected at less than 10 percent of their respective ALs.

5.0 REFERENCES

DOE, 1991, Final Phase I RFI/RI Work Plan Present Landfill IHSS 114 and Inactive Hazardous Waste Storage Area IHSS 203 (Operable Unit No. 7) Environmental Restoration Program Volumes I and II, Rocky Flats Plant, Golden, Colorado, December.

DOE, 1992-2004, Historical Release Reports for the Rocky Flats Plant, Golden, Colorado.

DOE, 1994, Technical Memorandum Final Work Plan operable unit no. 7 Present Landfill (IHSS 114) and Inactive Hazardous Waste Storage Area (IHSS 203) Volume I - IV , Rocky Flats Environmental Technology Site, Golden, Colorado, September.

DOE, 2004a, Industrial Area and Buffer Zone Sampling and Analysis Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, May.

DOE, 2004b, East Landfill Pond Sediment Removal Confirmation Sampling and Analysis Plan, Rocky Flats Environmental Technology Site, Golden, Colorado, November.

Table 1
East Landfill Pond Sediment Removal Sampling Specifications and Sampling Deviations

Location	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comment
CG57-000	2084103.330	752868.954	2084100.175	752895.348	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CH57-000	2084225.663	752917.250	2084225.697	752917.236	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CI57-000	2084518.626	752891.508	2084518.600	752891.562	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CI57-001	2084433.312	752928.526	2084433.278	752928.497	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CI58-000	2084507.350	753099.156	2084507.308	753099.166	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CI58-001	2084470.331	753013.841	2084466.687	753019.390	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.

Location	Planned Easting	Planned Northing	Actual Easting	Actual Northing	Actual Media	Actual Depth Interval (ft)	Actual Analyte	Comment
CI58-002	2084385.016	753050.860	2084384.985	753050.902	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CI58-003	2084347.997	752965.545	2084347.965	752965.549	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CJ58-000	2084592.664	753062.137	2084575.970	753056.256	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	No notable changes or deviations from plan.
CJ58-001	2084555.645	752976.822	2084555.648	752976.764	Sediment	0 – 0.5	Radionuclides Metals VOCs SVOCs	Duplicate sample collected at this location, otherwise no notable changes or deviations from plan.

Table 2
East Landfill Pond Sediment Removal Confirmation Sampling Results Greater Than Background Means Plus Two Standard Deviations or Reporting Limits

Location	Easting	Northing	Start Depth (ft)	End Depth (ft)	Analyte	Result	RL	Background Mean + 2 Standard Deviations	WRW AL	Unit
CG57-000	752895.348	2084100.175	0	0.5	Acetone	12	6.1	-	102000000	ug/kg
CG57-000	752895.348	2084100.175	0	0.5	Aluminum	18000	-	16902.00	228000	mg/kg
CG57-000	752895.348	2084100.175	0	0.5	Barium	190	-	141.26	26400	mg/kg
CG57-000	752895.348	2084100.175	0	0.5	Benzo(a)anthracene	61	32	-	34900	ug/kg
CG57-000	752895.348	2084100.175	0	0.5	Beryllium	1.2	-	0.97	921	mg/kg
CG57-000	752895.348	2084100.175	0	0.5	Chrysene	49	36	-	3490000	ug/kg
CG57-000	752895.348	2084100.175	0	0.5	Fluoranthene	90	29	-	27200000	ug/kg
CG57-000	752895.348	2084100.175	0	0.5	Methylene chloride	2.8	1.1	-	2530000	ug/kg
CG57-000	752895.348	2084100.175	0	0.5	Naphthalene	2.5	1.1	-	3090000	ug/kg
CH57-000	752917.236	2084225.697	0	0.5	Acetone	25	7.2	-	102000000	ug/kg
CH57-000	752917.236	2084225.697	0	0.5	Barium	150	-	141.26	26400	mg/kg
CH57-000	752917.236	2084225.697	0	0.5	Benzo(a)anthracene	54	37	-	34900	ug/kg
CH57-000	752917.236	2084225.697	0	0.5	Fluoranthene	87	34	-	27200000	ug/kg
CH57-000	752917.236	2084225.697	0	0.5	Methylene chloride	3.3	1.2	-	2530000	ug/kg
CH57-000	752917.236	2084225.697	0	0.5	Naphthalene	1.7	1.3	-	3090000	ug/kg
CH57-000	752917.236	2084225.697	0	0.5	Strontium	61	-	48.94	613000	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Acetone	7.8	5.6	-	102000000	ug/kg
CI57-000	752891.562	2084518.600	0	0.5	Aluminum	21000	-	16902.00	228000	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Barium	190	-	141.26	26400	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Beryllium	1	-	0.97	921	mg/kg

Location	Easting	Northing	Start Depth (ft)	End Depth (ft)	Analyte	Result	RL	Background Mean + 2 Standard Deviations	WRW AL	Unit
CI57-000	752891.562	2084518.600	0	0.5	Chromium	21	-	16.99	268	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Lithium	15	-	11.55	20400	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Methylene chloride	2.6	0.97	-	2530000	ug/kg
CI57-000	752891.562	2084518.600	0	0.5	Naphthalene	1.9	1	-	3090000	ug/kg
CI57-000	752891.562	2084518.600	0	0.5	Nickel	17	-	14.91	20400	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Strontium	59	-	48.94	613000	mg/kg
CI57-000	752891.562	2084518.600	0	0.5	Vanadium	49	-	45.59	7150	mg/kg
CI57-001	752928.497	2084433.278	0	0.5	Acetone	8.2	5.5	-	102000000	ug/kg
CI57-001	752928.497	2084433.278	0	0.5	Aluminum	19000	-	16902.00	228000	mg/kg
CI57-001	752928.497	2084433.278	0	0.5	Barium	160	-	141.26	26400	mg/kg
CI57-001	752928.497	2084433.278	0	0.5	Beryllium	1	-	0.97	921	mg/kg
CI57-001	752928.497	2084433.278	0	0.5	bis(2-Ethylhexyl)phthalate	210	83	-	1970000	ug/kg
CI57-001	752928.497	2084433.278	0	0.5	Chromium	19	-	16.99	268	mg/kg
CI57-001	752928.497	2084433.278	0	0.5	Lithium	12	-	11.55	20400	mg/kg
CI57-001	752928.497	2084433.278	0	0.5	Methylene chloride	2.7	0.95	-	2530000	ug/kg
CI57-001	752928.497	2084433.278	0	0.5	Strontium	62	-	48.94	613000	mg/kg
CI58-000	753099.166	2084507.308	0	0.5	Acetone	11	5.6	-	102000000	ug/kg
CI58-000	753099.166	2084507.308	0	0.5	Barium	160	-	141.26	26400	mg/kg
CI58-000	753099.166	2084507.308	0	0.5	Methylene chloride	2.6	0.98	-	2530000	ug/kg
CI58-001	753019.390	2084466.687	0	0.5	2-Butanone	13	6.2	-	192000000	ug/kg
CI58-001	753019.390	2084466.687	0	0.5	Acetone	99	6.1	-	102000000	ug/kg
CI58-001	753019.390	2084466.687	0	0.5	Aluminum	20000	-	16902.00	228000	mg/kg
CI58-001	753019.390	2084466.687	0	0.5	Barium	180	-	141.26	26400	mg/kg

Location	Easting	Northing	Start Depth (ft)	End Depth (ft)	Analyte	Result	RL	Background Mean + 2 Standard Deviations	WRW AL	Unit
CI58-001	753019.390	2084466.687	0	0.5	Beryllium	0.98	-	0.97	921	mg/kg
CI58-001	753019.390	2084466.687	0	0.5	Chromium	20	-	16.99	268	mg/kg
CI58-001	753019.390	2084466.687	0	0.5	Methylene chloride	2.9	1.1	-	2530000	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Acetone	6.1	5.3	-	102000000	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Aluminum	17000	-	16902.00	228000	mg/kg
CI58-002	753050.902	2084384.985	0	0.5	Barium	200	-	141.26	26400	mg/kg
CI58-002	753050.902	2084384.985	0	0.5	Benzo(a)anthracene	42	28	-	34900	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Benzo(b)fluoranthene	64	32	-	34900	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Beryllium	0.99	-	0.97	921	mg/kg
CI58-002	753050.902	2084384.985	0	0.5	Chrysene	44	31	-	3490000	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Fluoranthene	85	25	-	27200000	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Methylene chloride	2.7	0.92	-	2530000	ug/kg
CI58-002	753050.902	2084384.985	0	0.5	Strontium	58	-	48.94	613000	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	Acetone	30	5.9	-	102000000	ug/kg
CI58-003	752965.549	2084347.965	0	0.5	Aluminum	24000	-	16902.00	228000	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	Barium	390	-	141.26	26400	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	Beryllium	1.2	-	0.97	921	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	bis(2-Ethylhexyl)phthalate	170	89	-	1970000	ug/kg
CI58-003	752965.549	2084347.965	0	0.5	Chromium	25	-	16.99	268	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	Lithium	14	-	11.55	20400	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	Methylene chloride	3	1	-	2530000	ug/kg
CI58-003	752965.549	2084347.965	0	0.5	Strontium	78	-	48.94	613000	mg/kg
CI58-003	752965.549	2084347.965	0	0.5	Vanadium	59	-	45.59	7150	mg/kg

Location	Easting	Northing	Start Depth (ft)	End Depth (ft)	Analyte	Result	RL	Background Mean + 2 Standard Deviations	WRW AL	Unit
CJ58-000	753056.256	2084575.970	0	0.5	Acetone	6.4	5.8	-	102000000	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Anthracene	51	29	-	204000000	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Barium	340	-	141.26	26400	mg/kg
CJ58-000	753056.256	2084575.970	0	0.5	Benzo(a)anthracene	120	30	-	34900	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Benzo(a)pyrene	98	49	-	3490	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Benzo(b)fluoranthene	160	35	-	34900	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Chrysene	110	34	-	3490000	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Fluoranthene	240	28	-	27200000	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Indeno(1,2,3-cd)pyrene	57	28	-	34900	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Manganese	1100	-	365.08	3480	mg/kg
CJ58-000	753056.256	2084575.970	0	0.5	Methylene chloride	2.9	1	-	2530000	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Pyrene	210	160	-	22100000	ug/kg
CJ58-000	753056.256	2084575.970	0	0.5	Strontium	320	-	48.94	613000	mg/kg
CJ58-000	753056.256	2084575.970	0	0.5	Zinc	110	-	73.76	307000	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	Acetone	35	6	-	102000000	ug/kg
CJ58-001	752976.764	2084555.648	0	0.5	Aluminum	17000	-	16902.00	228000	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	Barium	340	-	141.26	26400	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	Benzo(a)anthracene	46	31	-	34900	ug/kg
CJ58-001	752976.764	2084555.648	0	0.5	Benzo(b)fluoranthene	56	37	-	34900	ug/kg
CJ58-001	752976.764	2084555.648	0	0.5	Beryllium	1	-	0.97	921	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	bis(2-Ethylhexyl)phthalate	220	91	-	1970000	ug/kg
CJ58-001	752976.764	2084555.648	0	0.5	Chromium	17	-	16.99	268	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	Copper	19	-	18.06	40900	mg/kg

Location	Easting	Northing	Start Depth (ft)	End Depth (ft)	Analyte	Result	RL	Background Mean + 2 Standard Deviations	WRW AL	Unit
CJ58-001	752976.764	2084555.648	0	0.5	Fluoranthene	79	29	-	27200000	ug/kg
CJ58-001	752976.764	2084555.648	0	0.5	Lithium	12	-	11.55	20400	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	Methylene chloride	3.1	1	-	2530000	ug/kg
CJ58-001	752976.764	2084555.648	0	0.5	Strontium	110	-	48.94	613000	mg/kg
CJ58-001	752976.764	2084555.648	0	0.5	Zinc	79	-	73.76	307000	mg/kg

APPENDIX K

SEEP MONITORING DATA DURING CONSTRUCTION

DU7
July Sampling

Project Narrative
RIN 04S0353

The following report contains the analytical results for two samples received at STL Denver on July 20, 2004.

Dilution factors and footnotes have been provided on each data sheet to assist in the interpretation of the results. In some cases, due to interferences or analytes present above the linear calibration curve, samples must be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits are adjusted relative to the dilution required. Dilutions made for reasons other than the presence of target compound(s) are addressed in the Supplemental Information Section.

This report includes reporting limits (RLs) less than STL Denver's practical quantitation limits. The reported sample results and associated reporting limits are being used specifically at the client's request. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

STL Denver utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for GC/MS Volatile Organics, as detailed on the methods summary page in accordance with the method indicated. QC data for these analyses are included.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted. The test results shown in this report meet all requirements of NELAC. Any exceptions are noted in the Supplemental Information Section below.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Supplemental Information – 04S0353

Sample Arrival and Receipt

The samples presented in this report were received at the laboratory in good condition, and at a temperature of less than 6°C.

No anomalies were observed.

GCMS VOC Analysis – Method 8260B

Low levels of Methylene chloride, a common laboratory contaminant, are present in the method blank associated with QC batch 4215217. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

No other anomalies were observed.

Non Radiological Qualifiers

Organic

B	Analyte found in blank and sample
E	Concentration exceeds calibration range of instrument
J	Estimated value above the MDL, but below the CRDL
U	Analyzed for but undetected

Inorganic

B	Estimated value above the IDL/MDL but below the CRDL
J	Analyte found in blank and sample
M	Replicate instrument readings not within control limits
N	Spike recovery not within control limits
U	Analyzed for but undetected
*	RPD not within control limits

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF41AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	1.4	
108-86-1	Bromobenzene	1.0	U
74-97-5	Bromochloromethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
78-93-3	2-Butanone (MEK)	5.0	U
104-51-8	n-Butylbenzene	0.28	J
135-98-8	sec-Butylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
75-15-0	Carbon disulfide	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
108-90-7	Chlorobenzene	0.44	J
124-48-1	Dibromochloromethane	1.0	U
75-00-3	Chloroethane	13	
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.0	U
74-95-3	Dibromomethane	1.0	U
95-50-1	1,2-Dichlorobenzene	0.34	J
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	0.44	J
75-71-8	Dichlorodifluoromethane	1.0	U
75-34-3	1,1-Dichloroethane	1.3	

FORM I

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF41AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
107-06-2	1,2-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-35-4	1,1-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
100-41-4	Ethylbenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
591-78-6	2-Hexanone	5.0	U
98-82-8	Isopropylbenzene	0.83	J
99-87-6	4-Isopropyltoluene	1.0	U
75-09-2	Methylene chloride	0.47	J B
108-10-1	4-Methyl-2-pentanone	5.0	U
91-20-3	Naphthalene	1.7	
103-65-1	n-Propylbenzene	0.32	J
100-42-5	Styrene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-88-3	Toluene	0.30	J
87-61-6	1,2,3-Trichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF41AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.18	J
75-01-4	Vinyl chloride	0.51	J
1330-20-7	Xylenes (total)	0.60	J

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Dibromofluoromethane	85	(73 - 118)
1,2-Dichloroethane-d4	80	(62 - 128)
4-Bromofluorobenzene	92	(78 - 118)
Toluene-d8	93	(77 - 117)

FORM I

KAISER-HILL LLC
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF41AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-001.001

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
75-45-6	Methane, chlorodifluoro-	4.3115	8.0	J
933-98-2	Benzene, 1-ethyl-2,3-dimethy	16.136	1.5	J
27133-93-3	2,3-Dihydro-1-methylindene	16.767	1.4	J
109-99-9	tetrahydrofuran	8.171	21	

KSH 8/9/04

FORM I - TIC

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF61AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-002.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	1.0	U
108-86-1	Bromobenzene	1.0	U
74-97-5	Bromochloromethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
78-93-3	2-Butanone (MEK)	2.8	J
104-51-8	n-Butylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
75-15-0	Carbon disulfide	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.0	U
74-95-3	Dibromomethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF61AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-002.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
107-06-2	1,2-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-35-4	1,1-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
100-41-4	Ethylbenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
591-78-6	2-Hexanone	5.0	U
98-82-8	Isopropylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
75-09-2	Methylene chloride	0.33	J B
108-10-1	4-Methyl-2-pentanone	5.0	U
91-20-3	Naphthalene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
100-42-5	Styrene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-88-3	Toluene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF61AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-002.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
75-01-4	Vinyl chloride	1.0	U
1330-20-7	Xylenes (total)	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Dibromofluoromethane	89	(73 - 118)
1,2-Dichloroethane-d4	88	(62 - 128)
4-Bromofluorobenzene	93	(78 - 118)
Toluene-d8	92	(77 - 117)

FORM I

KAISER-HILL LLC
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0353

Matrix: (soil/water) WR Lab Sample ID: D4G200349 003
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GLGF61AA
Dilution factor: 1
Moisture %:

Date Received: 07/20/04
Date Extracted: 07/30/04
Date Analyzed: 07/30/04

QC Batch: 4215217

Client Sample Id: 04S0353-002.001

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	None			

FORM I - TIC

Project Narrative
RIN 04S0389

The following report contains the analytical results for two samples received at STL Denver on August 19, 2004.

Dilution factors and footnotes have been provided on each data sheet to assist in the interpretation of the results. In some cases, due to interferences or analytes present above the linear calibration curve, samples must be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits are adjusted relative to the dilution required. Dilutions made for reasons other than the presence of target compound(s) are addressed in the Supplemental Information Section.

This report includes reporting limits (RLs) less than STL Denver's practical quantitation limits. The reported sample results and associated reporting limits are being used specifically at the client's request. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

STL Denver utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for GC/MS Volatile Organics, as detailed on the methods summary page in accordance with the method indicated. QC data for these analyses are included.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted. The test results shown in this report meet all requirements of NELAC. Any exceptions are noted in the Supplemental Information Section below.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Supplemental Information – 04S0389

Sample Arrival and Receipt

The samples presented in this report were received at the laboratory in good condition, and at a temperature of less than 6°C.

No anomalies were observed.

GCMS VOC Analysis – Method 8260B

No anomalies were observed.

Non Radiological Qualifiers

Organic		Inorganic	
B	Analyte found in blank and sample	B	Estimated value above the IDL/MDL but below the CRDL
E	Concentration exceeds calibration range of instrument	J	Analyte found in blank and sample
J	Estimated value above the MDL, but below the CRDL	M	Replicate instrument readings not within control limits
U	Analyzed for but undetected	N	Spike recovery not within control limits
		U	Analyzed for but undetected
		*	RPD not within control limits

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0389

Matrix: (soil/water) WR Lab Sample ID: D4H190247 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GNHHN1AA
Dilution factor: 1
Moisture %:

Date Received: 08/19/04
Date Extracted: 08/28/04
Date Analyzed: 08/28/04

QC Batch: 4243526

Client Sample Id: 04S0389-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	10	U
71-43-2	Benzene	2.5	
108-86-1	Bromobenzene	1.0	U
74-97-5	Bromochloromethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
78-93-3	2-Butanone (MEK)	5.0	U
104-51-8	n-Butylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
75-15-0	Carbon disulfide	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
108-90-7	Chlorobenzene	0.95	J
124-48-1	Dibromochloromethane	1.0	U
75-00-3	Chloroethane	22	
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	2.8	
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.0	U
74-95-3	Dibromomethane	1.0	U
95-50-1	1,2-Dichlorobenzene	0.38	J
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	0.47	J
75-71-8	Dichlorodifluoromethane	0.86	J
75-34-3	1,1-Dichloroethane	2.2	

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0389

Matrix: (soil/water) WR Lab Sample ID: D4H190247 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 08/19/04
Work Order: GNHHN1AA Date Extracted: 08/28/04
Dilution factor: 1 Date Analyzed: 08/28/04
Moisture %:

QC Batch: 4243526

Client Sample Id: 04S0389-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
107-06-2	1,2-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	0.16	J
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-35-4	1,1-Dichloroethene	0.52	J
78-87-5	1,2-Dichloropropane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
100-41-4	Ethylbenzene	0.15	J
87-68-3	Hexachlorobutadiene	1.0	U
591-78-6	2-Hexanone	5.0	U
98-82-8	Isopropylbenzene	0.97	J
99-87-6	4-Isopropyltoluene	1.0	U
75-09-2	Methylene chloride	0.89	J
108-10-1	4-Methyl-2-pentanone	5.0	U
91-20-3	Naphthalene	2.3	
103-65-1	n-Propylbenzene	0.40	J
100-42-5	Styrene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-88-3	Toluene	0.67	J
87-61-6	1,2,3-Trichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0389

Matrix: (soil/water) WR Lab Sample ID: D4H190247 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 08/19/04
Work Order: GNHHN1AA Date Extracted: 08/28/04
Dilution factor: 1 Date Analyzed: 08/28/04
Moisture %:

QC Batch: 4243526

Client Sample Id: 04S0389-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	0.61	J
75-69-4	Trichlorofluoromethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.19	J
75-01-4	Vinyl chloride	1.0	U
1330-20-7	Xylenes (total)	0.59	J

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Dibromofluoromethane	107	(73 - 118)
1,2-Dichloroethane-d4	115	(62 - 128)
4-Bromofluorobenzene	90	(78 - 118)
Toluene-d8	100	(77 - 117)

KAISER-HILL LLC
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 04S0389

Matrix: (soil/water) WR Lab Sample ID: D4H190247.001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 08/19/04
Work Order: GNHHN1AA Date Extracted: 08/28/04
Dilution factor: 1 Date Analyzed: 08/28/04
Moisture %:

QC Batch: 4243526

Client Sample Id: 04S0389-001.001

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
593-70-4	Methane, chlorofluoro-	1.5207	26	J
	Unknown	14.606	2.0	J
	Unknown	15.002	1.8	J

OU-7
NCV Sample

Project Narrative
RIN 05Z0352

The following report contains the analytical results for two samples received at STL Denver on November 9, 2004.

Dilution factors and footnotes have been provided on each data sheet to assist in the interpretation of the results. In some cases, due to interferences or analytes present above the linear calibration curve, samples must be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits are adjusted relative to the dilution required. Dilutions made for reasons other than the presence of target compound(s) are addressed in the Supplemental Information Section.

This report includes reporting limits (RLs) less than STL Denver's practical quantitation limits. The reported sample results and associated reporting limits are being used specifically at the client's request. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

STL Denver utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for GC/MS Volatile Organics, as detailed on the methods summary page in accordance with the method indicated. QC data for these analyses are included.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted. The test results shown in this report meet all requirements of NELAC. Any exceptions are noted in the Supplemental Information Section below.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Supplemental Information – 05Z0352

Sample Arrival and Receipt

The samples presented in this report were received at the laboratory in good condition, and at a temperature of less than 6°C.

No anomalies were observed.

GCMS VOC Analysis – Method 8260B

Low levels of Hexachlorobutadiene and Methylene chloride are present in the method blank associated with QC batch 4323462. Because the concentrations in the method blank are not present at levels greater than the reporting limits, corrective action is deemed unnecessary.

The MS/MSD associated with QC batch 4323462 exhibited spike compound recoveries outside the QC control limits. The acceptable LCS analysis data indicated that the analytical system was operating within control; therefore, corrective action is deemed unnecessary.

No other anomalies were observed.

Non Radiological Qualifiers

Organic

B	Analyte found in blank and sample
E	Concentration exceeds calibration range of instrument
J	Estimated value above the MDL, but below the CRDL
U	Analyzed for but undetected

Inorganic

B	Estimated value above the IDL/MDL but below the CRDL
J	Analyte found in blank and sample
M	Replicate instrument readings not within control limits
N	Spike recovery not within control limits
U	Analyzed for but undetected
*	RPD not within control limits

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 05Z0352

Matrix: (soil/water) WR Lab Sample ID: D4K090227 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GWJH61AA
Dilution factor: 1
Moisture %:

Date Received: 11/09/04
Date Extracted: 11/17/04
Date Analyzed: 11/18/04

QC Batch: 4323462

Client Sample Id: 05Z0352-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	5.9	J
71-43-2	Benzene	1.9	
108-86-1	Bromobenzene	1.0	U
74-97-5	Bromochloromethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
78-93-3	2-Butanone (MEK)	5.0	U
104-51-8	n-Butylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
75-15-0	Carbon disulfide	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
108-90-7	Chlorobenzene	0.52	J
124-48-1	Dibromochloromethane	1.0	U
75-00-3	Chloroethane	18	
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	2.5	
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.0	U
74-95-3	Dibromomethane	1.0	U
95-50-1	1,2-Dichlorobenzene	0.39	J
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	0.53	J
75-71-8	Dichlorodifluoromethane	0.61	J
75-34-3	1,1-Dichloroethane	1.5	

FORM I

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 05Z0352

Matrix: (soil/water) WR Lab Sample ID: D4K090227 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GWJH61AA
Dilution factor: 1
Moisture %:

Date Received: 11/09/04
Date Extracted: 11/17/04
Date Analyzed: 11/18/04

QC Batch: 4323462

Client Sample Id: 05Z0352-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
107-06-2	1,2-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-35-4	1,1-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
100-41-4	Ethylbenzene	1.0	U
87-68-3	Hexachlorobutadiene	0.68	J B
591-78-6	2-Hexanone	5.0	U
98-82-8	Isopropylbenzene	0.93	J
99-87-6	4-Isopropyltoluene	0.28	J
75-09-2	Methylene chloride	0.74	J B
108-10-1	4-Methyl-2-pentanone	5.0	U
91-20-3	Naphthalene	15	
103-65-1	n-Propylbenzene	0.40	J
100-42-5	Styrene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-88-3	Toluene	0.38	J
87-61-6	1,2,3-Trichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U

FORM I

KAISER-HILL LLC

Lab Name:Severn Trent Laboratories, Inc. SDG Number:05Z0352

Matrix: (soil/water) WR Lab Sample ID:D4K090227 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: GWJH61AA
Dilution factor: 1
Moisture %:

Date Received: 11/09/04
Date Extracted:11/17/04
Date Analyzed: 11/18/04

QC Batch: 4323462

Client Sample Id: 05Z0352-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	0.27	J
75-01-4	Vinyl chloride	0.94	J
1330-20-7	Xylenes (total)	1.2	

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Dibromofluoromethane	108	(73 - 118)
1,2-Dichloroethane-d4	111	(62 - 128)
4-Bromofluorobenzene	96	(78 - 118)
Toluene-d8	96	(77 - 117)

FORM I

KAISER-HILL LLC
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:05Z0352

Matrix: (soil/water) WR Lab Sample ID:D4K090227 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 11/09/04
Work Order: GWJH61AA Date Extracted:11/17/04
Dilution factor: 1 Date Analyzed: 11/18/04
Moisture %:

QC Batch: 4323462

Client Sample Id: 05Z0352-001.001

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	Unknown	13.061	1.8	J
	Unknown	14.014	1.4	J
	Unknown	14.625	2.3	J
	Unknown	15.003	2.3	J
	2-propanol	2.272	41	
	tetrahydrofuran	4.142	37	

FORM I - TIC

OUT
DATA
Sample Date:
12/14/04

Project Narrative
RIN 05Z0587

The following report contains the analytical results for two samples received at STL Denver on December 15, 2004.

Dilution factors and footnotes have been provided on each data sheet to assist in the interpretation of the results. In some cases, due to interferences or analytes present above the linear calibration curve, samples must be analyzed at a dilution. For samples analyzed at a dilution, the reporting limits are adjusted relative to the dilution required. Dilutions made for reasons other than the presence of target compound(s) are addressed in the Supplemental Information Section.

This report includes reporting limits (RLs) less than STL Denver's practical quantitation limits. The reported sample results and associated reporting limits are being used specifically at the client's request. Please note that data are not normally reported to these levels without qualification, since they are inherently less reliable and potentially less defensible than required by the current NELAC standards.

STL Denver utilizes USEPA approved methods in all analytical work. The samples presented in this report were analyzed for GC/MS Volatile Organics, as detailed on the methods summary page in accordance with the method indicated. QC data for this analysis are included.

The results included in this report have been reviewed for compliance with the laboratory QA/QC plan. All data have been found to be compliant with the exception of those items noted. The test results shown in this report meet all requirements of NELAC. Any exceptions are noted in the Supplemental Information Section below.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Supplemental Information – 05Z0587

Sample Arrival and Receipt

The sample collection times, for samples 05Z0587-001.001 and 002.001, were taken directly from the sample container label, as this information was not listed on the chain-of-custody.

No anomalies were observed.

GCMS VOC Analysis – Method 8260B

Low levels of Napthalene are present in the method blank associated with QC batch 4363568. Because the concentration in the method blank is not present at a level greater than the reporting limit, corrective action is deemed unnecessary.

No other anomalies were observed.

Non Radiological Qualifiers

Organic	
B	Analyte found in blank and sample
E	Concentration exceeds calibration range of instrument
J	Estimated value above the MDL, but below the CRDL
U	Analyzed for but undetected

Inorganic	
B	Estimated value above the IDL/MDL but below the CRDL
J	Analyte found in blank and sample
M	Replicate instrument readings not within control limits
N	Spike recovery not within control limits
U	Analyzed for but undetected
*	RPD not within control limits

KAISER-HILL LLC

Lab Name:Severn Trent Laboratories, Inc. SDG Number:05Z0587

Matrix: (soil/water) WR Lab Sample ID:D4L150418 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 12/15/04
Work Order: G06PH1AA Date Extracted:12/27/04
Dilution factor: 1 Date Analyzed: 12/27/04
Moisture %:

QC Batch: 4363568

Client Sample Id: 05Z0587-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	7.9	J
71-43-2	Benzene	1.8	
108-86-1	Bromobenzene	1.0	U
74-97-5	Bromochloromethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
78-93-3	2-Butanone (MEK)	5.0	U
104-51-8	n-Butylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
75-15-0	Carbon disulfide	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
108-90-7	Chlorobenzene	0.52	J
124-48-1	Dibromochloromethane	1.0	U
75-00-3	Chloroethane	15	
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.0	U
74-95-3	Dibromomethane	1.0	U
95-50-1	1,2-Dichlorobenzene	0.34	J
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	0.50	J
75-71-8	Dichlorodifluoromethane	1.0	U
75-34-3	1,1-Dichloroethane	1.6	

FORM I

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 05Z0587

Matrix: (soil/water) WR Lab Sample ID: D4L150418 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: G06PH1AA
Dilution factor: 1
Moisture %:

Date Received: 12/15/04
Date Extracted: 12/27/04
Date Analyzed: 12/27/04

QC Batch: 4363568

Client Sample Id: 05Z0587-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
107-06-2	1,2-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-35-4	1,1-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
100-41-4	Ethylbenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
591-78-6	2-Hexanone	5.0	U
98-82-8	Isopropylbenzene	1.0	
99-87-6	4-Isopropyltoluene	0.21	J
75-09-2	Methylene chloride	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
91-20-3	Naphthalene	1.5	B
103-65-1	n-Propylbenzene	0.48	J
100-42-5	Styrene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-88-3	Toluene	0.31	J
87-61-6	1,2,3-Trichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U

FORM I

KAISER-HILL LLC

Lab Name:Severn Trent Laboratories, Inc. SDG Number:05Z0587

Matrix: (soil/water) WR Lab Sample ID:D4L150418 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: G06PH1AA
Dilution factor: 1
Moisture %:

Date Received: 12/15/04
Date Extracted:12/27/04
Date Analyzed: 12/27/04

QC Batch: 4363568

Client Sample Id: 05Z0587-001.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
75-01-4	Vinyl chloride	1.0	U
1330-20-7	Xylenes (total)	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Dibromofluoromethane	98	(73 - 118)
1,2-Dichloroethane-d4	87	(62 - 128)
4-Bromofluorobenzene	89	(78 - 118)
Toluene-d8	107	(77 - 117)

FORM I

KAISER-HILL LLC
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name:Severn Trent Laboratories, Inc. SDG Number:05Z0587

Matrix: (soil/water) WR Lab Sample ID:D4L150418 001
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 12/15/04
Work Order: G06PH1AA Date Extracted:12/27/04
Dilution factor: 1 Date Analyzed: 12/27/04
Moisture %:

QC Batch: 4363568

Client Sample Id: 05Z0587-001.001

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	Unknown	14.15	2.9	J
	Unknown	14.693	17	J
	Unknown	15.128	2.2	J
103-09-3	Acetic acid, 2-ethylhexyl es	15.291	10	J
	Unknown	15.617	2.6	J
	Unknown	16.034	1.7	J

FORM I - TIC

KAISER-HILL LLC

Lab Name:Severn Trent Laboratories, Inc. SDG Number:05Z0587

Matrix: (soil/water) WR Lab Sample ID:D4L150418 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 12/15/04
Work Order: G06PKiAA Date Extracted:12/27/04
Dilution factor: 1 Date Analyzed: 12/27/04
Moisture %:

QC Batch: 4363568

Client Sample Id: 05Z0587-002.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
67-64-1	Acetone	26	
71-43-2	Benzene	1.0	U
108-86-1	Bromobenzene	1.0	U
74-97-5	Bromochloromethane	1.0	U
75-27-4	Bromodichloromethane	1.0	U
75-25-2	Bromoform	1.0	U
74-83-9	Bromomethane	1.0	U
78-93-3	2-Butanone (MEK)	12	
104-51-8	n-Butylbenzene	1.0	U
135-98-8	sec-Butylbenzene	1.0	U
98-06-6	tert-Butylbenzene	1.0	U
75-15-0	Carbon disulfide	1.0	U
56-23-5	Carbon tetrachloride	1.0	U
108-90-7	Chlorobenzene	1.0	U
124-48-1	Dibromochloromethane	1.0	U
75-00-3	Chloroethane	1.0	U
67-66-3	Chloroform	1.0	U
74-87-3	Chloromethane	1.0	U
95-49-8	2-Chlorotoluene	1.0	U
106-43-4	4-Chlorotoluene	1.0	U
96-12-8	1,2-Dibromo-3-chloropropane	1.0	U
106-93-4	1,2-Dibromoethane (EDB)	1.0	U
74-95-3	Dibromomethane	1.0	U
95-50-1	1,2-Dichlorobenzene	1.0	U
541-73-1	1,3-Dichlorobenzene	1.0	U
106-46-7	1,4-Dichlorobenzene	1.0	U
75-71-8	Dichlorodifluoromethane	1.0	U
75-34-3	1,1-Dichloroethane	1.0	U

FORM I

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 05Z0587

Matrix: (soil/water) WR Lab Sample ID: D4L150418 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL Date Received: 12/15/04
Work Order: G06PK1AA Date Extracted: 12/27/04
Dilution factor: 1 Date Analyzed: 12/27/04
Moisture %:

QC Batch: 4363568

Client Sample Id: 05Z0587-002.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
107-06-2	1,2-Dichloroethane	1.0	U
156-59-2	cis-1,2-Dichloroethene	1.0	U
156-60-5	trans-1,2-Dichloroethene	0.50	U
75-35-4	1,1-Dichloroethene	1.0	U
78-87-5	1,2-Dichloropropane	1.0	U
142-28-9	1,3-Dichloropropane	1.0	U
594-20-7	2,2-Dichloropropane	1.0	U
10061-01-5	cis-1,3-Dichloropropene	1.0	U
10061-02-6	trans-1,3-Dichloropropene	1.0	U
563-58-6	1,1-Dichloropropene	1.0	U
100-41-4	Ethylbenzene	1.0	U
87-68-3	Hexachlorobutadiene	1.0	U
591-78-6	2-Hexanone	5.0	U
98-82-8	Isopropylbenzene	1.0	U
99-87-6	4-Isopropyltoluene	1.0	U
75-09-2	Methylene chloride	1.0	U
108-10-1	4-Methyl-2-pentanone	5.0	U
91-20-3	Naphthalene	1.0	U
103-65-1	n-Propylbenzene	1.0	U
100-42-5	Styrene	1.0	U
630-20-6	1,1,1,2-Tetrachloroethane	1.0	U
79-34-5	1,1,2,2-Tetrachloroethane	1.0	U
127-18-4	Tetrachloroethene	1.0	U
108-88-3	Toluene	1.0	U
87-61-6	1,2,3-Trichlorobenzene	1.0	U
120-82-1	1,2,4-Trichlorobenzene	1.0	U
71-55-6	1,1,1-Trichloroethane	1.0	U
79-00-5	1,1,2-Trichloroethane	1.0	U

FORM I

KAISER-HILL LLC

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 05Z0587

Matrix: (soil/water) WR Lab Sample ID: D4L150418 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: G06PK1AA
Dilution factor: 1
Moisture %:

Date Received: 12/15/04
Date Extracted: 12/27/04
Date Analyzed: 12/27/04

QC Batch: 4363568

Client Sample Id: 05Z0587-002.001

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/kg) ug/L	Q
79-01-6	Trichloroethene	1.0	U
75-69-4	Trichlorofluoromethane	1.0	U
96-18-4	1,2,3-Trichloropropane	1.0	U
76-13-1	1,1,2-Trichloro-1,2,2-triflu	1.0	U
95-63-6	1,2,4-Trimethylbenzene	1.0	U
108-67-8	1,3,5-Trimethylbenzene	1.0	U
75-01-4	Vinyl chloride	1.0	U
1330-20-7	Xylenes (total)	1.0	U

SURROGATE RECOVERY	%	ACCEPTABLE LIMITS
Dibromofluoromethane	96	(73 - 118)
1,2-Dichloroethane-d4	90	(62 - 128)
4-Bromofluorobenzene	87	(78 - 118)
Toluene-d8	98	(77 - 117)

FORM I

KAISER-HILL LLC
TENTATIVELY IDENTIFIED COMPOUNDS

Lab Name: Severn Trent Laboratories, Inc. SDG Number: 05Z0587

Matrix: (soil/water) WR Lab Sample ID: D4L150418 002
Method: SW846 8260B
Volatile Organics, GC/MS (8260B)

Sample WT/Vol: 20 / mL
Work Order: G06PK1AA
Dilution factor: 1
Moisture %:

Date Received: 12/15/04
Date Extracted: 12/27/04
Date Analyzed: 12/27/04

QC Batch: 4363568

Client Sample Id: 05Z0587-002.001

(ug/L or ug/kg) ug/L

CAS NUMBER	COMPOUND NAME	RT	EST. CONC.	Q
	Unknown	14.694	28	J
	Unknown	15.147	2.5	J
103-09-3	Acetic acid, 2-ethylhexyl es	15.292	7.2	J
	Unknown	16.686	2.2	J

FORM I - TIC

APPENDIX L

FINAL AS-BUILT CERTIFIED RECORD SURVEYS OF PLF LAYERS

SURVEY DATA TABLES

MAP POCKETS:

SHEET 1:	COVER SHEET
SHEET 2:	TOP OF REGRADE
SHEET 3:	TOP OF 6" CUSHION
SHEET 4:	SOILS TEST LOCATIONS
SHEET 5:	GCL PANEL LOCATIONS
SHEET 6:	FML PANEL LOCATIONS
SHEET 7:	GDN PANEL LOCATIONS
SHEET 8:	TOP OF 10" CUSHION
SHEET 9:	TOP OF ROCK
SHEET 10:	TOP OF SUBGRADE 22"
SHEET 11:	FINAL COVER

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
2341	39609.32	20913.62	5968.01
6525	39559.60	19452.85	5987.10
6526	39580.22	19437.48	5987.16
10001	39500.21	19449.90	5990.08
10002	39450.02	19450.18	5991.94
10003	39400.01	19500.06	5993.76
10004	39450.00	19500.05	5991.89
10005	39500.01	19499.86	5990.19
10006	39550.00	19499.98	5988.41
10007	39550.00	19550.04	5989.02
10008	39500.00	19550.00	5990.93
10009	39449.99	19549.94	5992.84
10010	39400.01	19550.03	5994.40
10011	39350.01	19550.04	5994.01
10012	39350.01	19600.02	5994.34
10013	39400.01	19599.99	5995.34
10014	39450.00	19599.94	5993.57
10015	39500.00	19599.98	5991.78
10016	39549.99	19600.06	5989.69
10017	39600.02	19599.97	5987.95
10018	39599.98	19650.07	5988.76
10019	39549.99	19650.05	5990.62
10020	39500.00	19650.03	5992.57
10021	39450.01	19650.06	5994.19
10022	39400.00	19649.98	5996.26
10023	39350.02	19650.05	5994.66
10024	39300.02	19650.03	5992.87
10025	39300.01	19700.02	5993.01
10026	39349.99	19699.98	5994.61
10027	39400.02	19700.07	5996.50
10028	39450.00	19699.95	5995.13
10029	39500.00	19700.03	5993.29
10030	39550.00	19699.94	5991.41
10031	39600.01	19699.95	5989.32
10032	39650.02	19699.95	5987.58
10033	39699.99	19750.04	5986.50
10034	39649.99	19750.01	5988.35
10035	39600.00	19750.03	5990.30
10036	39550.00	19750.03	5992.01
10037	39500.01	19750.02	5993.82
10038	39450.00	19750.03	5996.16
10039	39400.01	19750.02	5996.89
10040	39350.01	19750.01	5994.91
10041	39300.02	19750.04	5992.99
10042	39249.98	19799.97	5991.20
10043	39300.03	19800.06	5992.99

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10044	39350.01	19800.02	5994.73
10045	39400.00	19800.03	5997.01
10046	39450.00	19800.03	5997.00
10047	39500.01	19800.20	5994.80
10048	39550.00	19799.98	5992.71
10049	39600.01	19799.94	5990.97
10050	39649.97	19800.08	5989.16
10051	39699.97	19800.06	5987.22
10052	39750.02	19849.98	5986.16
10053	39699.99	19850.01	5988.05
10054	39649.97	19850.05	5989.87
10055	39600.03	19849.92	5991.75
10056	39550.00	19849.98	5993.48
10057	39500.00	19849.93	5995.71
10058	39450.01	19850.07	5997.99
10059	39400.00	19850.04	5997.30
10060	39350.00	19849.99	5995.24
10061	39299.99	19849.97	5993.21
10062	39249.96	19849.94	5991.10
10063	39249.93	19899.92	5991.10
10064	39299.93	19899.92	5993.20
10065	39349.99	19899.98	5995.36
10066	39400.01	19900.00	5997.40
10067	39450.00	19900.01	5998.68
10068	39500.00	19899.99	5996.69
10069	39549.98	19900.11	5994.40
10070	39600.00	19899.99	5992.49
10071	39649.97	19900.05	5990.67
10072	39699.98	19900.02	5988.72
10073	39749.95	19900.05	5986.90
10074	39800.01	19899.99	5985.05
10075	39799.95	19950.04	5985.72
10076	39749.95	19950.04	5987.71
10077	39699.98	19950.02	5989.59
10078	39649.99	19950.01	5991.36
10079	39599.95	19950.11	5993.29
10080	39550.00	19950.03	5995.29
10081	39500.00	19950.01	5997.65
10082	39450.02	19950.06	5998.58
10083	39399.99	19949.97	5996.72
10084	39350.01	19950.01	5994.94
10085	39300.04	19950.06	5993.10
10086	39250.10	19950.07	5991.21
10087	39250.30	20000.18	5990.48
10088	39299.99	19999.99	5992.34
10089	39349.96	19999.96	5994.20

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10090	39399.98	19999.97	5996.00
10091	39449.98	19999.94	5997.89
10092	39500.00	19999.98	5998.50
10093	39550.03	19999.91	5996.26
10094	39600.04	19999.94	5994.03
10095	39650.09	19999.91	5992.17
10096	39700.02	19999.99	5990.31
10097	39749.96	20000.02	5988.48
10098	39800.09	19999.96	5986.70
10099	39849.96	20000.02	5984.71
10100	39900.13	20050.01	5983.16
10101	39850.07	20049.98	5985.18
10102	39799.92	20050.00	5987.18
10103	39750.19	20050.02	5989.19
10104	39699.90	20049.99	5991.03
10105	39650.01	20049.99	5992.95
10106	39600.09	20049.91	5994.98
10107	39549.91	20050.00	5997.26
10108	39500.00	20050.06	5998.82
10109	39450.06	20050.12	5996.98
10110	39400.03	20050.03	5995.30
10111	39349.72	20049.81	5993.37
10112	39299.94	20049.97	5991.60
10113	39249.83	20049.94	5989.69
10114	39249.98	20100.00	5988.96
10115	39300.42	20100.11	5990.80
10116	39349.92	20099.97	5992.54
10117	39399.97	20099.74	5994.30
10118	39450.16	20100.15	5995.84
10119	39500.15	20099.74	5997.80
10120	39550.12	20100.01	5998.20
10121	39600.12	20099.88	5995.76
10122	39649.90	20099.99	5993.59
10123	39700.01	20100.00	5991.45
10124	39749.81	20099.99	5989.60
10125	39800.09	20100.01	5987.50
10126	39849.91	20100.00	5985.58
10127	39900.16	20100.01	5983.45
10128	39949.92	20150.01	5981.89
10129	39900.09	20149.98	5983.98
10130	39849.99	20149.56	5985.97
10131	39800.25	20149.98	5987.98
10132	39749.79	20150.02	5990.00
10133	39699.93	20150.00	5991.93
10134	39650.18	20150.00	5994.00
10135	39599.98	20150.00	5996.27

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10136	39549.90	20150.00	5997.98
10137	39500.03	20150.00	5996.16
10138	39450.02	20150.00	5994.61
10139	39400.03	20150.27	5993.14
10140	39350.19	20150.00	5991.56
10141	39300.15	20149.99	5990.01
10142	39249.94	20150.00	5988.20
10143	39250.00	20200.00	5986.92
10144	39300.06	20199.99	5988.71
10145	39350.21	20199.93	5990.30
10146	39400.02	20199.99	5991.75
10147	39449.95	20200.05	5993.20
10148	39500.18	20200.15	5994.68
10149	39550.20	20199.97	5996.29
10150	39600.05	20199.98	5996.90
10151	39649.87	20199.96	5994.47
10152	39699.97	20200.00	5992.39
10153	39750.05	20200.00	5990.40
10154	39800.05	20200.01	5988.39
10155	39849.97	20199.96	5986.27
10156	39900.10	20199.99	5984.33
10157	39950.00	20200.00	5982.47
10158	39999.93	20200.01	5980.41
10159	40000.16	20249.95	5980.89
10160	39950.07	20249.98	5982.89
10161	39899.94	20250.02	5984.80
10162	39850.11	20249.97	5986.75
10163	39800.05	20250.00	5988.72
10164	39749.93	20250.02	5990.70
10165	39700.25	20249.95	5992.80
10166	39649.99	20249.98	5994.81
10167	39599.97	20250.00	5995.76
10168	39550.07	20250.16	5994.82
10169	39500.00	20250.33	5993.36
10170	39449.96	20250.07	5991.94
10171	39399.95	20250.05	5990.37
10172	39349.96	20250.03	5988.89
10173	39300.02	20249.99	5987.41
10174	39300.00	20300.00	5986.19
10175	39350.04	20299.96	5987.70
10176	39400.01	20299.99	5989.06
10177	39450.02	20299.94	5990.41
10178	39499.87	20299.99	5992.09
10179	39549.91	20299.99	5993.39
10180	39599.76	20300.05	5993.35
10181	39649.80	20300.04	5993.05

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry

Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10182	39699.86	20300.03	5992.61
10183	39750.01	20299.99	5991.20
10184	39800.00	20300.00	5989.25
10185	39849.95	20300.01	5987.12
10186	39900.12	20299.94	5985.25
10187	39950.14	20299.95	5983.30
10188	39999.81	20300.06	5981.30
10189	40049.92	20300.03	5979.21
10190	40049.84	20349.97	5979.69
10191	39999.81	20349.96	5981.65
10192	39950.06	20350.01	5983.68
10193	39899.85	20349.95	5985.65
10194	39850.13	20350.03	5987.65
10195	39799.90	20349.96	5989.50
10196	39750.00	20350.00	5989.88
10197	39700.16	20350.12	5990.30
10198	39650.12	20350.13	5990.60
10199	39599.88	20350.17	5990.90
10200	39549.83	20349.84	5991.20
10201	39499.98	20350.03	5990.69
10202	39450.00	20350.00	5989.20
10203	39400.10	20349.94	5987.79
10204	39349.93	20350.03	5986.28
10205	39300.03	20349.99	5984.78
10206	39299.95	20400.03	5983.45
10207	39349.95	20400.04	5984.98
10208	39399.95	20400.04	5986.40
10209	39450.03	20399.97	5987.89
10210	39500.11	20399.74	5989.32
10211	39550.00	20400.00	5988.63
10212	39599.98	20399.89	5988.37
10213	39650.00	20400.01	5988.03
10214	39699.99	20399.99	5987.74
10215	39750.16	20400.12	5987.45
10216	39800.15	20400.09	5987.30
10217	39850.06	20400.03	5986.81
10218	39899.95	20399.98	5985.95
10219	39949.82	20400.01	5984.09
10220	39999.88	20399.97	5982.06
10221	40050.02	20400.00	5980.01
10222	40100.06	20400.02	5978.18
10223	40100.16	20449.98	5978.60
10224	40049.92	20450.03	5980.50
10225	39999.80	20450.06	5982.38
10226	39949.94	20450.02	5983.71
10227	39899.94	20450.03	5984.16

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry

Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10228	39849.95	20450.02	5984.49
10229	39800.07	20449.97	5984.71
10230	39750.07	20449.97	5985.10
10231	39699.82	20450.13	5985.35
10232	39649.87	20450.07	5985.59
10233	39600.01	20450.01	5985.90
10234	39549.86	20450.12	5986.39
10235	39499.47	20449.51	5987.28
10236	39449.36	20449.84	5986.34
10237	39399.70	20449.98	5984.94
10238	39349.95	20449.93	5983.58
10239	39350.03	20500.01	5982.10
10240	39400.02	20500.01	5983.54
10241	39450.03	20500.01	5985.10
10242	39500.01	20500.00	5984.98
10243	39549.85	20499.90	5984.05
10244	39599.93	20499.93	5983.50
10245	39649.99	20499.97	5983.15
10246	39700.00	20499.97	5982.89
10247	39749.84	20500.17	5982.59
10248	39800.14	20499.97	5982.26
10249	39849.83	20500.09	5981.97
10250	39900.06	20499.97	5981.64
10251	39949.92	20500.03	5981.38
10252	40000.11	20500.00	5981.10
10253	40049.86	20500.03	5980.80
10254	40100.01	20500.11	5978.81
10255	40150.09	20500.33	5977.00
10256	40150.11	20550.00	5977.41
10257	40099.94	20550.01	5978.06
10258	40049.94	20550.02	5978.38
10259	40000.00	20550.00	5978.64
10260	39949.97	20549.94	5978.75
10261	39900.04	20549.99	5979.20
10262	39849.92	20549.64	5979.40
10263	39800.06	20549.98	5979.70
10264	39749.84	20550.09	5980.09
10265	39700.00	20549.99	5980.33
10266	39650.02	20549.93	5980.70
10267	39599.87	20550.20	5981.50
10268	39549.88	20549.92	5982.08
10269	39500.02	20550.00	5982.96
10270	39449.85	20549.98	5983.65
10271	39399.95	20550.24	5982.30
10272	39350.17	20550.02	5981.08
10273	39399.87	20599.92	5980.97

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10274	39450.03	20600.02	5981.80
10275	39500.05	20600.04	5981.20
10276	39550.06	20600.03	5980.35
10277	39599.91	20599.92	5979.60
10278	39650.08	20600.07	5978.89
10279	39699.90	20599.92	5978.08
10280	39750.01	20600.02	5977.60
10281	39800.01	20600.01	5977.28
10282	39849.93	20599.93	5977.00
10283	39899.97	20599.94	5976.64
10284	39949.99	20599.97	5976.33
10285	39999.98	20599.95	5976.06
10286	40049.98	20599.94	5975.90
10287	40100.05	20600.16	5975.60
10288	40149.98	20599.92	5975.14
10289			*See Appendix A
10290	40150.04	20650.21	5972.74
10291	40100.06	20650.22	5972.91
10292	40050.10	20650.19	5973.39
10293	40000.05	20650.07	5973.69
10294	39949.92	20649.88	5973.87
10295	39900.00	20650.01	5974.17
10296	39850.02	20650.04	5974.50
10297	39799.98	20649.99	5974.78
10298	39749.98	20649.99	5975.45
10299	39700.04	20650.02	5976.21
10300	39650.04	20650.04	5976.81
10301	39599.96	20649.97	5977.62
10302	39549.94	20649.96	5978.40
10303	39499.96	20650.00	5979.27
10304	39449.80	20649.86	5979.96
10305	39400.05	20650.02	5979.43
10306	39449.97	20700.00	5978.17
10307	39500.13	20700.07	5977.32
10308	39549.89	20699.94	5976.55
10309	39599.96	20699.98	5975.89
10310	39650.16	20700.10	5975.00
10311	39700.04	20700.03	5974.27
10312	39749.99	20699.99	5973.60
10313	39799.97	20699.99	5972.81
10314	39850.08	20700.09	5972.09
10315	39899.94	20699.95	5971.67
10316	39949.98	20699.97	5971.51
10317	40000.10	20700.17	5971.20
10318	40050.00	20700.00	5970.90
10319	40099.98	20699.96	5970.93

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10320	40150.01	20700.10	5970.88
10321	40150.04	20749.98	5968.99
10322	40100.10	20749.95	5968.80
10323	40049.80	20750.11	5965.01
10324	39999.95	20750.03	5965.83
10325	39950.03	20749.98	5966.86
10326	39900.03	20749.97	5967.70
10327	39849.96	20750.04	5970.12
10328	39800.01	20749.98	5970.81
10329	39750.04	20749.93	5971.79
10330	39700.03	20749.93	5972.54
10331	39649.99	20750.02	5973.12
10332	39600.00	20750.02	5973.93
10333	39550.00	20750.01	5974.80
10334	39499.97	20749.85	5975.41
10335	39449.96	20749.91	5976.20
10336	39499.98	20799.94	5973.77
10337	39550.00	20800.01	5972.87
10338	39600.24	20799.87	5972.20
10339	39650.00	20800.01	5971.49
10340	39700.02	20799.96	5970.69
10341	39750.01	20799.99	5968.92
10342	39800.00	20800.00	5964.32
10343	39849.96	20800.02	5959.47
10344	39899.89	20800.07	5955.25
10345	39949.96	20800.02	5954.39
10346	39999.99	20800.00	5953.31
10347	40049.97	20800.01	5954.36
10348	40099.97	20800.01	5966.45
10349	40149.94	20800.03	5966.93
10350	40150.24	20849.93	5965.62
10351	40100.05	20849.98	5962.79
10352	40050.10	20849.96	5950.71
10353	39999.88	20850.05	5941.10
10354	39950.10	20849.96	5941.93
10355	39899.93	20850.03	5943.22
10356	39849.94	20850.03	5947.82
10357	39799.96	20850.03	5952.64
10358	39749.97	20850.03	5957.46
10359	39699.95	20850.07	5962.33
10360	39650.00	20849.99	5968.27
10361	39600.01	20849.97	5970.26
10362	39550.00	20850.09	5971.18
10363	39499.99	20849.97	5971.71
10364	39500.04	20900.09	5970.33
10365	39550.01	20900.08	5969.29

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
10366	39600.03	20899.89	5968.36
10367	39649.96	20900.06	5962.98
10368	39699.93	20900.06	5953.84
10369	39749.97	20900.02	5945.89
10370	39800.03	20899.99	5941.10
10371			*See Appendix A
10372			*See Appendix A
10373			*See Appendix A
10374			*See Appendix A
10375	40050.10	20899.97	5947.00
10376	40100.18	20899.96	5959.10
10377	40149.93	20900.01	5964.10
10378	40149.85	20950.02	5962.42
10379	40099.86	20950.02	5955.38
10380			*See Appendix A
10381			*See Appendix A
10382			*See Appendix A
10383			*See Appendix A
10384			*See Appendix A
10385			*See Appendix A
10386			*See Appendix A
10387	39700.08	20949.95	5945.27
10388	39650.02	20949.98	5957.57
10389	39600.01	20949.98	5966.07
10390	39550.01	20950.05	5968.01
10391	39550.02	21000.05	5967.70
10392	39600.02	20999.99	5965.60
10393	39649.89	21000.03	5957.31
10416	39650.11	21050.02	5957.11
10417	39599.95	21049.97	5965.29
10418	39550.02	21049.97	5967.35
10419	39550.01	21099.97	5967.07
10420	39600.00	21100.00	5964.93
11000	40324.93	21002.25	5960.08
11001	40300.73	21009.55	5960.00
11002	40272.36	20913.63	5961.96
11003	40296.67	20905.97	5962.02
11004	40271.87	20809.16	5964.09
11005	40247.51	20816.93	5964.01
11006	40228.53	20719.95	5966.05
11007	40252.74	20712.86	5966.04
11008	40239.00	20632.61	5968.08
11009	40214.70	20640.48	5968.01
11010	40182.82	20511.93	5970.10
11011	40207.11	20504.83	5970.10
11012	40199.99	20450.73	5972.06

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry

Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
11013	40175.60	20457.85	5972.06
11014	40192.99	20417.12	5974.00
11015	40167.36	20419.26	5974.04
11016	40118.30	20288.40	5972.02
11017	40138.37	20273.21	5972.07
11018	40054.31	20156.43	5972.03
11019	40035.05	20172.91	5974.10
11020	39989.44	20112.26	5975.96
11021	40007.61	20094.60	5976.04
11022	39943.25	20005.97	5978.10
11023	39923.50	20021.78	5978.07
11024	39858.65	19933.15	5980.08
11025	39878.13	19917.06	5980.09
11026	39786.19	19791.59	5982.08
11027	39766.19	19806.50	5981.96
11028	39670.91	19677.41	5983.98
11029	39691.07	19662.68	5983.99
11030	39621.62	19521.80	5986.00
11031	39599.10	19532.60	5986.09
11032	39521.57	19409.58	5988.01
11033	39534.01	19387.90	5988.08
11034	39441.09	19395.55	5990.00
11035	39457.98	19413.79	5990.03
11036	39407.79	19438.99	5992.00
11037	39390.74	19420.68	5992.06
11038	39333.16	19465.59	5993.97
11039	39350.19	19483.90	5994.02
11040	39346.63	19487.21	5994.00
11041	39321.62	19473.80	5994.06
11042	39299.19	19518.90	5992.07
11043	39319.96	19529.80	5991.99
11044	39281.29	19621.45	5990.07
11045	39258.43	19610.40	5989.96
11046	39222.81	19705.47	5988.04
11047	39246.12	19715.21	5988.06
11048	39216.10	19806.47	5985.98
11049	39192.25	19800.44	5986.03
11050	39178.03	19897.92	5984.09
11051	39202.68	19903.76	5983.99
11052	39196.52	19998.03	5982.04
11053	39171.17	19998.11	5982.10
11054	39177.11	20095.73	5980.08
11055	39202.29	20095.44	5980.10
11056	39213.15	20194.16	5978.06
11057	39187.97	20195.56	5978.04
11058	39200.49	20294.97	5976.05

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
11059	39225.69	20293.27	5976.05
11060	39240.20	20390.76	5974.06
11061	39215.62	20396.68	5974.01
11062	39248.37	20487.80	5972.09
11063	39272.18	20480.51	5972.08
11064	39307.85	20569.97	5970.05
11065	39290.10	20577.65	5970.02
11066	39329.46	20670.25	5968.04
11067	39353.14	20661.17	5968.06
11068	39434.11	20846.22	5966.00
11069	39410.16	20854.56	5966.00
11070	39482.85	21042.49	5964.09
11071	39507.20	21035.80	5963.99
11072	39545.45	21149.10	5962.09
11073	39519.92	21149.84	5962.02
11130	40205.92	20381.00	5976.10
11131	40156.06	20377.27	5976.03
11136	39393.63	20753.74	5967.01
11137	39369.91	20762.41	5966.99
11138	39468.68	20941.78	5965.00
11139	39444.47	20949.25	5964.94
12000	39353.50	19499.90	5994.02
12001	39312.40	19600.00	5993.34
12002	39273.24	19700.08	5992.04
12003	39239.32	19800.02	5991.45
12004	39227.45	19899.96	5991.11
12005	39224.94	19999.97	5989.57
12006	39230.67	20099.98	5988.25
12007	39245.26	20199.99	5987.29
12008	39261.66	20300.09	5985.09
12009	39285.61	20399.94	5983.10
12010	39326.09	20500.34	5981.37
12011	39374.49	20599.94	5980.17
12012	39417.21	20699.94	5978.70
12013	39457.90	20800.01	5974.26
12014	39489.27	20899.96	5970.33
12015	39518.85	20999.96	5968.86
12016	39547.71	21099.94	5967.07
12017	39555.90	21129.42	5966.62
12018	39639.44	21077.13	5959.70
12019	39691.42	21009.53	5946.97
12020	39710.49	20955.16	5942.53
12021	39752.18	20924.76	5940.06
12022	39855.92	20905.30	5934.68
12023	39873.49	20895.64	5935.19
12024	39894.37	20889.41	5934.67

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
12025	39912.23	20879.57	5935.20
12026	40005.99	20853.44	5940.70
12027	40017.73	20864.13	5941.91
12028	40056.67	20936.02	5946.08
12029	39533.63	21047.98	5968.00
12030	39534.59	20915.98	5968.90
12031	39836.51	20689.73	5972.61
12032	39988.41	20709.89	5970.91
12033	40086.31	20729.53	5969.46
12034	40175.13	20770.71	5968.07
12038	40197.18	20970.99	5963.19
12041	40189.09	20900.03	5964.88
12042	40172.97	20749.87	5968.25
12043			*See Appendix A
12044			*See Appendix A
12045	40132.65	20418.18	5976.81
12046	40123.45	20399.99	5977.11
12047	40099.74	20352.14	5977.78
12048	40073.37	20299.97	5978.20
12049	40011.40	20199.97	5979.84
12050	39945.25	20100.00	5981.74
12051	39876.92	19999.99	5983.52
12052	39799.97	19886.33	5984.90
12053	39741.42	19799.96	5985.78
12054	39700.02	19740.49	5986.35
12055	39670.18	19700.05	5986.56
12056	39648.60	19672.00	5987.10
12057	39612.90	19600.30	5987.31
12058	39600.40	19565.40	5987.31
12059	39570.70	19500.30	5987.44
12060	39549.80	19459.90	5988.23
12061	39529.20	19429.20	5989.00
12062	39499.90	19418.70	5990.24
12063	39449.90	19430.20	5992.03
12064	39400.00	19457.80	5994.01
12065	39382.20	19467.60	5994.14
12221	40123.63	20935.68	5961.95
12222	40113.55	20875.76	5964.02
12223	40106.50	20826.10	5966.00
12224	40099.39	20776.60	5967.94
12225	40089.46	20727.12	5970.09
12226	39879.96	20742.04	5969.95
12227	39686.29	20822.12	5969.90
12228	39616.47	20905.05	5968.02
12229	39617.11	20917.19	5966.05
12230	39630.63	21035.39	5962.03

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry

Final Submittal

Regrade Layer

PT. NO.	NORTHING	EASTING	ELEVATION
12231			*See Appendix A
12232	40050.01	20944.63	5944.02
12233	40009.83	20870.66	5939.76
12234	40003.04	20864.36	5938.60
12235	39916.78	20888.70	5932.89
12236	39873.78	20912.17	5931.40
12237	39756.07	20934.47	5937.67
12238	39719.04	20961.38	5940.30
12239	39701.07	21014.30	5944.51
12240	39649.06	21081.24	5957.13
12241			*See Appendix A
12242	40038.08	20960.12	5943.39
12243	39997.18	20884.71	5939.28
12244	39923.68	20905.50	5931.54
12245	39879.72	20929.43	5930.22
12246	39763.35	20951.42	5937.03
12247	39734.03	20972.66	5940.10
12248	39717.19	21022.90	5943.97
12249	39661.93	21093.76	5957.34
12504	39567.52	21147.97	5966.07
12505	39622.03	21113.93	5963.90

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
2341	39609.33	20913.60	5968.51	2341	5968.01	0.50
10001	39500.01	19450.02	5990.72	10001	5990.08	0.64
10002	39450.01	19449.98	5992.51	10002	5991.94	0.57
10003	39399.99	19499.96	5994.41	10003	5993.76	0.65
10004	39450.00	19500.05	5992.62	10004	5991.89	0.73
10005	39499.99	19499.99	5990.91	10005	5990.19	0.72
10006	39550.01	19500.05	5989.04	10006	5988.41	0.63
10007	39550.01	19549.96	5989.77	10007	5989.02	0.75
10008	39500.01	19550.03	5991.55	10008	5990.93	0.62
10009	39450.01	19550.05	5993.53	10009	5992.84	0.69
10010	39400.01	19550.02	5995.15	10010	5994.40	0.75
10011	39349.99	19550.00	5994.82	10011	5994.01	0.81
10012	39349.98	19599.93	5995.05	10012	5994.34	0.71
10013	39399.99	19599.92	5996.02	10013	5995.34	0.68
10014	39450.00	19599.96	5994.21	10014	5993.57	0.64
10015	39500.01	19599.94	5992.48	10015	5991.78	0.70
10016	39550.01	19599.94	5990.24	10016	5989.69	0.55
10017	39600.00	19599.99	5988.62	10017	5987.95	0.67
10018	39599.99	19650.01	5989.48	10018	5988.76	0.72
10019	39550.01	19649.95	5991.30	10019	5990.62	0.68
10020	39500.01	19649.96	5993.10	10020	5992.57	0.53
10021	39449.99	19649.94	5994.72	10021	5994.19	0.53
10022	39400.01	19650.05	5997.00	10022	5996.26	0.74
10023	39349.98	19649.92	5995.32	10023	5994.66	0.66
10024	39300.00	19650.00	5993.46	10024	5992.87	0.59
10025	39300.03	19700.06	5993.64	10025	5993.01	0.63
10026	39350.00	19699.99	5995.30	10026	5994.61	0.69
10027	39400.02	19700.03	5997.21	10027	5996.50	0.71
10028	39450.01	19699.99	5995.66	10028	5995.13	0.53
10029	39500.01	19700.05	5993.94	10029	5993.29	0.65
10030	39549.99	19700.04	5991.91	10030	5991.41	0.50
10031	39600.01	19699.97	5990.07	10031	5989.32	0.75
10032	39650.00	19700.00	5988.09	10032	5987.58	0.51
10033	39699.99	19750.03	5987.10	10033	5986.50	0.60
10034	39649.99	19749.98	5988.92	10034	5988.35	0.57
10035	39600.00	19749.99	5990.69	10035	5990.19	0.50
10036	39549.96	19750.01	5992.52	10036	5992.01	0.51
10037	39500.01	19750.03	5994.42	10037	5993.82	0.60
10038	39450.00	19750.00	5996.67	10038	5996.16	0.51
10039	39400.01	19750.04	5998.04	10039	5996.89	1.15
10040	39349.99	19749.97	5995.53	10040	5994.91	0.62
10041	39300.00	19750.01	5993.55	10041	5992.99	0.56
10042	39249.98	19799.97	5992.31	10042	5991.20	1.11
10043	39300.00	19800.01	5993.51	10043	5992.99	0.52
10044	39350.07	19800.15	5995.32	10044	5994.73	0.59
10045	39400.38	19799.80	5998.01	10045	5997.01	1.00
10046	39450.01	19800.09	5998.06	10046	5997.00	1.06
10047	39500.01	19800.19	5995.39	10047	5994.80	0.59
10048	39549.98	19800.07	5993.25	10048	5992.71	0.54
10049	39600.27	19800.08	5991.51	10049	5990.97	0.54
10050	39650.52	19800.49	5989.66	10050	5989.16	0.50
10051	39700.02	19800.25	5987.80	10051	5987.22	0.58
10052	39750.02	19849.97	5986.76	10052	5986.16	0.60
10053	39700.00	19849.99	5988.59	10053	5988.05	0.54
10054	39650.04	19849.91	5990.37	10054	5989.87	0.50
10055	39600.03	19849.92	5992.35	10055	5991.75	0.60
10056	39550.02	19849.87	5994.05	10056	5993.48	0.57
10057	39500.00	19849.87	5996.25	10057	5995.71	0.54
10058	39449.99	19849.96	5998.58	10058	5997.99	0.59

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
10059	39400.03	19850.13	5998.06	10059	5997.30	0.76
10060	39349.97	19849.94	5995.77	10060	5995.24	0.53
10061	39299.93	19849.88	5993.72	10061	5993.21	0.51
10062	39249.88	19849.85	5991.62	10062	5991.10	0.52
10063	39249.87	19899.86	5991.69	10063	5991.10	0.59
10064	39299.82	19899.77	5993.71	10064	5993.20	0.51
10065	39350.04	19900.07	5995.91	10065	5995.36	0.55
10066	39400.04	19900.08	5997.94	10066	5997.40	0.54
10067	39449.99	19899.93	5999.27	10067	5998.68	0.59
10068	39500.00	19899.99	5997.22	10068	5996.69	0.53
10069	39549.99	19900.08	5994.99	10069	5994.40	0.59
10070	39599.96	19900.10	5993.08	10070	5992.49	0.59
10071	39649.99	19900.02	5991.27	10071	5990.67	0.60
10072	39700.14	19899.83	5989.28	10072	5988.72	0.56
10073	39749.88	19900.12	5987.50	10073	5986.90	0.60
10074	39799.99	19900.01	5985.65	10074	5985.05	0.60
10075	39800.08	19949.95	5986.32	10075	5985.72	0.60
10076	39749.73	19950.23	5988.24	10076	5987.71	0.53
10077	39699.93	19950.08	5990.19	10077	5989.59	0.60
10078	39649.99	19950.01	5991.90	10078	5991.36	0.54
10079	39599.98	19950.04	5993.85	10079	5993.29	0.56
10080	39549.63	19950.13	5995.81	10080	5995.29	0.52
10081	39500.00	19949.90	5998.21	10081	5997.65	0.56
10082	39450.04	19950.13	5999.14	10082	5998.58	0.56
10083	39400.05	19950.08	5997.32	10083	5996.72	0.60
10084	39350.04	19950.05	5995.49	10084	5994.94	0.55
10085	39300.02	19950.04	5993.64	10085	5993.10	0.54
10086	39249.80	19950.16	5991.72	10086	5991.21	0.51
10087	39250.49	20000.29	5991.06	10087	5990.48	0.58
10088	39299.84	20000.08	5992.84	10088	5992.34	0.50
10089	39349.89	19999.90	5994.75	10089	5994.20	0.55
10090	39399.93	19999.91	5996.60	10090	5996.00	0.60
10091	39449.93	19999.79	5998.40	10091	5997.89	0.51
10092	39500.03	20000.05	5999.05	10092	5998.50	0.55
10093	39550.06	19999.83	5996.79	10093	5996.26	0.53
10094	39600.41	19999.85	5994.56	10094	5994.03	0.53
10095	39649.95	19999.73	5992.77	10095	5992.17	0.60
10096	39700.01	19999.89	5990.86	10096	5990.31	0.55
10097	39750.04	19999.97	5989.06	10097	5988.48	0.58
10098	39799.92	20000.05	5987.26	10098	5986.70	0.56
10099	39850.06	19999.85	5985.22	10099	5984.71	0.51
10100	39900.01	20049.99	5983.66	10100	5983.16	0.50
10101	39850.15	20049.91	5985.70	10101	5985.18	0.52
10102	39800.07	20049.94	5987.68	10102	5987.18	0.50
10103	39750.01	20050.00	5989.71	10103	5989.19	0.52
10104	39700.05	20049.93	5991.54	10104	5991.03	0.51
10105	39650.01	20049.97	5993.46	10105	5992.95	0.51
10106	39600.01	20049.91	5995.52	10106	5994.98	0.54
10107	39550.01	20050.15	5997.77	10107	5997.26	0.51
10108	39500.05	20050.16	5999.34	10108	5998.82	0.52
10109	39449.99	20049.99	5997.52	10109	5996.98	0.54
10110	39400.06	20049.91	5995.83	10110	5995.30	0.53
10111	39350.11	20050.10	5993.97	10111	5993.37	0.60
10112	39300.02	20050.02	5992.13	10112	5991.60	0.53
10113	39250.05	20050.03	5990.22	10113	5989.69	0.53
10114	39250.05	20100.02	5989.55	10114	5988.96	0.59
10115	39300.02	20100.02	5991.30	10115	5990.80	0.50
10116	39349.98	20099.98	5993.14	10116	5992.54	0.60
10117	39400.09	20100.08	5994.84	10117	5994.30	0.54

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
10118	39450.01	20100.01	5996.34	10118	5995.84	0.50
10119	39499.99	20099.99	5998.30	10119	5997.80	0.50
10120	39550.01	20100.09	5998.71	10120	5998.20	0.51
10121	39599.95	20100.21	5996.27	10121	5995.76	0.51
10122	39649.94	20100.09	5994.10	10122	5993.59	0.51
10123	39699.97	20100.02	5991.95	10123	5991.45	0.50
10124	39749.75	20100.08	5990.15	10124	5989.60	0.55
10125	39799.83	20100.10	5988.01	10125	5987.50	0.51
10126	39849.75	20100.12	5986.08	10126	5985.58	0.50
10127	39899.98	20100.01	5984.00	10127	5983.45	0.55
10128	39950.03	20149.99	5982.39	10128	5981.89	0.50
10129	39900.09	20149.97	5984.48	10129	5983.98	0.50
10130	39850.29	20149.90	5986.49	10130	5985.97	0.52
10131	39800.04	20149.98	5988.49	10131	5987.98	0.51
10132	39749.97	20150.02	5990.50	10132	5990.00	0.50
10133	39699.99	20150.01	5992.45	10133	5991.93	0.52
10134	39649.95	20150.05	5994.50	10134	5994.00	0.50
10135	39599.96	20150.10	5996.78	10135	5996.27	0.51
10136	39549.99	20149.90	5998.48	10136	5997.98	0.50
10137	39499.98	20150.04	5996.66	10137	5996.16	0.50
10138	39450.00	20150.00	5995.11	10138	5994.61	0.50
10139	39400.08	20150.50	5993.66	10139	5993.14	0.52
10140	39350.01	20150.01	5992.08	10140	5991.56	0.52
10141	39299.98	20149.99	5990.51	10141	5990.01	0.50
10142	39250.11	20150.04	5988.74	10142	5988.20	0.54
10143	39250.20	20200.04	5987.99	10143	5986.92	1.07
10144	39299.96	20199.99	5989.35	10144	5988.71	0.64
10145	39350.02	20200.01	5990.87	10145	5990.30	0.57
10146	39400.10	20200.03	5992.34	10146	5991.75	0.59
10147	39449.97	20199.99	5993.70	10147	5993.20	0.50
10148	39500.09	20200.07	5995.18	10148	5994.68	0.50
10149	39550.11	20199.89	5996.82	10149	5996.29	0.53
10150	39599.85	20199.85	5997.44	10150	5996.90	0.54
10151	39649.95	20199.97	5995.02	10151	5994.47	0.55
10152	39699.92	20200.03	5992.95	10152	5992.39	0.56
10153	39750.04	20199.99	5990.91	10153	5990.40	0.51
10154	39800.05	20199.99	5988.96	10154	5988.39	0.57
10155	39850.09	20199.99	5986.81	10155	5986.27	0.54
10156	39900.00	20200.01	5984.84	10156	5984.33	0.51
10157	39949.79	20200.03	5982.98	10157	5982.47	0.51
10158	39999.81	20200.02	5980.97	10158	5980.41	0.56
10159	39999.90	20249.99	5981.48	10159	5980.89	0.59
10160	39950.02	20250.02	5983.45	10160	5982.89	0.56
10161	39900.26	20249.86	5985.30	10161	5984.80	0.50
10162	39850.23	20250.00	5987.28	10162	5986.75	0.53
10163	39799.67	20250.00	5989.26	10163	5988.72	0.54
10164	39750.15	20249.89	5991.24	10164	5990.70	0.54
10165	39699.95	20249.80	5993.36	10165	5992.80	0.56
10166	39650.14	20250.14	5995.37	10166	5994.81	0.56
10167	39599.97	20250.09	5996.32	10167	5995.76	0.56
10168	39550.01	20249.93	5995.38	10168	5994.82	0.56
10169	39500.01	20250.07	5993.89	10169	5993.36	0.53
10170	39449.93	20250.21	5992.50	10170	5991.94	0.56
10171	39399.92	20250.18	5990.88	10171	5990.37	0.51
10172	39349.98	20250.26	5989.45	10172	5988.89	0.56
10173	39299.81	20249.99	5988.12	10173	5987.41	0.71
10174	39300.28	20299.95	5986.71	10174	5986.19	0.52
10175	39349.85	20299.82	5988.23	10175	5987.70	0.53
10176	39399.57	20300.13	5989.56	10176	5989.06	0.50

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
10177	39450.61	20299.86	5991.07	10177	5990.41	0.66
10178	39500.06	20299.95	5992.64	10178	5992.09	0.55
10179	39550.17	20300.20	5993.94	10179	5993.39	0.55
10180	39600.17	20300.24	5993.90	10180	5993.35	0.55
10181	39649.95	20299.97	5993.68	10181	5993.05	0.63
10182	39700.18	20300.06	5993.11	10182	5992.61	0.50
10183	39749.97	20300.10	5991.70	10183	5991.20	0.50
10184	39799.87	20299.97	5989.79	10184	5989.25	0.54
10185	39850.26	20300.04	5987.66	10185	5987.12	0.54
10186	39900.13	20300.02	5985.76	10186	5985.25	0.51
10187	39950.18	20300.03	5983.96	10187	5983.30	0.66
10188	40000.02	20300.00	5981.94	10188	5981.30	0.64
10189	40050.39	20300.04	5979.83	10189	5979.21	0.62
10190	40049.64	20350.03	5980.21	10190	5979.69	0.52
10191	39999.67	20349.78	5982.19	10191	5981.65	0.54
10192	39950.12	20349.96	5984.19	10192	5983.68	0.51
10193	39899.89	20349.90	5986.16	10193	5985.65	0.51
10194	39850.08	20350.10	5988.23	10194	5987.65	0.58
10195	39799.78	20349.88	5990.01	10195	5989.50	0.51
10196	39749.97	20350.10	5990.42	10196	5989.88	0.54
10197	39700.15	20350.35	5990.90	10197	5990.30	0.60
10198	39650.11	20350.10	5991.11	10198	5990.60	0.51
10199	39599.91	20350.25	5991.49	10199	5990.90	0.59
10200	39549.93	20350.02	5991.76	10200	5991.20	0.56
10201	39499.91	20349.95	5991.21	10201	5990.69	0.52
10202	39449.97	20349.97	5989.71	10202	5989.20	0.51
10203	39400.00	20349.86	5988.30	10203	5987.79	0.51
10204	39349.86	20349.99	5986.81	10204	5986.28	0.53
10205	39299.86	20349.89	5985.29	10205	5984.78	0.51
10206	39299.95	20400.03	5984.01	10206	5983.45	0.56
10207	39350.03	20400.08	5985.52	10207	5984.98	0.54
10208	39399.96	20400.04	5986.93	10208	5986.40	0.53
10209	39449.97	20399.92	5988.41	10209	5987.89	0.52
10210	39500.04	20399.50	5989.85	10210	5989.32	0.53
10211	39550.07	20400.18	5989.23	10211	5988.63	0.60
10212	39599.95	20399.82	5988.97	10212	5988.37	0.60
10213	39650.00	20399.99	5988.63	10213	5988.03	0.60
10214	39699.99	20400.00	5988.27	10214	5987.74	0.53
10215	39750.21	20399.98	5988.03	10215	5987.45	0.58
10216	39800.14	20400.11	5987.80	10216	5987.30	0.50
10217	39850.03	20400.06	5987.40	10217	5986.81	0.59
10218	39899.88	20400.04	5986.46	10218	5985.95	0.51
10219	39949.78	20400.04	5984.66	10219	5984.09	0.57
10220	39999.79	20400.02	5982.58	10220	5982.06	0.52
10221	40049.98	20400.02	5980.60	10221	5980.01	0.59
10222	40100.22	20399.94	5978.68	10222	5978.18	0.50
10223	40100.13	20449.98	5979.10	10223	5978.60	0.50
10224	40049.99	20450.00	5981.04	10224	5980.50	0.54
10225	39999.93	20450.01	5982.88	10225	5982.38	0.50
10226	39949.96	20450.01	5984.21	10226	5983.71	0.50
10227	39899.85	20450.09	5984.67	10227	5984.16	0.51
10228	39850.05	20449.77	5985.02	10228	5984.49	0.53
10229	39799.93	20450.02	5985.21	10229	5984.71	0.50
10230	39750.22	20449.80	5985.62	10230	5985.10	0.52
10231	39699.83	20450.01	5985.88	10231	5985.35	0.53
10232	39649.79	20449.80	5986.09	10232	5985.59	0.50
10233	39599.94	20449.91	5986.41	10233	5985.90	0.51
10234	39549.70	20449.96	5986.94	10234	5986.39	0.55
10235	39499.37	20449.44	5987.84	10235	5987.28	0.56

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
10236	39449.32	20449.82	5986.89	10236	5986.34	0.55
10237	39399.69	20449.98	5985.47	10237	5984.94	0.53
10238	39349.91	20449.90	5984.18	10238	5983.58	0.60
10239	39350.11	20500.04	5982.61	10239	5982.10	0.51
10240	39400.06	20500.02	5984.04	10240	5983.54	0.51
10241	39450.07	20500.02	5985.62	10241	5985.10	0.52
10242	39500.17	20499.63	5985.54	10242	5984.98	0.56
10243	39549.82	20499.87	5984.57	10243	5984.05	0.52
10244	39599.84	20499.83	5984.09	10244	5983.50	0.60
10245	39650.02	20500.03	5983.69	10245	5983.15	0.54
10246	39699.92	20500.24	5983.49	10246	5982.89	0.60
10247	39749.72	20500.34	5983.14	10247	5982.59	0.55
10248	39800.10	20500.01	5982.84	10248	5982.26	0.58
10249	39849.88	20500.07	5982.57	10249	5981.97	0.60
10250	39900.07	20499.97	5982.24	10250	5981.64	0.60
10251	39949.82	20500.07	5981.98	10251	5981.38	0.60
10252	40000.01	20500.03	5981.60	10252	5981.10	0.50
10253	40049.82	20499.97	5981.38	10253	5980.80	0.59
10254	40100.01	20500.12	5979.41	10254	5978.81	0.60
10255	40150.21	20500.31	5977.51	10255	5977.00	0.51
10256	40150.08	20550.00	5977.98	10256	5977.41	0.57
10257	40099.91	20550.02	5978.58	10257	5978.06	0.52
10258	40049.91	20550.02	5978.95	10258	5978.38	0.57
10259	40000.11	20549.99	5979.20	10259	5978.64	0.56
10260	39950.03	20549.93	5979.35	10260	5978.75	0.60
10261	39900.11	20549.98	5979.79	10261	5979.20	0.60
10262	39850.05	20549.61	5980.00	10262	5979.40	0.60
10263	39800.20	20549.94	5980.23	10263	5979.70	0.53
10264	39749.72	20550.16	5980.60	10264	5980.09	0.51
10265	39699.84	20550.16	5980.88	10265	5980.33	0.55
10266	39650.10	20550.14	5981.28	10266	5980.70	0.59
10267	39599.89	20550.21	5982.02	10267	5981.50	0.53
10268	39550.04	20549.96	5982.62	10268	5982.08	0.55
10269	39499.93	20549.98	5983.49	10269	5982.96	0.53
10270	39450.03	20550.06	5984.16	10270	5983.65	0.51
10271	39400.01	20550.24	5982.81	10271	5982.30	0.52
10272	39350.12	20550.14	5981.59	10272	5981.08	0.51
10273	39400.02	20600.04	5981.49	10273	5980.97	0.52
10274	39449.97	20599.90	5982.37	10274	5981.80	0.57
10275	39500.01	20600.06	5981.76	10275	5981.20	0.56
10276	39550.00	20599.97	5980.95	10276	5980.35	0.60
10277	39599.99	20600.14	5980.10	10277	5979.60	0.50
10278	39650.40	20599.83	5979.40	10278	5978.89	0.51
10279	39700.00	20600.00	5978.65	10279	5978.08	0.57
10280	39750.00	20600.01	5978.11	10280	5977.60	0.51
10281	39800.00	20600.01	5977.87	10281	5977.28	0.59
10282	39850.09	20599.87	5977.56	10282	5977.00	0.56
10283	39900.11	20599.86	5977.24	10283	5976.64	0.60
10284	39950.00	20600.02	5976.90	10284	5976.33	0.57
10285	40000.05	20599.95	5976.57	10285	5976.06	0.51
10286	40050.05	20599.96	5976.41	10286	5975.90	0.51
10287	40099.92	20600.06	5976.10	10287	5975.60	0.50
10288	40150.05	20599.95	5975.69	10288	5975.14	0.55
10289						*See Appendix A
10290	40150.04	20649.96	5973.25	10290	5972.74	0.51
10291	40100.10	20649.94	5973.44	10291	5972.91	0.53
10292	40050.00	20649.99	5973.90	10292	5973.39	0.51
10293	39999.99	20650.01	5974.22	10293	5973.69	0.53
10294	39949.97	20649.89	5974.38	10294	5973.87	0.51

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
10295	39899.93	20650.07	5974.73	10295	5974.17	0.56
10296	39850.08	20649.89	5975.07	10296	5974.50	0.57
10297	39800.04	20649.94	5975.36	10297	5974.78	0.58
10298	39750.04	20649.95	5975.97	10298	5975.45	0.52
10299	39700.01	20649.94	5976.77	10299	5976.21	0.56
10300	39649.99	20650.03	5977.34	10300	5976.81	0.53
10301	39600.00	20650.05	5978.12	10301	5977.62	0.50
10302	39550.00	20649.99	5978.93	10302	5978.40	0.53
10303	39500.00	20650.00	5979.77	10303	5979.27	0.50
10304	39450.03	20650.08	5980.46	10304	5979.96	0.50
10305	39399.94	20649.89	5979.94	10305	5979.43	0.51
10306	39450.45	20699.69	5978.75	10306	5978.17	0.58
10307	39500.00	20699.97	5977.88	10307	5977.32	0.56
10308	39550.00	20699.94	5977.07	10308	5976.55	0.52
10309	39599.99	20700.05	5976.48	10309	5975.89	0.59
10310	39650.04	20699.86	5975.60	10310	5975.00	0.60
10311	39699.98	20700.04	5974.78	10311	5974.27	0.51
10312	39749.98	20700.03	5974.13	10312	5973.60	0.53
10313	39799.99	20700.02	5973.41	10313	5972.81	0.60
10314	39850.10	20699.90	5972.67	10314	5972.09	0.58
10315	39900.14	20699.86	5972.26	10315	5971.67	0.59
10316	39950.15	20699.87	5972.10	10316	5971.51	0.59
10317	39999.98	20700.02	5971.79	10317	5971.20	0.59
10318	40049.73	20700.18	5971.47	10318	5970.90	0.57
10319	40099.91	20700.04	5971.52	10319	5970.93	0.59
10320	40150.08	20699.95	5971.41	10320	5970.88	0.53
10321	40149.99	20750.06	5969.51	10321	5968.99	0.52
10322						*See Appendix A
10323	40050.01	20750.11	5965.51	10323	5965.01	0.51
10324	39999.99	20749.85	5966.36	10324	5965.83	0.53
10325	39950.01	20750.19	5967.40	10325	5966.86	0.54
10326	39900.01	20750.10	5968.30	10326	5967.70	0.60
10327	39850.01	20750.01	5970.67	10327	5970.12	0.56
10328	39799.98	20750.02	5971.39	10328	5970.81	0.58
10329	39750.01	20749.96	5972.29	10329	5971.79	0.50
10330	39700.00	20750.00	5973.09	10330	5972.54	0.55
10331	39649.93	20750.22	5973.73	10331	5973.12	0.61
10332	39600.00	20749.91	5974.50	10332	5973.93	0.57
10333	39550.01	20749.96	5975.34	10333	5974.80	0.54
10334	39500.00	20749.98	5975.96	10334	5975.41	0.55
10335	39449.98	20749.94	5976.79	10335	5976.20	0.59
10336	39499.97	20799.90	5974.29	10336	5973.77	0.52
10337	39550.00	20800.02	5973.41	10337	5972.87	0.54
10338	39600.23	20799.79	5972.76	10338	5972.20	0.56
10339	39649.97	20800.07	5972.07	10339	5971.49	0.58
10340	39699.99	20800.01	5971.27	10340	5970.69	0.58
10341	39750.03	20799.96	5969.48	10341	5968.92	0.56
10342	39800.04	20799.98	5964.83	10342	5964.32	0.51
10343	39849.98	20799.95	5959.99	10343	5959.47	0.52
10344	39899.98	20799.97	5955.83	10344	5955.25	0.57
10345	39950.03	20800.01	5954.97	10345	5954.39	0.58
10346	40000.01	20800.05	5953.82	10346	5953.31	0.50
10347	40050.00	20800.19	5954.87	10347	5954.36	0.51
10348	40100.01	20799.96	5966.96	10348	5966.45	0.51
10349	40150.00	20799.89	5967.47	10349	5966.93	0.54
10350	40149.96	20850.05	5966.22	10350	5965.62	0.61
10351	40100.03	20849.75	5963.31	10351	5962.79	0.52
10352	40050.00	20849.89	5951.22	10352	5950.71	0.52
10353						*See Appendix A

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
10354	39949.99	20850.02	5942.44	10354	5941.93	0.51
10355	39900.02	20850.12	5943.73	10355	5943.22	0.51
10356	39850.04	20850.12	5948.33	10356	5947.82	0.51
10357	39799.97	20850.02	5953.24	10357	5952.64	0.60
10358	39749.94	20850.05	5958.05	10358	5957.46	0.59
10359	39699.89	20850.15	5962.90	10359	5962.33	0.57
10360				10360	5968.27	*See Appendix A
10361	39600.00	20850.00	5970.85	10361	5970.26	0.59
10362	39549.99	20850.03	5971.76	10362	5971.18	0.58
10363	39499.99	20849.97	5972.24	10363	5971.71	0.53
10364	39500.10	20900.22	5970.86	10364	5970.33	0.53
10365	39549.99	20899.92	5969.79	10365	5969.29	0.50
10366	39600.01	20899.93	5968.96	10366	5968.36	0.60
10367	39649.99	20900.02	5963.48	10367	5962.98	0.50
10368	39699.93	20900.05	5954.40	10368	5953.84	0.56
10369	39749.90	20900.07	5946.49	10369	5945.89	0.60
10370	39799.98	20900.02	5941.68	10370	5941.10	0.58
10371						*See Appendix A
10372						*See Appendix A
10373						*See Appendix A
10374						*See Appendix A
10375	40050.00	20900.05	5947.53	10375	5947.00	0.52
10376	40100.12	20899.82	5959.65	10376	5959.10	0.55
10377	40149.98	20900.02	5964.70	10377	5964.10	0.60
10378	40150.02	20949.89	5962.94	10378	5962.42	0.52
10379	40100.00	20949.84	5955.92	10379	5955.38	0.53
10380						*See Appendix A
10381						*See Appendix A
10382						*See Appendix A
10383						*See Appendix A
10384						*See Appendix A
10385						*See Appendix A
10386						*See Appendix A
10387	39700.02	20949.98	5945.78	10387	5945.27	0.51
10388	39650.00	20949.99	5958.07	10388	5957.57	0.50
10389						*See Appendix A
10390	39550.02	20950.07	5968.61	10390	5968.01	0.60
10391	39550.06	21000.02	5968.25	10391	5967.70	0.55
10392	39600.02	20999.99	5966.20	10392	5965.60	0.60
10393	39649.98	21000.00	5957.84	10393	5957.31	0.53
10416	39650.31	21050.06	5957.71	10416	5957.11	0.60
10417	39600.03	21050.00	5965.82	10417	5965.29	0.53
10418	39550.08	21049.86	5967.95	10418	5967.35	0.60
10419				10419	5967.07	*See Appendix A
10420	39599.99	21099.79	5965.44	10420	5964.93	0.51
12000	39353.49	19499.92	5994.69	12000	5994.02	0.66
12001	39312.43	19600.11	5993.85	12001	5993.26	0.59
12002	39273.16	19699.92	5992.72	12002	5992.04	0.68
12003	39239.55	19799.85	5991.99	12003	5991.45	0.54
12004	39227.38	19899.90	5991.61	12004	5991.11	0.50
12005	39224.97	19999.98	5990.08	12005	5989.57	0.51
12006	39230.40	20099.86	5988.85	12006	5988.25	0.60
12007	39245.29	20199.99	5987.86	12007	5987.29	0.57
12008	39261.70	20300.08	5985.61	12008	5985.09	0.52
12009	39285.51	20399.90	5983.69	12009	5983.10	0.59
12010	39326.19	20500.37	5981.95	12010	5981.37	0.58
12011	39374.27	20600.03	5980.71	12011	5980.17	0.54
12012	39417.10	20700.20	5979.27	12012	5978.70	0.57
12013	39457.75	20799.98	5974.87	12013	5974.26	0.61

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
12014	39489.30	20900.02	5970.88	12014	5970.33	0.55
12015	39518.91	21000.00	5969.43	12015	5968.86	0.57
12016	39547.73	21099.84	5967.57	12016	5967.07	0.50
12017	39555.90	21129.44	5967.12	12017	5966.62	0.50
12018	39639.53	21077.18	5960.21	12018	5959.70	0.51
12019	39691.39	21009.53	5947.47	12019	5946.97	0.50
12020	39710.65	20955.08	5943.03	12020	5942.53	0.50
12021	39752.13	20924.79	5940.65	12021	5940.06	0.59
12022	39855.92	20905.24	5935.19	12022	5934.68	0.51
12023	39873.45	20895.48	5935.70	12023	5935.19	0.51
12024	39894.35	20889.36	5935.21	12024	5934.67	0.54
12025	39912.25	20879.75	5935.70	12025	5935.20	0.51
12026	40006.00	20853.52	5941.30	12026	5940.70	0.60
12027	40017.75	20864.44	5942.42	12027	5941.91	0.51
12028	40056.67	20936.28	5946.61	12028	5946.08	0.52
12029	39533.53	21048.04	5968.50	12029	5968.00	0.50
12030	39534.58	20915.94	5969.49	12030	5968.90	0.59
12031	39836.51	20689.70	5973.16	12031	5972.61	0.55
12032	39988.44	20709.92	5971.42	12032	5970.91	0.52
12033	40091.90	20721.33	5970.72	12033	5969.46	1.26
12034	40175.10	20770.72	5968.58	12034	5968.07	0.51
12038	40197.15	20971.10	5963.70	12038	5963.19	0.51
12041	40189.13	20899.89	5965.38	12041	5964.88	0.50
12042	40172.98	20749.79	5968.75	12042	5968.25	0.50
12043						*See Appendix A
12044	40155.95	20594.03	5976.11	12044	5975.60	0.51
12045	40132.95	20417.97	5978.38	12045	5976.81	1.56
12046	40123.51	20399.97	5977.70	12046	5977.11	0.59
12047	40099.53	20352.04	5978.29	12047	5977.78	0.51
12048	40073.45	20300.07	5978.80	12048	5978.20	0.60
12049	40011.64	20199.94	5980.39	12049	5979.84	0.55
12050	39945.04	20100.08	5982.25	12050	5981.74	0.51
12051	39876.84	19999.87	5984.12	12051	5983.52	0.60
12052	39799.89	19886.41	5985.48	12052	5984.90	0.58
12053	39741.69	19800.05	5986.36	12053	5985.78	0.58
12054	39700.01	19740.42	5986.87	12054	5986.35	0.52
12055	39670.18	19700.03	5987.11	12055	5986.56	0.55
12056	39648.58	19672.03	5987.70	12056	5987.10	0.60
12057	39612.89	19600.34	5987.95	12057	5987.31	0.64
12058	39600.39	19565.49	5988.03	12058	5987.31	0.72
12059	39570.71	19500.22	5988.12	12059	5987.44	0.68
12060	39549.80	19459.82	5988.91	12060	5988.23	0.68
12061	39529.22	19429.14	5989.61	12061	5989.00	0.61
12062	39499.91	19418.68	5990.79	12062	5990.24	0.55
12063	39449.90	19430.19	5992.72	12063	5992.03	0.69
12064	39400.02	19457.61	5995.49	12064	5994.01	1.48
12065	39382.19	19467.60	5994.66	12065	5994.14	0.52
12221	40123.62	20935.70	5962.46	12221	5961.95	0.51
12222	40113.58	20875.68	5964.54	12222	5964.02	0.52
12223	40106.53	20825.84	5966.52	12223	5966.00	0.52
12224	40099.40	20776.39	5968.45	12224	5967.94	0.51
12225	40089.44	20727.06	5970.62	12225	5970.09	0.53
12226	39879.96	20742.06	5970.46	12226	5969.95	0.51
12227	39686.29	20822.12	5970.43	12227	5969.90	0.53
12228	39616.41	20905.13	5968.57	12228	5968.02	0.55
12229	39617.11	20917.19	5966.60	12229	5966.05	0.55
12230	39630.63	21035.39	5962.57	12230	5962.03	0.54
12235	39916.80	20888.75	5933.49	12235	5932.89	0.60
12236	39873.77	20912.08	5931.90	12236	5931.40	0.50

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

6" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	REGRADE ELEVATION	THICKNESS OF LAYER
12237	39756.08	20934.46	5938.19	12237	5937.67	0.52
12238	39719.12	20961.35	5940.89	12238	5940.30	0.59
12239	39701.15	21014.29	5945.02	12239	5944.51	0.51

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
6646	39385.28	19552.98	5995.06	CL-001
6653	39448.58	19530.62	5993.33	CL-002
6652	39537.29	19487.60	5989.65	CL-003
6655	39509.86	19443.74	5990.31	CL-004
6654	39432.35	19463.61	5993.27	CL-005
6651	39582.12	19527.69	5988.31	CL-006
6649	39498.23	19563.94	5991.79	CL-007
6647	39442.19	19584.36	5994.24	CL-008
6648	39343.07	19646.31	5995.18	CL-009
6695	39378.69	19529.17	5994.71	CL-010
6693	39476.49	19535.76	5992.69	CL-011
6692	39548.22	19527.19	5989.68	CL-012
6698	39493.78	19602.27	5992.92	CL-013
6696	39344.32	19589.36	5994.89	CL-014
6816	39330.59	19633.98	5994.57	CL-015
6815	39377.92	19629.57	5996.14	CL-016
6691	39566.45	19638.19	5990.51	CL-017
6819	39553.32	19653.14	5991.05	CL-018
6818	39394.20	19697.40	5996.94	CL-019
6817	39319.26	19682.97	5994.13	CL-020
6960	39615.85	19705.07	5989.36	CL-021
6958	39249.10	19779.51	5991.99	CL-022
6955	39595.91	19764.93	5991.09	CL-023
6956	39496.71	19772.50	5995.03	CL-024
6959	39326.89	19811.51	5994.66	CL-025
6957	39266.60	19792.03	5992.49	CL-026
7337	39726.13	19836.88	5987.61	CL-027
7380	39728.61	19883.50	5987.93	CL-028
7379	39641.52	19860.94	5990.84	CL-029
7378	39558.05	19883.18	5994.50	CL-030
7381	39465.07	19874.89	5998.44	CL-031
7376	39355.14	19882.02	5996.22	CL-032
7377	39293.91	19883.87	5993.43	CL-033,CLP-1
7491	39248.00	19967.37	5991.62	CL-034
7490	39350.15	19980.12	5995.27	CL-035
7489	39441.24	19973.38	5998.79	CL-036
7488	39607.60	19980.68	5994.27	CL-037
7487	39700.47	19973.76	5990.43	CL-038
7486	39814.86	19983.92	5986.52	CL-039
7599	39463.61	20019.29	5998.57	CL-040,CUP-1
7600	39358.61	20017.79	5994.78	CL-041
7601	39273.16	20023.04	5991.47	CL-042

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7598	39558.31	20030.26	5997.32	CL-043
7597	39637.59	20031.39	5993.98	CL-044
7596	39728.86	20029.03	5990.35	CL-045
7595	39829.21	20032.49	5986.46	CL-046
8205	39872.29	20035.64	5984.38	CL-047
8206	39823.39	20024.25	5986.32	CL-048
8207	39765.44	20048.23	5988.98	CL-049
8208	39715.91	20028.81	5990.60	CL-050
8209	39647.25	20044.63	5993.53	CL-051
8210	39591.39	20037.98	5995.77	CL-052
8211	39511.10	20042.77	5998.98	CL-053
8212	39454.51	20053.76	5997.63	CL-054
8213	39395.48	20041.08	5995.73	CL-055
8214	39346.68	20041.05	5993.87	CL-056
8215	39295.29	20042.76	5991.91	CL-057
8216	39258.49	20027.61	5990.79	CL-058
8397	39280.73	20119.49	5990.09	CL-059
8396	39265.17	20194.15	5988.20	CL-060
8398	39323.13	20182.08	5990.35	CL-061
8399	39363.43	20114.62	5993.40	CL-062
8400	39428.52	20122.07	5995.41	CL-063
8401	39483.71	20155.24	5995.69	CL-064
8402	39531.42	20109.38	5998.71	CL-065
8403	39572.56	20165.04	5998.20	CL-066
8404	39616.39	20104.55	5995.44	CL-067
8405	39646.60	20164.15	5994.67	CL-068
8406	39718.35	20166.24	5991.59	CL-069
8407	39723.91	20108.82	5990.99	CL-070
8408	39770.80	20098.63	5989.16	CL-071
8409	39823.45	20143.35	5987.24	CL-072
8410	39876.88	20094.62	5984.88	CL-073
8411	39938.75	20145.54	5982.63	CL-074
8477	39260.34	20226.08	5987.37	CL-075
8491	39260.04	20225.58	5987.44	CL-075
8492	39330.00	20213.86	5989.80	CL-076
8493	39417.97	20218.25	5992.31	CL-077
8494	39516.44	20217.20	5995.14	CL-078
8495	39614.69	20221.40	5996.63	CL-079
8496	39691.40	20224.03	5993.66	CL-080
8497	39825.56	20231.83	5988.14	CL-081
8498	39968.79	20219.20	5982.54	CL-082
8654	39675.89	20280.19	5994.01	CL-083
8655	39756.26	20297.76	5991.18	CL-084
9990	39252.01	20288.70	5985.71	CL-085
8657	40026.26	20283.87	5980.55	CL-085

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8656	39889.35	20288.40	5985.90	CL-086
8653	39630.30	20305.58	5993.49	CL-087
8652	39534.38	20302.97	5993.33	CL-088
8651	39420.57	20291.89	5990.34	CL-089
8650	39314.27	20288.40	5987.36	CL-090
8763	39307.03	20317.69	5986.44	CL-091
8762	39410.27	20340.67	5988.76	CL-092
8761	39496.39	20309.12	5992.17	CL-093
8760	39576.81	20333.31	5992.54	CL-094
8759	39692.69	20334.13	5991.82	CL-095
8755	39794.74	20304.36	5989.62	CL-096
8758	39879.55	20339.48	5986.74	CL-097
8756	39984.93	20301.20	5982.35	CL-098
8757	40065.55	20325.35	5979.36	CL-099
8862	39890.85	20360.99	5986.52	CL-100X
8864	39707.38	20376.75	5989.36	CL-100Y
8882	40047.78	20366.69	5980.55	CL-100Z
8861	39962.31	20358.69	5983.52	CL-101
8863	39803.00	20370.58	5989.12	CL-103
8888	39634.69	20383.63	5989.82	CL-105
8865	39503.00	20356.53	5990.83	CL-106
8866	39398.64	20372.64	5987.55	CL-107
8867	39312.44	20369.66	5984.99	CL-108
8950	39351.78	20440.27	5984.38	CL-109
8951	39451.92	20421.73	5987.77	CL-110
8952	39521.50	20423.80	5988.56	CL-111
8953	39584.97	20423.77	5988.07	CL-112
8954	39678.18	20431.51	5986.78	CL-113
8955	39792.65	20428.95	5986.23	CL-114
8956	39909.91	20420.74	5985.80	CL-115
8957	40001.31	20427.90	5982.71	CL-116
8958	40096.34	20428.39	5979.15	CL-117
9009	39402.68	20419.25	5986.24	CL-118
9010	39954.89	20421.52	5984.35	CL-119
9161	39364.57	20469.41	5983.92	CL-120
9178	39352.37	20529.38	5982.07	CL-121
9177	39443.83	20522.98	5984.56	CL-122
9162	39458.00	20460.43	5986.68	CL-123
9163	39538.00	20463.00	5986.49	CL-124
9164	39597.62	20458.20	5986.35	CL-125
9176	39604.92	20537.81	5982.48	CL-126
9175	39696.27	20509.24	5982.77	CL-127
9165	39707.61	20451.77	5985.58	CL-128
9166	39782.86	20466.40	5984.63	CL-129
9174	39809.73	20527.03	5981.32	CL-130

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9173	39894.20	20510.65	5981.31	CL-131
9167	39926.24	20454.37	5984.12	CL-132
9172	39959.68	20518.20	5980.88	CL-133
9171	40018.53	20526.46	5980.22	CL-134
9168	40024.89	20455.36	5981.87	CL-135
9169	40102.97	20473.39	5979.17	CL-136,CLP-2
9170	40119.70	20527.16	5978.60	CL-137
3096	40145.01	20601.89	5975.56	CL-147
3097	40063.93	20624.03	5974.75	CL-148
3101	39973.69	20623.57	5975.18	CL-149
3102	39877.20	20634.55	5975.25	CL-150
3105	39794.30	20625.17	5976.23	CL-151
3106	39702.44	20627.53	5977.22	CL-152
3112	39610.66	20629.03	5978.62	CL-153
3108	39521.39	20626.89	5980.19	CL-154
3111	39433.81	20618.14	5981.32	CL-155
3110	39462.01	20671.29	5979.61	CL-156
3109	39542.62	20693.86	5977.16	CL-157
3114	39635.72	20672.39	5976.41	CL-158
3107	39733.45	20677.01	5975.03	CL-159
3104	39819.58	20658.24	5974.76	CL-160
3103	39894.19	20669.86	5973.82	CL-161
3100	39982.95	20668.29	5973.21	CL-162
3098	40067.84	20670.76	5972.47	CL-163
3099	40138.03	20671.55	5972.49	CL-164
2553	39686.77	20932.74	5951.15	CL-165
2554	39673.04	20991.75	5951.77	CL-166
2546	39628.39	21066.33	5963.08	CL-167
2547	39619.24	20945.55	5965.60	CL-168
2548	39629.83	20883.05	5969.12	CL-169
2549	39684.39	20832.78	5968.66	CL-170
2550	39741.97	20810.68	5967.81	CL-171
2551	39779.14	20854.74	5954.10	CL-172
2552	39739.42	20901.50	5947.06	CL-173
4142	39572.66	21081.19	5966.66	CL-174
4141	39540.95	21010.96	5968.53	CL-175
4140	39556.07	20962.29	5968.18	CL-176
4139	39526.19	20899.11	5969.90	CL-177
4143	39481.79	20858.92	5972.22	CL-178
4144	39467.95	20793.27	5974.85	CL-179
4138	39547.01	20847.28	5971.65	CL-180
4135	39644.11	20819.12	5974.62	CL-181
4137	39589.50	20774.50	5973.71	CL-182
4145	39441.24	20716.93	5978.02	CL-183
4146	39530.47	20711.86	5976.70	CL-184

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4147	39623.66	20714.64	5975.46	CL-185
4148	39702.91	20710.26	5974.12	CL-186
4149	39757.03	20760.11	5971.75	CL-187
4150	39811.21	20715.24	5972.82	CL-188
4252	39765.85	20894.61	5945.65	CL-189
4253	39828.18	20832.85	5954.51	CL-190
4249	39866.99	20770.63	5965.31	CL-191
4250	39912.26	20786.62	5959.08	CL-192
4251	39927.59	20852.07	5942.06	CL-193
4745	39897.13	20752.35	5967.65	CL-194
4746	39937.37	20725.97	5970.73	CL-195
4747	39977.74	20771.10	5961.67	CL-196
4760	39953.18	20842.95	5943.84	CL-197
4759	40017.79	20835.42	5945.02	CL-198
4758	40038.27	20762.55	5962.61	CL-199
4750	40108.47	20753.56	5969.25	CL-200
4757	40087.06	20810.02	5963.10	CL-201
4756	40068.99	20869.52	5954.22	CL-202
4755	40078.31	20925.31	5952.63	CL-203
4754	40127.52	20923.94	5962.95	CL-204
4753	40170.89	20900.89	5965.11	CL-205,CLP-3
4752	40161.48	20834.24	5966.73	CL-206
4751	40156.60	20775.41	5968.24	CL-207
4749	40145.64	20694.65	5971.65	CL-208
4748	40038.16	20762.56	5962.71	CL-209
4783	40001.13	20697.25	5971.71	CL-209
9425	39428.24	19447.50	5994.00	CU-001
9424	39515.41	19463.74	5990.94	CU-002
9417	39398.43	19491.10	5995.06	CU-003
9418	39344.85	19531.49	5994.99	CU-004
9421	39442.27	19541.54	5994.50	CU-005
9423	39532.67	19531.37	5990.99	CU-006
9422	39534.48	19589.48	5991.64	CU-007
9420	39413.38	19586.94	5995.88	CU-008
9426	39352.29	19586.45	5995.49	CU-009
9419	39296.28	19630.51	5993.72	CU-010
9646	39597.08	19650.98	5990.36	CU-011
9645	39664.11	19671.17	5985.27	CU-012
9647	39511.60	19691.55	5993.97	CU-013
9648	39454.84	19636.57	5995.15	CU-014
9649	39445.58	19738.04	5996.99	CU-015
9650	39364.43	19690.96	5996.23	CU-016
9651	39313.89	19751.04	5994.63	CU-017
9652	39249.56	19774.68	5992.35	CU-018
1	39261.94	19806.93	5993.45	CU-019

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4	39350.25	19809.56	5996.63	CU-020
2	39259.27	19884.61	5993.03	CU-021
3	39350.52	19864.46	5996.81	CU-022
5	39427.46	19804.50	5999.46	CU-023
6	39405.98	19877.09	5999.25	CU-024
7	39469.45	19867.94	5999.04	CU-025
8	39514.08	19792.21	5996.01	CU-026
9	39593.74	19778.64	5992.39	CU-027
10	39671.56	19772.10	5989.56	CU-028
11	39771.35	19866.35	5987.43	CU-029
12	39704.34	19874.50	5989.93	CU-030
13	39633.41	19867.67	5992.43	CU-031
14	39545.62	19876.35	5995.78	CU-032
9905	39232.63	19970.51	5991.74	CU-039
9906	39311.97	19970.27	5994.88	CU-040
9907	39400.25	19955.70	5998.18	CU-041
9908	39486.90	19971.28	5999.55	CU-042
9909	39576.30	19989.98	5996.72	CU-043
9910	39650.02	19977.12	5993.47	CU-044
9911	39765.49	19970.51	5988.63	CU-045
9912	39838.81	19937.88	5985.63	CU-046
9913	39850.36	20011.67	5986.08	CU-047
9958	39750.96	20026.49	5990.35	CU-048
9959	39647.81	20031.07	5994.44	CU-049
9960	39552.36	20029.71	5998.18	CU-050
9961	39468.99	20034.31	5999.38	CU-051
9962	39374.10	20025.59	5996.33	CU-052
9963	39264.77	20025.44	5992.15	CU-053
2196	39248.05	20052.79	5991.10	CU-054
2195	39351.76	20053.61	5994.99	CU-055
2194	39443.47	20062.41	5997.92	CU-056
2193	39536.44	20049.42	5999.35	CU-057
2192	39650.68	20058.31	5994.62	CU-058
2191	39774.74	20051.88	5989.81	CU-059
2201	39894.01	20076.60	5985.19	CU-060
2197	39285.00	20106.57	5991.52	CU-061
2198	39358.62	20120.62	5994.13	CU-062
2200	39465.77	20137.00	5997.05	CU-063
2206	39598.60	20112.98	5997.61	CU-064
2205	39689.20	20142.71	5993.62	CU-065
2204	39802.61	20127.38	5989.06	CU-066
2203	39893.76	20128.63	5985.44	CU-067
2202	39967.84	20122.82	5981.88	CU-068
2214	39232.81	20181.34	5987.19	CU-069
2213	39338.78	20188.33	5991.79	CU-070

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
2212	39441.54	20174.13	5995.07	CU-071
2211	39547.96	20193.64	5997.88	CU-072
2210	39641.54	20176.06	5996.12	CU-073
2209	39742.76	20160.18	5991.85	CU-074
2208	39842.49	20186.69	5988.00	CU-075
2207	39942.08	20173.47	5984.19	CU-076
9965	39371.27	20211.16	5992.09	CU-077
9966	39476.42	20210.94	5995.27	CU-078
9967	39561.32	20245.88	5996.88	CU-079
9964	39263.39	20224.21	5988.56	CU-080
9968	39681.58	20227.61	5994.82	CU-081
9969	39769.83	20246.02	5991.35	CU-082
9970	39870.80	20227.04	5987.02	CU-083,CUP-2
9971	39979.09	20236.47	5983.19	CU-084
9989	39319.97	20346.25	5987.04	CU-094
9988	39391.63	20309.00	5990.07	CU-095
9987	39471.37	20330.53	5991.88	CU-096
9986	39544.42	20329.51	5993.48	CU-097
9985	39636.45	20335.53	5993.14	CU-098
9984	39734.06	20331.29	5992.28	CU-099
9983	39806.76	20330.94	5990.60	CU-100
9982	39902.26	20339.69	5986.92	CU-101
9981	39993.52	20338.89	5983.57	CU-102
9980	40080.74	20312.14	5979.92	CU-103
2019	39295.63	20381.31	5985.54	CU-104
2017	39404.85	20388.37	5988.67	CU-105
2018	39371.92	20420.62	5986.61	CU-106
2016	39450.74	20425.37	5988.74	CU-107
2014	39499.67	20386.42	5990.95	CU-108
2015	39520.24	20441.10	5989.25	CU-109
2013	39599.77	20381.90	5991.07	CU-110
2012	39617.48	20440.19	5987.93	CU-111
2010	39679.15	20379.49	5990.65	CU-112
2011	39732.80	20434.59	5987.47	CU-113
9997	39796.56	20382.72	5989.40	CU-114
9996	39836.75	20419.24	5987.70	CU-115
9995	39924.53	20384.18	5986.42	CU-116
9994	39957.65	20425.30	5985.17	CU-117
9993	40031.96	20443.14	5982.80	CU-118
9991	40060.43	20372.55	5981.02	CU-119
9992	40124.64	20436.76	5979.12	CU-120,CUP-3
2249	39674.72	20438.66	5987.57	CU-127
2248	39778.00	20425.56	5987.54	CU-128
2247	39890.35	20441.31	5986.19	CU-129
2246	39990.99	20403.06	5983.86	CU-130

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
2250	40084.73	20440.15	5980.59	CU-131
3877	40082.36	20471.90	5980.96	CU-132
3868	40021.42	20478.97	5982.84	CU-133
3867	39922.48	20482.91	5983.98	CU-134
3866	39806.57	20482.21	5984.30	CU-135
3865	39698.43	20488.94	5984.81	CU-136
3864	39597.28	20495.53	5985.21	CU-137
3863	39478.60	20489.35	5986.87	CU-138
3862	39376.64	20489.62	5984.51	CU-139
3876	39374.08	20529.55	5983.76	CU-140
3875	39474.04	20531.53	5985.31	CU-141
3874	39578.42	20513.86	5984.65	CU-142
3873	39664.74	20539.79	5982.56	CU-143
3872	39746.09	20526.21	5982.79	CU-144
3871	39825.96	20532.42	5981.87	CU-145
3870	39971.30	20523.29	5981.38	CU-146
3869	40041.45	20514.12	5981.51	CU-147
3878	40151.11	20495.04	5977.50	CU-148
4099	40150.02	20589.88	5976.95	CU-149
4098	40050.94	20589.41	5977.73	CU-150
4097	39966.50	20572.65	5979.23	CU-151
4096	39872.01	20578.83	5979.48	CU-152
4095	39783.96	20587.39	5979.51	CU-153,CUP-4
4094	39684.81	20575.13	5980.69	CU-154
4093	39593.24	20577.81	5982.16	CU-155
4092	39496.29	20583.52	5983.38	CU-156
4091	39418.73	20593.97	5982.82	CU-157
4633	39623.05	21083.05	5965.17	CU-158
4634	39633.41	21050.17	5963.09	CU-159
4635	39614.82	21020.47	5966.47	CU-160
4641	39690.39	21009.38	5948.55	CU-161
4636	39656.88	20973.40	5957.27	CU-162
4637	39643.45	20944.52	5961.06	CU-163
4638	39650.81	20900.99	5963.98	CU-164
4639	39679.11	20860.94	5966.11	CU-165
4640	39698.05	20966.81	5947.29	CU-166
5351	39589.77	21106.47	5967.05	CU-167
5352	39599.45	20999.97	5967.12	CU-168
5342	39542.53	21033.36	5968.96	CU-169
5341	39546.14	20951.35	5969.46	CU-170
5350	39485.37	20943.74	5968.30	CU-171
5339	39509.38	20897.57	5971.57	CU-172
5349	39458.86	20840.08	5972.69	CU-173
5346	39480.58	20770.01	5976.29	CU-174
5345	39427.56	20705.59	5979.55	CU-175

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
5344	39404.55	20645.66	5980.83	CU-176
5343	39489.38	20625.64	5981.81	CU-177
5347	39522.56	20756.17	5976.67	CU-178
5340	39558.21	20910.33	5970.07	CU-179
5348	39540.65	20813.99	5974.08	CU-180
5415	39614.76	20833.97	5971.92	CU-181
5413	39590.20	20769.94	5974.68	CU-182
5416	39659.81	20799.65	5972.61	CU-183
5414	39643.73	20760.03	5974.46	CU-184
5411	39659.43	20696.90	5976.30	CU-185
5410	39658.01	20626.53	5978.72	CU-186
5412	39575.36	20656.97	5979.19	CU-187
4650	39701.44	20833.98	5967.65	CU-188
4651	39775.76	20902.87	5944.12	CU-189
4652	39787.63	20862.13	5952.35	CU-190
4668	39830.38	20691.69	5974.35	CU-191
4666	39736.33	20738.05	5973.97	CU-192
4655	39634.83	20843.44	5971.14	CU-193
4654	39517.10	20861.74	5972.80	CU-194
4653	39540.45	21030.10	5969.29	CU-195
4667	39817.50	20822.22	5958.86	CU-196
4679	39816.26	20823.17	5958.81	CU-196
4678	39941.23	20623.49	5976.87	CU-197
4673	39900.07	20691.63	5973.73	CU--198
4672	39977.71	20692.11	5973.42	CU-199
4671	40053.96	20718.97	5971.76	CU-200,CUP-5
4677	40034.22	20635.68	5975.96	CU-201
4674	40118.02	20651.07	5974.44	CU-202
4675	40158.20	20678.75	5972.91	CU-203
4676	40190.43	20637.97	5972.49	CU-204
4669	39873.76	20849.75	5947.03	CU-205
4670	39886.38	20805.78	5956.49	CU-206
4682	40157.48	20951.40	5964.56	CU-207
4683	40111.64	20925.87	5961.65	CU-208
4681	40084.01	20877.66	5958.15	CU-209
4684	40064.81	20854.19	5955.34	CU-210
4685	40050.20	20786.29	5957.98	CU-211
4686	39982.12	20807.22	5953.78	CU-212
4687	39936.47	20807.86	5954.26	CU-213
4688	39952.84	20851.41	5943.44	CU-214
4690	40138.25	20888.76	5966.01	CU-215
4680	40116.73	20846.33	5967.11	CU-216
4689	40176.23	20816.36	5968.32	CU-217
4691	40182.85	20753.27	5969.66	CU-218
4692	40192.00	20714.54	5969.44	CU-219,CUP-6

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4693	40087.27	20719.80	5971.82	CU-220
3068	39308.83	19909.90	5994.00	CU-33
3069	39391.23	19916.42	5998.00	CU-34
3070	39488.54	19919.33	5999.00	CU-35
3071	39568.76	19933.08	5996.00	CU-36
3072	39648.99	19933.80	5993.00	CU-37
3073	39753.27	19920.77	5988.00	CU-38
5215	40052.41	20926.46	5943.89	DP-25P
5216	40041.40	20906.52	5942.57	DP-25Q
5217	40020.02	20866.46	5940.47	DP-25R
5218	40006.93	20854.28	5938.95	DP-25S
5219	40026.13	20691.10	5971.93	DP-26E
5220	40024.52	20712.64	5970.67	DP-26F
9972	39344.16	20293.39	5989.40	CU-086
9973	39436.32	20285.49	5992.12	CU-087
9974	39537.13	20266.17	5995.74	CU-088
9975	39643.01	20278.40	5995.86	CU-089
9976	39733.99	20294.13	5993.24	CU-090
9977	39834.95	20263.29	5989.14	CU-091
9978	39927.34	20268.97	5985.43	CU-092
9979	40036.57	20283.61	5981.20	CU-093
2528	39450.96	19544.94	5997.36	10009-SMP
2529	39453.05	19548.28	5997.21	10009-SMP
2530	39445.57	19547.68	5997.69	10009-SMP
2531	39445.42	19543.65	5997.42	10009-SMP
2549	39448.77	19546.33	5995.50	10009-SMP
2532	39351.53	19746.67	5999.53	10040-SMP
2533	39344.51	19749.20	5999.40	10040-SMP
2534	39347.15	19755.17	5999.48	10040-SMP
2535	39353.07	19753.63	5999.80	10040-SMP
2536	39350.80	19752.42	5997.65	10040-SMP
2537	39601.96	19848.04	5996.04	10055-SMP
2538	39597.12	19848.75	5996.40	10055-SMP
2539	39597.65	19852.78	5996.33	10055-SMP
2540	39604.03	19852.54	5995.97	10055-SMP
2541	39601.18	19851.00	5994.47	10055-SMP
2520	39354.66	19956.22	5999.54	10084-SMP
2521	39362.43	19955.98	5999.90	10084-SMP
2522	39361.67	19949.62	5999.91	10084-SMP
2523	39355.49	19951.65	5999.51	10084-SMP
2548	39359.09	19953.69	5997.90	10084-SMP
2512	39851.71	20145.42	5989.73	10130-SMP
2513	39847.39	20147.95	5989.98	10130-SMP
2514	39852.39	20155.11	5989.86	10130-SMP
2515	39856.38	20149.85	5989.51	10130-SMP

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
2543	39852.64	20150.01	5988.20	10130-SMP
2516	39503.09	20155.80	6000.41	10137-SMP
2517	39510.76	20155.20	6000.66	10137-SMP
2518	39508.94	20148.90	6000.85	10137-SMP
2519	39502.39	20149.70	6000.55	10137-SMP
2546	39506.59	20153.06	5998.70	10137-SMP
2500	39694.50	20253.01	5997.07	10165-SMP
2501	39702.89	20253.18	5996.74	10165-SMP
2502	39702.49	20246.74	5996.68	10165-SMP
2503	39694.55	20246.28	5997.09	10165-SMP
2544	39699.11	20250.04	5995.20	10165-SMP
2504	39404.77	20398.68	5990.82	10208-SMP
2505	39404.52	20403.93	5990.78	10208-SMP
2506	39396.55	20403.40	5990.40	10208-SMP
2507	39396.78	20399.60	5990.52	10208-SMP
2547	39401.36	20401.86	5988.70	10208-SMP
2508	40000.78	20425.21	5987.13	10225-SMP
2509	39995.94	20428.77	5987.35	10225-SMP
2510	39999.46	20433.45	5987.19	10225-SMP
2511	40003.87	20428.05	5986.89	10225-SMP
2542	40000.28	20428.91	5985.20	10225-SMP
2524	39655.32	19976.47	5996.26	2IN10040
2525	39648.54	19981.70	5996.70	2IN10040
2526	39661.78	19993.60	5996.27	2IN10040
2527	39664.39	19986.69	5996.08	2IN10040
2545	39657.90	19985.26	5994.46	2IN10040
3851	39265.69	19665.41	5992.23	AC22-1
3859	39398.45	19966.61	6000.60	AC22-2
3858	39767.76	19890.61	5989.96	AC22-3
3856	40017.71	20277.16	5983.66	AC22-4
3853	39775.96	20396.37	5991.22	AC22-5
3855	39489.29	20391.67	5992.55	AC22-6
4695	39896.74	20959.31	5918.50	AEB-1
4712	39884.69	20958.69	5919.90	AEB-2
4711	40038.61	20442.13	5985.49	AM-22
4701	39549.73	20498.45	5989.26	AM-2210
4702	39536.23	20500.13	5989.41	AM-2210
4703	39535.51	20507.51	5989.16	AM-2210
4704	39548.15	20505.98	5988.96	AM-2210
4705	39542.50	20502.65	5988.22	AM-2210
4696	39792.92	20565.69	5983.75	AM-2211
4697	39804.24	20566.73	5983.78	AM-2211
4698	39805.89	20558.89	5984.17	AM-2211
4699	39793.41	20558.13	5984.17	AM-2211
4700	39799.17	20562.03	5982.77	AM-2211

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Soil Test Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4706	40021.55	20471.26	5986.10	AM-2212
4707	40021.63	20480.08	5985.90	AM-2212
4708	40009.26	20480.67	5986.05	AM-2212
4709	40009.43	20473.70	5986.21	AM-2212
4710	40015.70	20475.98	5984.70	AM-2212
7382	39269.64	19710.27	5992.48	AT-002
7539	39229.60	19875.39	5990.60	AT-003
7538	39235.44	19823.44	5990.98	AT-004
7602	39232.53	19843.59	5991.83	AT-005
7613	39741.88	19797.28	5985.46	AT-006
7614	39778.20	19852.31	5984.67	AT-007
7615	39837.32	19939.09	5983.58	AT-008
7664	39743.30	19799.97	5986.41	AT-009
7665	39827.92	19925.24	5985.12	AT-010
7560	39695.06	19731.49	5987.06	AT-1
3121	40156.06	20598.90	5971.14	AT-11
3694	40151.67	20557.09	5977.41	AT-12
3352	39369.50	20594.59	5979.73	AT-13
3367	39386.23	20626.23	5979.93	AT-14
4404	39817.94	20912.45	5936.20	AT-15
4405	39734.59	20937.83	5941.56	AT-16
5171	40182.94	20832.07	5965.55	AT-17
5170	40177.91	20784.05	5966.41	AT-18
5207	40179.90	20803.33	5967.54	AT-19
5206	40186.89	20873.31	5966.02	AT-20
5214	40161.60	20961.36	5963.29	AT-21
5221	40136.51	20955.58	5961.79	AT-22
3857	39854.51	19891.36	5979.95	AV-1
3850	39490.88	19382.39	5988.02	AV-2
3852	39176.50	20019.06	5981.14	AV-3
3879	39245.58	20462.39	5972.49	AV-4
4776	39594.42	20893.57	5974.22	AM2-3
4777	39595.23	20897.53	5974.02	AM2-3
4778	39604.01	20892.71	5974.08	AM2-3
4779	39601.64	20887.45	5974.25	AM2-3
4780	39599.41	20890.93	5973.69	AM2-3
4749	39785.45	21025.16	5932.08	GWS-1
4750	39838.87	20959.93	5927.41	GWS-2
4695	40021.18	20980.97	5936.08	GWN-1
4696	39991.22	20971.80	5933.18	GWN-2
4702	39881.74	20961.03	5922.93	AEB-3
4703	39889.16	20971.47	5919.76	AEB-4
4704	39901.72	20950.10	5923.37	AEB-5

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
6659	39487.54	19488.74	5991.29	DS-1A
6673	39426.98	19443.47	5993.58	DS-1B
6680	39518.82	19425.82	5990.29	DS-1C
6684	39507.81	19496.63	5990.72	DS-1D
6776	39505.48	19515.92	5991.19	DS-1E
6787	39472.55	19557.51	5992.75	DS-1F
6842	39340.64	19611.84	5994.83	DS-1G
6833	39589.38	19637.39	5989.62	DS-1H
6834	39595.76	19637.49	5989.42	DS-1H
6835	39595.63	19623.59	5989.15	DS-1H
6836	39589.47	19623.69	5989.45	DS-1H
6898	39348.60	19515.26	5994.60	DS-1I
6967	39589.10	19652.24	5989.84	DS-1K
6981	39662.08	19691.88	5987.14	DS-1M
6988	39326.74	19694.31	5994.32	DS-1N
6989	39276.53	19696.23	5992.69	DS-1N
6990	39279.31	19689.79	5992.71	DS-1N
7196	39602.90	19701.13	5989.98	DS-1Q
7198	39458.58	19779.21	5996.92	DS-1R
7346	39561.68	19805.29	5993.06	DS-1T
7347	39561.70	19800.04	5992.88	DS-1T
7348	39533.11	19805.16	5994.23	DS-1T
7349	39532.33	19799.58	5994.14	DS-1T
7351	39524.18	19805.12	5994.48	DS-1T
7352	39524.13	19799.93	5994.47	DS-1T
7419	39783.01	19862.88	5986.02	DS-1W
7420	39774.48	19849.42	5986.33	DS-1W
7421	39716.73	19858.72	5988.18	DS-1W
7422	39719.24	19873.30	5988.28	DS-1W
7468	39686.27	19874.45	5989.42	DS-1X
7619	39818.56	19973.50	5985.96	DS-2A
7620	39818.23	19969.55	5985.89	DS-2A
7621	39858.22	19973.31	5984.74	DS-2A
7622	39853.06	19965.40	5984.86	DS-2A
7623	39819.31	19973.67	5985.91	DS-2B
7624	39819.24	19969.43	5985.83	DS-2B
7625	39788.01	19972.85	5987.02	DS-2B
7648	39269.54	19978.09	5992.09	DS-2C
7649	39225.71	19979.14	5990.35	DS-2C
7650	39225.55	19974.55	5990.48	DS-2C
8267	39543.36	20026.25	5997.80	DS-2D
8428	39632.37	20089.07	5994.72	DS-2E
8682	39696.25	20046.88	5991.72	DS-2G
8687	39537.34	20254.95	5994.70	DS-2H
8686	39530.81	20255.23	5994.63	DS-2I
8823	40073.37	20301.61	5978.76	DS-2J
8825	40077.15	20308.44	5978.69	DS-2J
8832	40028.51	20305.87	5980.78	DS-2J

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8833	40028.44	20311.19	5980.84	DS-2J
8829	39976.47	20310.07	5982.89	DS-2K
8830	40028.51	20305.85	5980.80	DS-2K
8831	40028.66	20311.10	5980.83	DS-2K
8934	39969.58	20353.05	5983.32	DS-2M
8935	39960.69	20353.38	5983.70	DS-2M
8936	39960.94	20367.89	5983.79	DS-2M
8937	39969.41	20367.85	5983.44	DS-2M
3693	39521.49	20669.30	5978.64	DS-2W
3692	39495.46	20670.11	5979.20	DS-2X
4129	39667.31	20818.07	5970.64	DS-3A/S477
4128	39673.47	20821.60	5970.62	DS-3A/S477/S478
4130	39671.78	20814.33	5970.78	DS-3A/S479
4134	39665.29	20821.94	5970.63	DS-3B
4243	39621.32	21087.29	5964.43	DS-3C
4248	39556.35	21128.38	5966.30	DS-3D
4246	39554.13	21124.19	5966.73	DS-3D/S508
4247	39568.37	21121.23	5966.34	DS-3D/S508/S509
4331	39865.98	20857.21	5944.67	DS-3E
4332	39872.11	20859.49	5943.70	DS-3E
4333	39872.64	20856.79	5944.24	DS-3E
4339	39884.04	20858.01	5942.86	DS-3F
5079	40121.49	20852.16	5965.81	DS-3F
5078	40120.34	20860.21	5965.43	DS-3F/S645/S646
4390	39835.14	20739.87	5971.96	DS-3G
4395	39875.22	20788.73	5960.70	DS-3H
4552	39781.61	20725.72	5972.99	DS-3I
4549	39786.58	20723.39	5972.74	DS-3I/S546
4550	39779.47	20723.89	5973.06	DS-3I/S546/S548
4551	39779.38	20728.15	5972.59	DS-3I/S548
4561	39757.15	20741.30	5972.68	DS-3J
4590	39717.86	20771.34	5972.53	DS-3K
4587	39729.36	20766.98	5972.51	DS-3K/S556
4588	39712.50	20767.29	5972.72	DS-3K/S556/S559
4589	39712.92	20778.59	5972.07	DS-3K/S559
4601	39681.58	20799.71	5971.83	DS-3M
4598	39690.95	20795.98	5971.71	DS-3M/S560
4599	39678.11	20796.70	5971.97	DS-3M/S560/S562
4600	39678.40	20804.49	5971.47	DS-3M/S562
4609	39664.75	20813.01	5971.35	DS-3N
4606	39670.75	20810.22	5971.17	DS-3N/S562
4607	39661.52	20810.51	5971.65	DS-3N/S562/S565
4608	39661.48	20817.45	5971.06	DS-3N/S565
4670	39480.35	20863.60	5972.10	DS-3P
4685	39536.44	20912.03	5969.36	DS-3Q
4696	39528.78	20936.94	5969.19	DS-3R
4712	39531.58	21046.55	5966.62	DS-3S
5005	40090.11	20724.74	5970.50	DS-3T/DS-4A/S633
4980	40084.44	20721.91	5970.42	DS-3T/S620
4990	40042.92	20813.93	5951.84	DS-3W

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4989	40038.55	20806.60	5951.74	DS-3W/S611/S614/S627/S630
4987	40046.82	20819.88	5952.31	DS-3W/S624/S625
4986	40041.84	20820.73	5951.07	DS-3W/S624/S627
4988	40043.86	20806.12	5952.80	DS-3W/S625/S630
4997	40056.17	20781.11	5957.81	DS-3X
4993	40049.08	20785.56	5956.72	DS-3X/S615
4996	40056.78	20773.05	5959.77	DS-3X/S615
4998	40058.88	20774.18	5959.48	DS-3X/S615/S618/S629
4994	40054.93	20789.05	5956.82	DS-3X/S628
4995	40062.84	20776.45	5959.80	DS-3X/S628
5006	40091.49	20728.11	5970.40	DS-4A/S633
5007	40096.05	20725.99	5970.27	DS-4A/S635
5023	40150.36	20758.17	5968.89	DS-4B
5020	40144.30	20754.12	5968.81	DS-4B/S638
5021	40145.85	20762.04	5968.77	DS-4B/S638/S639
5022	40155.69	20760.16	5968.56	DS-4B/S639
5027	40163.85	20771.33	5968.33	DS-4C
5024	40160.43	20763.45	5968.57	DS-4C/S639
5025	40165.31	20784.90	5967.99	DS-4C/S639/S640
5026	40165.94	20766.50	5968.37	DS-4C/S640
5067	40178.58	20921.90	5964.62	DS-4D
5066	40178.50	20905.84	5965.06	DS-4D/S639/S640
5064	40174.84	20906.25	5965.03	DS-4D/S639/S644
5068	40181.00	20915.84	5964.84	DS-4D/S640/S641
5065	40181.63	20944.63	5964.26	DS-4D/S641/S644
5176	39893.28	20693.56	5972.52	DS-4F
5172	39869.45	20691.81	5972.60	DS-4F/S460
5173	39900.08	20691.84	5972.51	DS-4F/S460
5174	39900.15	20693.85	5972.45	D-4F/S460/S657
5076	40122.20	20844.75	5966.17	DS-4F/S634/S636
5075	40117.92	20846.56	5965.95	DS-4F/S634/S645
5077	40124.32	20859.38	5965.61	DS-4F/S646
5175	39900.22	20695.76	5972.26	DS-4F/S657
5179	40172.89	20766.62	5968.35	DS-4G
5180	40165.59	20758.79	5968.68	DS-4G
5177	40148.23	20751.53	5968.99	DS-4G/S664/S665
5178	40172.11	20755.09	5968.61	DS-4G/S665
6752	39408.62	19498.04	5994.30	S1/S12/S14
6753	39461.15	19498.20	5992.50	S1/S14/S15
6754	39494.59	19497.73	5991.32	S1/S2/S15
6681	39410.17	19485.26	5994.05	S1/S4/S12
6674	39524.83	19427.88	5989.90	S10/S11
7401	39439.77	19848.58	5998.79	S100/S102/S105
7402	39559.21	19848.06	5993.78	S100/S104/S105
7399	39373.92	19849.24	5997.10	S101/S102/S107
7398	39370.67	19849.16	5996.85	S101/S106/S107
7400	39415.93	19848.79	5998.73	S102/S105/S107
7417	39778.28	19855.59	5986.19	S103/DS-1W
7416	39718.60	19860.26	5988.18	S103/S111
7415	39704.23	19860.46	5988.70	S104/S103/S111

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7412	39558.65	19862.11	5994.14	S104/S105/S110
7413	39620.24	19862.40	5991.76	S104/S110/S112
7414	39647.76	19861.67	5990.67	S104/S111/S112
7410	39416.62	19863.02	5998.91	S105/S107/S109
7411	39476.08	19862.71	5997.70	S105/S109/S110
7397	39234.19	19848.44	5991.46	S106/S101
7409	39370.75	19863.58	5997.05	S106/S107/S109
7407	39232.26	19862.26	5991.60	S106/S108
7408	39326.87	19863.87	5995.05	S106/S108/S109
7465	39326.40	19878.00	5994.91	S108/S109/S116
7466	39316.84	19878.22	5994.41	S108/S116/S117
7467	39231.08	19876.33	5991.56	S108/S117
7463	39475.97	19876.63	5998.04	S109/S110/S115
7464	39465.80	19876.53	5998.49	S109/S115/S116
6677	39469.58	19423.09	5992.12	S11
6678	39490.29	19420.16	5991.25	S11
6679	39509.24	19420.55	5990.40	S11
7461	39621.39	19876.25	5991.93	S110/S112/S114
7462	39611.29	19876.50	5992.20	S110/S114/S115
7418	39781.10	19859.37	5986.10	S111/DS-1W
7460	39648.51	19876.13	5990.87	S111/S112/S114
7458	39789.95	19873.03	5985.86	S111/S113
7459	39757.00	19874.00	5986.82	S111/S113/S114
7471	39757.24	19887.97	5987.02	S113/S114/S119
7469	39799.04	19886.14	5985.44	S113/S118
7470	39763.79	19887.89	5986.76	S113/S118/S119
7473	39611.48	19890.55	5992.44	S114/S115/S120
7472	39621.22	19890.60	5992.09	S114/S119/S120
7475	39465.45	19890.73	5998.81	S115/S116/S121
7474	39476.70	19890.89	5998.39	S115/S120/S121
7477	39316.98	19892.39	5994.50	S116/S117/S122
7501	39763.56	19902.28	5987.07	S118/S119/S124
7499	39808.64	19899.34	5985.59	S118/S123
7500	39789.70	19901.00	5986.07	S118/S123/S124
7503	39621.12	19904.76	5992.62	S119/S120/S125
7502	39644.79	19904.48	5991.61	S119/S124/S125
6751	39385.08	19498.06	5994.58	S12/S13/S14
7505	39476.80	19904.98	5998.66	S120/S121/S126
7504	39499.44	19905.01	5997.58	S120/S125/S126
7476	39330.26	19892.42	5995.16	S121/S122/S116
7507	39328.22	19906.65	5995.14	S121/S122/S127
7506	39351.66	19906.51	5996.16	S121/S126/S127
7478	39229.53	19890.49	5991.64	S122/S117
7508	39228.26	19904.56	5991.74	S122/S127
7510	39790.01	19915.04	5986.38	S123/S124/S129
7509	39816.61	19912.69	5985.47	S123/S129
7512	39645.05	19918.69	5991.94	S124/S125/S130
7511	39683.33	19917.66	5990.31	S124/S129/S130
7514	39499.32	19919.24	5997.92	S125/S126/S131
7513	39536.23	19919.09	5996.42	S125/S130/S131

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7524	39351.80	19920.73	5996.11	S126/S127/S132
7522	39390.28	19920.06	5997.64	S126/S131/S133
7523	39382.77	19920.24	5997.38	S126/S132/S133
7526	39226.77	19918.73	5991.66	S127/S128
7525	39236.56	19919.37	5991.86	S127/S128/S132
7533	39235.36	19933.34	5991.76	S128/S132/S137
7532	39226.63	19932.90	5991.50	S128/S137
7529	39683.45	19931.91	5990.74	S129/S130/S135
7527	39826.24	19926.27	5985.34	S129/S134
7528	39701.67	19931.46	5990.13	S129/S134/S135
6749	39355.40	19497.57	5994.76	S13/S14
7531	39536.83	19933.03	5996.63	S130/S131/S136
7530	39556.19	19933.42	5995.77	S130/S135/S136
7536	39388.91	19934.17	5997.41	S131/S133/S138
7537	39409.99	19934.25	5998.27	S131/S136/S138
7535	39383.11	19934.28	5997.16	S132/S133/S138
7534	39366.94	19934.64	5996.55	S132/S137/S138
7542	39701.71	19945.91	5990.29	S134/S135/S140
7540	39835.03	19939.71	5985.30	S134/S139
7541	39744.87	19945.46	5988.55	S134/S139/S140
7544	39555.96	19947.49	5995.71	S135/S136/S141
7543	39600.42	19947.71	5993.90	S135/S140/S141
7546	39407.17	19948.17	5997.78	S136/S138/S143
7545	39453.44	19947.87	5999.32	S136/S141/S143
7548	39367.00	19948.95	5996.32	S137/S138/S142/S143
7549	39226.26	19947.02	5991.22	S137/S142
7547	39368.18	19949.01	5996.39	S138/S142/S143
7552	39746.32	19959.54	5988.55	S139/S140/S145
7551	39844.68	19952.86	5985.19	S139/S145
6757	39460.96	19511.64	5992.82	S14/S15/S17
6750	39347.99	19511.04	5994.48	S14/S16
6756	39363.71	19512.13	5994.69	S14/S16/S17
7554	39600.30	19961.61	5994.16	S140/S141/S146
7553	39714.72	19959.74	5989.82	S140/S145/S146
7556	39455.26	19962.20	5999.23	S141/S143/S147
7555	39568.33	19962.12	5995.55	S141/S146/S147
7558	39367.75	19963.02	5996.39	S142/S143/S148
7550	39225.66	19961.36	5990.90	S142/S144
7559	39278.56	19963.23	5992.80	S142/S144/S148
7557	39426.58	19962.18	5998.55	S143/S147/S148
7644	39225.53	19976.19	5990.37	S144/DS-2C
7633	39278.35	19977.63	5992.37	S144/S148/S153
7643	39266.18	19977.64	5991.96	S144/S153/DS-2C
7617	39853.39	19966.02	5984.85	S145/DS-2A
7627	39714.59	19974.09	5989.83	S145/S146/S150
7616	39789.38	19972.78	5987.00	S145/S149
7626	39729.58	19973.67	5989.25	S145/S149/S150
7629	39568.78	19976.00	5995.81	S146/S147/S151
7628	39626.46	19975.37	5993.18	S146/S150/S151
7631	39426.66	19976.39	5998.19	S147/S148/S152

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7630	39480.60	19976.23	5999.13	S147/S151/S152
7632	39331.34	19977.85	5994.42	S148/S152/S153
7618	39857.63	19972.27	5984.77	S149/DS-2A
7636	39729.30	19987.92	5989.72	S149/S150/S155
7634	39866.72	19985.67	5984.44	S149/S154
7635	39850.72	19986.01	5985.03	S149/S154/S155
6772	39509.83	19511.69	5991.05	S15/S17/S18
6773	39575.39	19511.29	5988.15	S15/S18
7638	39626.64	19989.60	5993.52	S150/S151/S156
7637	39704.41	19988.27	5990.59	S150/S155/S156
7640	39480.61	19990.54	5999.15	S151/S152/S157
7639	39558.35	19990.38	5996.44	S151/S156/S157
7642	39331.19	19992.13	5994.14	S152/S153/S158
7641	39410.86	19990.89	5997.31	S152/S157/S158
7645	39225.51	19977.63	5990.40	S153/DS-2C
7646	39262.94	19992.23	5991.58	S153/S158/S159
7654	39704.33	20002.47	5990.72	S155/S156/S161
7653	39807.27	20000.92	5986.96	S155/S160/S161
7656	39558.03	20004.59	5996.38	S156/S157/S162
7655	39659.78	20003.12	5992.29	S156/S161/S162
7659	39409.18	20005.07	5996.84	S157/S158/S163
7658	39515.50	20004.81	5998.52	S157/S162/S163
7661	39262.09	20006.35	5991.40	S158/S159/S164
7660	39368.02	20006.01	5995.31	S158/S163/S164
7647	39225.75	19991.93	5990.13	S159/S153
7662	39225.31	20006.14	5990.09	S159/S164
6769	39362.66	19525.57	5994.67	S16/S17/S20
6768	39341.89	19524.95	5994.48	S16/S20
7651	39876.32	19999.57	5984.07	S160/S154
7652	39850.49	20000.10	5985.17	S160/S154/S155
8218	39807.44	20017.18	5987.00	S160/S161/S165
8217	39884.80	20013.77	5983.87	S160/S165
8220	39660.08	20018.04	5992.76	S161/S162/S166
8219	39753.11	20016.85	5989.16	S161/S165/S166
8222	39515.59	20020.04	5998.64	S162/S163/S167
8221	39606.03	20018.90	5994.87	S162/S166/S167
8224	39366.64	20020.22	5994.95	S163/S164/S168
8223	39459.69	20019.56	5998.37	S163/S167/S168
8225	39312.83	20020.87	5992.96	S164/S168/S169
8226	39226.10	20020.41	5989.92	S164/S169
8270	39752.60	20030.69	5989.34	S165/S166/S174
8272	39895.27	20027.79	5983.37	S165/S175
8271	39831.62	20029.72	5986.02	S165/S175/S174
8268	39605.90	20032.79	5995.07	S166/S167/S173
8269	39684.85	20031.50	5992.01	S166/S173/S174
8265	39460.27	20033.55	5998.22	S167/S168/S172
8266	39537.55	20033.01	5998.14	S167/S172/S173
8263	39312.80	20034.36	5992.79	S168/S169/S171
8264	39390.66	20034.03	5995.73	S168/S171/S172
8262	39242.67	20034.66	5990.40	S169/S170/S171

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
6771	39509.74	19525.67	5991.29	S17/S18/S21
6770	39481.30	19525.73	5992.27	S17/S20/S21
8261	39228.54	20034.53	5989.97	S170/S169
8296	39228.43	20048.71	5989.61	S170/S181
8293	39390.98	20048.18	5995.43	S171/S172/S180
8294	39266.30	20048.79	5990.76	S171/S180/S181
8284	39537.59	20047.45	5998.26	S172/S173/S179
8292	39413.23	20048.17	5996.30	S172/S179/S180
8282	39684.87	20045.45	5992.05	S173/S174/S178
8283	39560.00	20047.11	5997.26	S173/S178/S179
8280	39832.32	20043.98	5986.18	S174/S175/S177
8281	39705.49	20045.48	5991.23	S174/S177/S178
8278	39905.10	20041.60	5983.32	S175/S176
8279	39852.36	20043.45	5985.39	S175/S176/S177
8325	39853.40	20057.58	5985.40	S176/S177/S186
8323	39769.74	20058.67	5988.67	S177/S187/S185
8320	39560.17	20061.21	5997.35	S178/S179/S184
8321	39624.16	20060.67	5994.61	S178/S184/S185
8318	39412.91	20062.24	5996.00	S179/S180/S183
8319	39475.86	20061.85	5998.55	S179/S183/S184
6774	39582.51	19524.95	5988.30	S18/S19
6775	39527.41	19526.01	5990.58	S18/S19/S21
8295	39243.68	20048.79	5990.09	S181/S171/S170
8297	39228.89	20062.95	5989.36	S181/S182
8298	39266.21	20063.06	5990.74	S182/S181/S180
8317	39328.05	20062.85	5992.92	S182/S183/S180
8382	39358.20	20076.74	5993.54	S183/S191/S192
8381	39475.78	20076.30	5997.98	S184/S183/S191
8379	39623.35	20074.95	5994.99	S184/S185/S190
8380	39506.28	20075.95	5999.00	S184/S191/S190
8322	39705.53	20059.61	5991.20	S185/S178/S177
8378	39654.17	20074.61	5993.67	S185/S189/S190
8326	39915.10	20056.21	5982.99	S186/S176
8376	39779.33	20072.90	5988.63	S186/S187/S189
8327	39923.96	20070.34	5982.76	S186/S188
8375	39800.77	20072.61	5987.59	S186/S188/S189
8377	39770.34	20073.01	5989.03	S187/S185/S189
8324	39778.65	20058.59	5988.29	S187/S186/S177
8441	39800.97	20086.87	5987.87	S189/S188/S194
8425	39654.79	20088.89	5993.78	S189/S190/S195
6777	39527.28	19539.96	5990.77	S19/S21/S22
6778	39588.74	19539.37	5988.31	S19/S22
8439	39505.99	20090.24	5998.73	S190/S191/S196
8426	39638.69	20088.93	5994.41	S190/S195/S196
8438	39490.37	20090.37	5998.20	S191/S196/S197
8384	39229.51	20077.24	5989.19	S192/S182
8383	39328.04	20076.88	5992.49	S192/S182/S183
8430	39230.68	20091.31	5988.95	S192/S198
8417	39934.21	20083.94	5982.38	S193/S188
8416	39932.30	20084.34	5982.64	S193/S194/S188

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8419	39943.24	20097.72	5982.21	S193/S204
8418	39932.80	20098.22	5982.72	S194/S193/S204
8422	39785.95	20087.24	5988.55	S194/S195/S189
8421	39846.76	20100.13	5986.16	S194/S203/S204
8429	39638.08	20103.06	5994.51	S195/S196/S202
8435	39357.06	20091.06	5993.39	S197/S192/S191
8434	39343.18	20091.20	5992.95	S197/S192/S198
8433	39343.37	20105.38	5992.72	S197/S198/S200
8436	39406.44	20104.67	5994.87	S197/S200/S201
8431	39232.50	20105.49	5988.68	S198/S199
8432	39259.22	20105.67	5989.63	S198/S199/S200
8451	39259.00	20119.82	5989.31	S199/S200/S210
8452	39233.92	20119.73	5988.49	S199/S210
6658	39495.02	19484.97	5991.10	S1/S2/S4
6660	39365.76	19485.20	5994.65	S1/S4
6755	39569.63	19497.36	5988.25	S2/S15
4319	39802.91	20832.79	5956.97	S20/S22/S23
6780	39481.11	19539.82	5992.57	S20/S21/S24
6782	39336.69	19538.83	5994.43	S20/S23
6781	39475.59	19539.84	5992.84	S20/S23/S24
8449	39406.26	20119.02	5994.77	S200/S201/S209
8450	39346.78	20119.42	5992.73	S200/S209/S210
8437	39490.61	20104.43	5997.80	S201/S197/S196
8440	39552.73	20104.09	5998.54	S201/S202/S196
8447	39553.41	20118.19	5998.47	S201/S202/S208
8448	39493.07	20118.73	5997.71	S201/S208/S209
8424	39699.61	20102.44	5991.74	S202/S203/S195
8445	39699.81	20116.60	5992.07	S202/S203/S207
8446	39639.12	20117.32	5994.68	S202/S207/S208
8423	39786.37	20101.30	5988.60	S203/S194/S195
8443	39846.22	20114.35	5986.31	S203/S204/S206
8444	39785.49	20115.42	5988.80	S203/S206/S207
8442	39931.78	20112.52	5982.84	S204/205/S206
8420	39953.10	20111.55	5981.92	S204/S205
8456	39932.87	20126.74	5982.79	S205/S206/S212
8454	39962.39	20125.52	5981.52	S205/S212
8460	39786.65	20129.71	5988.79	S206/S207/S213
8457	39827.51	20129.06	5986.90	S206/S212/S213
8462	39639.82	20131.68	5994.76	S207/S208/S214
8461	39680.06	20131.11	5993.02	S207/S214/S213
8464	39492.01	20132.97	5997.06	S208/S209/S215
8463	39534.02	20132.90	5998.32	S208/S214/S215
8466	39346.92	20133.82	5992.42	S209/S210/S216
8465	39387.25	20133.53	5993.81	S209/S215/S216
6779	39502.23	19539.71	5991.71	S21/S22/S24
8453	39236.26	20134.07	5988.41	S210/S211
8467	39261.17	20134.21	5989.18	S210/S216/S211
8474	39262.11	20148.61	5989.09	S211/S216/S222
8468	39238.32	20148.50	5988.23	S211/S217
8473	39254.15	20148.98	5988.76	S211/S217/S222

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8459	39827.53	20143.14	5987.12	S212/S213/S219
8455	39971.68	20139.07	5981.20	S212/S218
8470	39680.14	20145.36	5993.10	S213/S214/S220
8458	39838.46	20142.86	5986.68	S213/S218/S219
8472	39533.66	20147.17	5998.02	S214/S215/S221
8475	39386.84	20147.94	5993.27	S216/S215/S222
6784	39502.31	19553.92	5991.72	S22/S24/S25
6785	39594.36	19553.54	5988.24	S22/S25
8469	39692.16	20145.23	5992.58	S220/S219/S213
8471	39544.47	20147.05	5998.33	S220/S221/S214
8476	39396.66	20147.96	5993.57	S221/S222/S215
6788	39475.32	19553.79	5992.65	S23/S24/S27
6783	39331.46	19552.62	5994.28	S23/S26
6789	39470.24	19553.87	5992.84	S23/S26/S27
6786	39487.78	19553.72	5992.09	S24/S25/S27
8583	39876.92	20213.46	5985.73	S241/S242/S248
8585	39731.62	20215.48	5991.76	S242/S243/S249
8584	39742.15	20215.47	5991.29	S242/S248/S249
8587	39586.55	20217.28	5997.07	S243/S244/S250
8589	39438.28	20218.84	5992.89	S244/S245/S251
8588	39447.67	20218.75	5993.14	S244/S250/S251
8591	39289.40	20219.79	5988.39	S246/S245/S252
8592	39249.80	20220.15	5987.46	S246/S252
8581	40016.62	20208.38	5980.10	S247/S241
8582	39888.39	20213.28	5985.26	S247/S248/S241
8597	39887.39	20227.36	5985.37	S247/S248/S255
8595	40025.07	20222.23	5980.06	S247/S254
8596	39891.88	20227.40	5985.24	S247/S254/S255
8586	39594.28	20217.11	5997.06	S249/S250/S243
6795	39487.52	19567.88	5992.18	S25/S27/S28
6796	39600.23	19567.42	5987.97	S25/S28
8603	39448.70	20232.90	5992.82	S250/S251/S258
8590	39303.18	20219.74	5988.85	S251/S252/S245
8594	39303.12	20233.97	5988.54	S251/S252/S253
8593	39252.09	20234.16	5987.12	S252/S253
8604	39336.95	20233.89	5989.51	S253/S258/S251
8671	39290.30	20248.40	5987.85	S253/S264/S265
8672	39254.23	20248.58	5986.78	S253/S265
8660	40033.28	20235.70	5979.79	S254/S259
8661	40019.11	20236.88	5980.58	S254/S259/S260
8598	39746.02	20229.83	5991.36	S255/S256/S248
8664	39746.27	20244.13	5991.33	S255/S256/S261
8663	39874.13	20241.55	5986.05	S255/S260/S261
8599	39741.33	20229.74	5991.56	S256/S248/S249
8666	39599.60	20245.55	5996.47	S256/S257/S262
8665	39728.48	20244.03	5992.12	S256/S261/S262
8601	39594.94	20231.25	5996.66	S257/S250/S249
8600	39600.07	20231.22	5996.72	S257/S256/S249
8602	39454.68	20233.00	5992.99	S257/S258/S250
8668	39454.03	20247.44	5992.74	S257/S258/S263

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8667	39582.09	20245.74	5996.35	S257/S262/S263
8669	39435.51	20247.35	5992.15	S258/S263/S264
8675	40042.05	20249.41	5979.50	S259/S267
6793	39470.38	19568.01	5992.97	S26/S27/S30
6790	39325.23	19566.59	5993.77	S26/S29
6792	39464.03	19568.31	5993.17	S26/S29/S30
8662	39891.36	20241.37	5985.36	S260/S254/S255
8677	39907.15	20255.18	5984.98	S260/S267/S268
8678	39874.14	20255.63	5986.31	S261/S260/S268
8684	39582.15	20259.84	5995.77	S262/S263/S270
8688	39435.37	20261.50	5991.81	S263/S264/S271
8685	39469.60	20261.26	5992.80	S263/S270/S271
8670	39337.49	20248.23	5989.16	S264/S253
8674	39290.18	20262.60	5987.34	S264/S265/S266
8689	39359.39	20262.44	5989.55	S264/S266/S271
8673	39256.87	20263.02	5986.35	S265/S266
8694	39283.43	20276.95	5986.69	S266/S272/S273
8676	40019.83	20250.94	5980.70	S267/S259/S260
8702	40049.70	20262.78	5979.19	S267/S277
8679	39761.44	20258.05	5990.76	S268/S269/S261
8705	39867.41	20270.07	5986.74	S268/S278/S276
8680	39728.41	20258.22	5992.18	S269/S261/S262
8683	39615.57	20259.43	5995.86	S269/S270/S262
8700	39721.17	20272.52	5992.56	S269/S275/S276
6794	39486.45	19567.88	5992.33	S27/S28/S30
8698	39575.36	20274.17	5995.02	S270/S274/S275
8696	39429.44	20275.86	5991.23	S271/S273/S274
8693	39258.56	20277.16	5985.96	S272/S266
8787	39260.79	20291.45	5985.68	S272/S284
8695	39359.95	20276.73	5989.82	S273/S266/S271
8786	39283.81	20291.57	5986.39	S273/S272/S284
8782	39429.82	20289.88	5990.81	S273/S274/S283
8784	39385.77	20290.51	5989.48	S273/S283/S284
8697	39469.74	20275.65	5992.33	S274/S271/S270
8778	39575.64	20288.46	5994.64	S274/S275/S282
8699	39615.93	20273.59	5995.28	S275/S270/S269
8774	39721.53	20286.81	5992.59	S275/S276/S281
8701	39764.18	20272.16	5990.79	S276/S268/S269
8770	39867.45	20284.27	5986.84	S276/S278/S280
8771	39824.60	20285.39	5988.57	S276/S280/S281
8703	39914.11	20269.25	5984.93	S277/S278/S267
8768	39914.01	20283.33	5985.17	S277/S278/S280
8764	40058.35	20275.85	5978.99	S277/S279
8765	39970.30	20281.95	5982.95	S277/S279/S280
8704	39907.19	20269.30	5985.21	S278/S268/S267
8766	40066.14	20289.12	5978.95	S279/S286
8767	39970.99	20296.08	5983.03	S279/S286/S280
6802	39486.07	19582.15	5992.69	S28/S30/S33
6797	39605.86	19581.65	5987.91	S28/S31
6800	39498.04	19582.41	5992.13	S28/S31/S33

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8769	39929.28	20297.14	5984.60	S280/S286/S287
8775	39677.76	20287.33	5993.87	S281/S282/S275
8776	39677.71	20301.51	5993.32	S281/S282/S288
8773	39783.39	20300.41	5990.31	S281/S287/S288
8779	39531.31	20289.35	5993.80	S282/S283/S274
8777	39636.91	20301.91	5993.70	S282/S288/S289
8785	39385.69	20304.79	5989.16	S283/S284/S290
8783	39490.38	20304.06	5992.15	S283/S289/S290
8788	39263.55	20305.61	5985.45	S284/S285
8789	39278.30	20305.50	5986.01	S284/S285/S291
8790	39343.61	20305.12	5987.85	S284/S290/S291
8809	39267.19	20319.85	5985.14	S285/S292
8822	40073.92	20302.96	5978.76	S286/DS2J
8826	40028.67	20307.85	5980.82	S286/DS2K/DS2J
8828	39979.29	20310.14	5982.78	S286/S293/DS2K
8772	39824.86	20299.32	5988.62	S287/S280/S281
8814	39783.75	20314.64	5990.11	S287/S288/S295
8816	39636.71	20316.23	5993.09	S288/S289/S296
8815	39648.87	20315.99	5993.03	S288/S295/S296
8780	39531.16	20303.56	5993.33	S289/S282/S283
8817	39490.36	20318.14	5991.74	S289/S290/S297
6803	39463.87	19582.41	5993.39	S29/S30/S33
6791	39320.30	19580.20	5993.67	S29/S32
6804	39459.19	19582.61	5993.54	S29/S32/S33
8820	39343.51	20319.18	5987.40	S290/S291/S298
8810	39278.47	20319.67	5985.63	S291/S292/S285
8879	39338.84	20333.38	5986.86	S292/S298/S304
8824	40076.49	20306.99	5978.72	S293/DS2J
8827	40028.81	20309.06	5980.82	S293/DS2J/DS2K
8811	39941.33	20310.88	5984.16	S293/S294/S286
8870	39942.75	20325.20	5984.17	S293/S294/S300
8868	40083.88	20321.47	5978.60	S293/S299
8812	39929.44	20311.37	5984.56	S294/S286/S287
8813	39795.48	20314.11	5989.68	S294/S295/S287
8872	39795.69	20328.47	5989.70	S294/S295/S301
8871	39801.96	20328.39	5989.58	S294/S300/S301
8874	39649.87	20330.35	5992.31	S295/S296/S302
8873	39654.73	20330.44	5992.29	S295/S301/S302
8818	39502.66	20318.03	5992.06	S296/S297/S289
8876	39502.42	20332.20	5991.63	S296/S297/S303
8875	39507.69	20332.04	5991.77	S296/S302/S303
8819	39356.01	20319.18	5987.81	S297/S298/S290
8878	39355.51	20333.33	5987.40	S297/S298/S304
8877	39360.90	20333.36	5987.62	S297/S303/S304
8821	39338.99	20319.34	5987.23	S298/S292/S291
8869	39948.29	20324.85	5983.98	S299/S300/S293
8883	40092.31	20335.52	5978.34	S299/S306
6656	39563.14	19485.38	5988.27	S2/S3
6657	39504.65	19484.95	5990.85	S2/S3/S4
6664	39505.02	19470.64	5990.94	S3/S4/S5

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
6663	39519.79	19470.61	5990.23	S3/S5/S6
6661	39555.31	19470.81	5988.68	S3/S6
8887	39802.26	20342.49	5989.74	S300/S301/S308
8886	39807.34	20342.51	5989.56	S300/S307/S308
8890	39655.00	20344.65	5991.48	S301/S302/S309
8892	39507.79	20346.21	5991.37	S302/S303/S310
8891	39513.05	20346.17	5991.41	S302/S309/S310
8893	39365.91	20347.34	5987.29	S303/S311/S310
8880	39270.48	20333.73	5984.82	S304/S292
8894	39360.81	20347.32	5987.15	S304/S303/S311
8881	39274.52	20347.86	5984.68	S304/S305
8895	39321.18	20347.53	5985.97	S304/S311/S305
8921	39321.50	20361.78	5985.51	S305/S311/S312
8922	39278.34	20362.03	5984.51	S305/S312
8884	39954.03	20339.10	5983.81	S306/S307/S299
8931	40099.01	20349.41	5978.14	S306/S317
8885	39948.32	20339.30	5984.02	S307/S299/S300
8930	39954.08	20353.42	5983.93	S307/S306/S316
8929	39813.90	20356.31	5989.47	S307/S315/S316
8889	39660.15	20344.53	5991.44	S308/S309/S301
8926	39660.04	20358.46	5990.83	S308/S309/S314
6801	39497.96	19596.54	5992.50	S31/S33/S36
6798	39610.72	19595.54	5987.70	S31/S34
6799	39517.91	19596.69	5991.77	S31/S34/S36
8920	39366.42	20361.40	5986.90	S310/S311/S312
8948	39373.65	20375.55	5986.72	S312/S313/S318
8949	39280.75	20376.44	5983.99	S312/S318
8924	39513.16	20360.25	5990.87	S313/S310/S309
8923	39374.02	20361.41	5987.18	S313/S312/S310
8925	39519.84	20360.07	5990.88	S313/S314/S309
8946	39519.77	20374.41	5990.41	S313/S314/S323
8947	39414.49	20375.30	5988.03	S313/S318/S323
8927	39666.71	20358.10	5990.74	S314/S315/S308
8944	39666.60	20372.69	5990.06	S314/S315/S322
8945	39528.20	20374.53	5990.51	S314/S322/S323
8928	39807.65	20356.19	5989.55	S315/S308/S307
8942	39814.19	20370.41	5988.98	S315/S316/S321
8943	39675.63	20372.67	5989.94	S315/S321/S322
8932	39961.36	20353.23	5983.66	S316/S306/DS2M
8940	39962.26	20367.68	5983.75	S316/S320/2M
8933	39968.47	20353.13	5983.35	S317/S306/DS2M
8938	40106.49	20363.55	5977.94	S317/S319
8939	39970.12	20367.10	5983.41	S317/S319/2M
9021	39284.12	20390.80	5983.96	S318/S3330
9011	40112.20	20377.55	5978.05	S319/S324
9013	40024.07	20380.43	5981.75	S319/S325/S326
6805	39458.92	19596.81	5993.77	S32/S33/S36
6807	39315.12	19593.69	5993.65	S32/S35
6806	39454.71	19596.92	5993.94	S32/S35/S36
8941	39822.15	20370.51	5988.88	S320/S321/S316

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9016	39822.23	20384.34	5988.34	S320/S321/S327
9015	39877.70	20383.28	5986.92	S320/S326/S327
9018	39677.02	20386.78	5989.23	S321/S322/S328
9019	39583.56	20387.71	5990.03	S322/S328/S329
9032	39436.50	20389.60	5988.39	S323/S336/S329
9012	40092.35	20378.21	5979.07	S324/S325/S319
9024	40094.68	20392.57	5978.99	S324/S325/S331
9023	40119.07	20391.50	5977.76	S324/S331
9025	40024.48	20394.18	5981.71	S325/S326/S331
9014	39969.99	20381.19	5983.75	S326/S319/S320
9017	39730.74	20386.10	5988.90	S327/S328/S321
9020	39528.09	20388.70	5990.11	S329/S323/S322
9035	39436.59	20403.63	5987.90	S329/S335/S36
9022	39414.66	20389.49	5987.77	S330/S323/S318
9026	39981.30	20395.49	5983.39	S331/S332/S326
9038	40124.88	20405.43	5977.54	S331/S338
9027	39878.05	20397.26	5986.79	S332/S326/S327
9028	39834.43	20398.32	5987.43	S332/S327/S333
9040	39981.75	20409.39	5983.38	S332/S331/S340
9029	39695.18	20402.14	5988.02	S333/S327/S328
9042	39835.54	20412.64	5986.85	S333/S332/S341
9030	39687.90	20400.82	5988.18	S333/S334/S328
9043	39693.86	20414.93	5987.56	S333/S341/342
9031	39583.68	20401.76	5989.14	S334/S328/S329
9044	39688.57	20415.01	5987.60	S334/S333/S342
9046	39541.56	20417.09	5988.82	S334/S335/S343
9045	39546.73	20416.90	5988.84	S334/S342/S343
9047	39409.93	20417.95	5986.71	S335/S343/S337
9033	39424.95	20389.63	5988.06	S336/S323/S330
9034	39424.00	20403.61	5987.54	S336/S330/S335
9036	39288.63	20404.82	5983.63	S337/S330
9037	39294.19	20419.01	5983.46	S337/S338
9048	39398.12	20418.51	5986.36	S337/S343/S344
9049	39311.69	20419.01	5984.00	S337/S344/S338
9179	39300.57	20433.35	5983.33	S338/S345
9039	39986.80	20409.28	5983.17	S339/S340/S331
9190	39986.98	20423.54	5983.26	S339/S340/S351/S350
9191	40128.50	20419.24	5977.53	S339/S350
6839	39517.28	19610.84	5992.04	S34/S36/S39
6837	39618.00	19609.59	5987.69	S34/S37
6838	39550.67	19610.24	5990.55	S34/S37/S39
9041	39839.98	20412.59	5986.80	S340/S332/S341
9188	39839.50	20426.74	5986.19	S340/S341/S349
9189	39939.56	20424.60	5984.95	S340/S349/S351
9186	39693.00	20429.01	5986.89	S341/S342/S348
9187	39792.59	20427.73	5986.41	S341/S348/S349
9185	39647.36	20429.46	5987.26	S342/S347/S348
9183	39501.29	20430.97	5988.65	S343/S346/S347
9182	39398.91	20432.30	5985.84	S344/S343/S346
9181	39354.05	20432.48	5984.69	S344/S345/S346

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9180	39311.26	20433.13	5983.67	S345/S344/S338
9202	39306.98	20447.28	5983.30	S345/S357
9203	39354.91	20446.76	5984.32	S346/S345/S357
9204	39457.37	20445.68	5987.22	S346/S356/S358
9205	39450.20	20446.07	5986.99	S346/S357/S358
9184	39545.78	20431.10	5988.22	S347/S343/S342
9200	39604.17	20444.04	5986.92	S347/S355/S356
9197	39793.57	20441.80	5985.51	S348/S349/S354
9195	39940.04	20438.59	5984.58	S349/S351/S353
9196	39897.27	20440.02	5985.13	S349/S353/S354
6840	39454.30	19610.88	5994.16	S35/S36/S39
6843	39310.04	19607.78	5993.48	S35/S38
6841	39450.60	19611.19	5994.29	S35/S38/S39
9194	39987.75	20437.76	5983.17	S350/S351/S353
9192	40132.16	20433.28	5977.59	S350/S352
9193	40043.22	20436.46	5981.33	S350/S352/S353
9216	40135.17	20447.26	5977.47	S352/S364
9198	39750.32	20442.41	5985.97	S354/S355/S348
9199	39647.51	20443.64	5986.61	S355/S348/S347
9201	39501.49	20445.13	5988.05	S356/S347/S346
9206	39312.53	20461.32	5983.05	S357/S359
9207	39447.10	20460.00	5986.42	S357/S359/S360
9231	39365.80	20475.19	5983.81	S359/S370/S371
9230	39317.79	20475.48	5982.68	S359/S371
9208	39449.82	20459.85	5986.50	S360/S357/S358
9209	39457.08	20459.82	5986.71	S360/S358/S356
9229	39447.97	20474.12	5986.16	S360/S359/S370
9210	39594.01	20458.35	5986.45	S360/S361/S356
9228	39513.03	20473.37	5986.25	S360/S369/S370
9211	39603.83	20458.08	5986.30	S361/S356/S355
9212	39741.51	20456.38	5985.19	S361/S362/S355
9226	39660.24	20471.88	5985.28	S361/S368/S369
9213	39750.36	20456.41	5985.16	S362/S354/S355
9214	39888.17	20453.90	5984.43	S362/S363/S354
9223	39888.01	20467.96	5983.81	S362/S363/S367
9224	39807.03	20469.77	5984.36	S362/S367/S368
9215	39898.13	20453.85	5984.33	S363/S354/S353
9222	39953.95	20466.72	5983.62	S363/S366/S367
9217	40043.41	20450.29	5981.16	S364/S352/S353
9218	40035.68	20450.54	5981.52	S364/S363/S353
9219	40136.97	20461.17	5977.58	S365/S364
9220	40100.44	20462.86	5979.14	S365/S366/S364
9251	40101.39	20477.12	5979.27	S365/S366/S373
9250	40139.46	20475.43	5977.65	S365/S373
9221	40035.84	20464.72	5981.71	S366/S364/S363
9253	39955.49	20481.09	5983.00	S366/S367/S374
9255	39807.82	20484.41	5983.71	S367/S368/S375
9254	39850.00	20483.76	5983.43	S367/S374/S375
9225	39740.80	20470.78	5984.67	S368/S362/S361
9257	39660.49	20486.12	5984.48	S368/S369/S376

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9256	39704.11	20485.64	5984.09	S368/S375/S376
9227	39594.00	20472.56	5985.86	S369/S361/S360
9259	39513.25	20488.08	5985.65	S369/S370/S377
9258	39557.75	20487.71	5985.10	S369/S376/S377
6851	39550.80	19623.75	5990.79	S37/S39/S42
6852	39623.91	19622.99	5987.44	S37/S40
9249	39366.35	20489.42	5983.33	S370/S371/S372
9260	39411.32	20489.35	5984.53	S370/S372/S377
9248	39323.08	20490.10	5982.15	S371/S372
9268	39409.55	20503.17	5984.06	S372/S377/S383
9269	39329.77	20503.74	5981.74	S372/S383
9252	39997.25	20480.40	5982.59	S373/S374/S366
9263	39997.33	20494.16	5981.86	S373/S374/S379
9261	40141.28	20489.78	5977.57	S373/S378
9262	39999.53	20494.16	5981.83	S373/S378/S379
9264	39851.88	20497.72	5982.63	S374/S375/S379/S380
9265	39706.18	20499.90	5983.31	S375/S376/S380/S381
9266	39559.20	20501.48	5984.29	S376/S377/S381/S382
9279	40142.85	20503.80	5977.56	S378/S389
9278	39851.80	20511.72	5981.61	S379/S380/S388
6848	39450.19	19624.10	5994.43	S38/S39/S42
6844	39304.56	19621.11	5993.37	S38/S41
6847	39443.51	19624.10	5994.68	S38/S41/S42
9276	39705.95	20513.80	5982.52	S380/S381/S387
9277	39832.54	20512.10	5981.72	S380/S387/S388
9274	39559.18	20515.46	5983.71	S381/S382/S386
9275	39686.57	20514.57	5982.64	S381/S386/S387
9267	39412.07	20503.07	5984.17	S382/S383/S377
9272	39411.57	20517.44	5984.03	S382/S383/S385
9270	39335.15	20518.25	5981.60	S383/S384
9271	39391.93	20517.56	5983.56	S383/S384/S385
9273	39539.19	20516.03	5983.98	S385/S386/S382
9292	39439.50	20531.42	5984.40	S385/S395/S396
9290	39586.44	20529.68	5982.95	S386/S394/S395
9288	39734.43	20527.78	5981.63	S387/S393/S394
9286	39879.84	20525.60	5980.90	S388/S392/S393
9280	40000.76	20508.34	5981.09	S389/S390/S378/S379
9282	40144.78	20518.10	5977.56	S389/S391
9281	39979.79	20509.31	5981.07	S390/S388/S379
9283	40026.75	20521.99	5980.45	S391/S392/S389
9284	40000.00	20522.42	5980.60	S392/S389/S390
9285	39980.43	20523.05	5980.67	S392/S390/S388
9287	39832.65	20526.51	5981.12	S393/S388/S387
9289	39686.95	20528.85	5981.93	S394/S387/S386
9291	39539.84	20530.13	5983.44	S395/S386/S385
9294	39341.86	20532.20	5981.57	S396/S384
9293	39392.01	20531.85	5983.36	S396/S384/S385
6682	39385.16	19485.13	5994.39	S4/S12/S13
6683	39365.94	19485.25	5994.62	S4/S13
6665	39379.26	19470.95	5994.61	S4/S5

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
6853	39631.05	19636.57	5987.24	S40/S43
6849	39443.41	19638.24	5994.76	S41/S42/S44
6846	39362.36	19638.31	5995.65	S41/S44/S45
6845	39299.28	19635.14	5993.40	S41/S45
6850	39507.56	19637.83	5992.61	S42/S43/S44
6965	39505.42	19651.98	5992.84	S43/S44/S47/S48
6966	39637.67	19650.39	5987.11	S43/S48
6964	39361.66	19652.41	5995.60	S44/S45/S47
3322	39518.59	20670.13	5978.52	S445/S446/S455
3323	39486.86	20670.43	5979.22	S445/S455/S456
3324	39408.22	20671.19	5979.15	S445/S456
3320	39665.51	20668.82	5976.51	S446/S447/S454
3321	39633.79	20669.16	5976.97	S446/S454/S455
3318	39812.60	20666.32	5974.56	S447/S448/S453
3319	39779.58	20666.84	5974.92	S447/S453/S454
3316	39959.82	20663.66	5973.67	S448/S449/S452
3317	39926.38	20664.62	5973.85	S448/S452/S453
3314	40110.54	20659.33	5972.84	S449/S450/S451
3315	40072.62	20660.51	5972.83	S449/S451/S452
6962	39293.58	19649.27	5992.93	S45/S46
6963	39357.03	19652.18	5995.42	S45/S46/S47
3313	40161.20	20656.77	5972.42	S450/S451
3119	40073.23	20675.58	5972.64	S451\S452\S462
3120	40162.66	20671.97	5972.41	S451\S462
3118	40066.78	20675.80	5972.65	S452\S461\S462
3115	39779.85	20681.70	5974.71	S453\S454\S460
3117	39926.87	20679.49	5973.45	S453\S456\S461
3116	39920.79	20679.72	5973.44	S453\S460\S461
3329	39633.90	20683.90	5976.44	S454/S455/S459
3330	39770.47	20681.69	5974.58	S454/S459/S460
3327	39486.80	20685.36	5978.58	S455/S456/S458
3328	39623.66	20684.11	5976.63	S455/S458/S459
3325	39412.89	20685.21	5979.22	S456/S457
3326	39477.08	20685.48	5978.77	S456/S457/S458
4539	39477.36	20698.84	5978.55	S457/S458/S543
4541	39417.37	20699.17	5979.22	S457/S542
4540	39452.71	20698.98	5978.93	S457/S542/S543
4537	39624.11	20697.50	5976.36	S458/S459/S541
4538	39538.39	20698.58	5977.29	S458-S541/S543
4535	39770.69	20695.17	5974.28	S459/S460/S540
4536	39680.59	20696.65	5975.25	S459/S540/S541
6974	39356.59	19666.32	5995.46	S46/S47/S50
6973	39288.23	19663.19	5993.03	S46/S50
5152	39921.41	20693.07	5972.33	S460/S461/S657
4534	39826.14	20694.87	5973.27	S460/S540
5150	40067.29	20689.11	5971.90	S461/S462/S658
5151	40043.16	20689.62	5971.96	S461/S657/S658
5149	40163.81	20685.16	5971.94	S462/S658
4111	39739.44	20927.40	5942.09	S463/S469/S471
4117	39731.47	20908.68	5946.29	S463/S471/S472

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4122	39722.50	20888.89	5951.92	S463/S472/S476
4123	39713.04	20870.00	5956.81	S463/S475/S476
4127	39704.38	20850.21	5962.37	S463/S475/S478
4133	39695.82	20831.61	5967.55	S463/S478/S479
4132	39683.25	20806.25	5970.99	S463/S479
4280	39693.35	20798.25	5971.37	S463/S510
4283	39739.65	20895.75	5948.29	S463/S512/S513
4284	39753.52	20923.94	5940.59	S463/S513
4103	39590.81	20892.21	5969.12	S464/S465/S467
4109	39717.40	20949.37	5942.29	S464/S466
4104	39621.07	20905.99	5967.50	S464/S466/S467
4180	39689.87	20950.70	5948.05	S464/S481/S483
4185	39666.02	20939.40	5954.20	S464/S483/S485
4186	39643.65	20928.63	5959.91	S464/S485/S487
4187	39616.19	20918.37	5966.62	S464/S487/S489
4189	39585.53	20904.38	5968.75	S465/S464/S489
4102	39576.97	20885.96	5969.21	S465/S467
4190	39565.46	20895.31	5969.31	S465/S489
4105	39627.40	20893.46	5968.41	S466/S467/S468
4107	39675.22	20914.63	5956.27	S466/S468/S469
4110	39730.12	20939.31	5941.75	S466/S469
4106	39589.85	20876.39	5969.58	S467/S468
4108	39681.38	20901.90	5957.27	S468/S469/S471
4113	39602.95	20866.55	5969.90	S468/S470
4112	39662.78	20893.64	5962.11	S468/S470/S471
6971	39504.97	19666.28	5993.23	S47/S48/S51
6972	39425.73	19667.29	5995.91	S47/S50/S51
4114	39616.04	20856.97	5969.92	S470/S473
4115	39668.64	20880.93	5962.90	S470/S473/S471
4116	39681.36	20886.55	5959.61	S471/S473/S472
4120	39687.47	20874.12	5960.97	S472/S473/S474
4121	39690.06	20874.97	5960.34	S472/S474/S476
4118	39628.85	20847.27	5970.06	S473/S474
4119	39642.13	20837.19	5970.11	S474/S475
4124	39696.05	20862.35	5961.29	S474/S475/476
4125	39653.84	20827.49	5970.40	S475/S477
4126	39667.04	20833.62	5969.92	S475/S477/S478
4131	39676.03	20823.25	5970.42	S478/S479/DS3A
6968	39644.26	19663.95	5987.36	S48/S49
6970	39512.13	19666.37	5993.00	S48/S49/S51
4183	39601.13	20964.13	5966.78	S480/S481/S483
4208	39603.59	20977.31	5966.38	S480/S481/S492
4169	39535.54	20975.15	5972.18	S480/S482
4170	39535.46	20975.15	5968.83	S480/S482
4174	39566.30	20970.15	5967.91	S480/S482/S483
4205	39534.97	20988.57	5972.13	S480/S491
4206	39535.05	20988.59	5968.84	S480/S491
4207	39573.44	20982.51	5967.45	S480/S491/S492
4209	39706.30	20962.34	5943.61	S481/S492
4179	39563.82	20956.26	5968.01	S482/S483/S485

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4171	39535.53	20960.91	5968.73	S482/S484
4175	39550.88	20958.06	5968.44	S482/S484/S485
4176	39547.84	20944.03	5968.58	S484/S485/S486
4172	39535.49	20945.81	5968.70	S484/S486
4177	39559.04	20942.51	5968.19	S485/S486/S487
4178	39556.93	20928.52	5968.57	S486/S487/S488
4173	39535.83	20931.31	5968.80	S486/S488
4188	39590.58	20923.24	5968.10	S487/S488/S489
4182	39568.03	20912.88	5968.75	S488/S489/S490
4191	39568.08	20913.01	5968.70	S488/S489/S490
4181	39535.39	20918.56	5969.31	S488/S490
4184	39551.88	20904.57	5969.32	S489/S490
6975	39512.04	19680.35	5993.07	S49/S51/S53
6969	39651.73	19677.04	5987.52	S49/S52
6976	39612.21	19680.34	5989.31	S49/S52/S53
4210	39575.66	20996.24	5967.44	S491/S492/S493
4211	39535.17	21002.69	5968.62	S491/S493
4215	39676.17	20980.83	5950.71	S492/S493/S494
4216	39700.81	20977.54	5944.32	S492/S494
4214	39677.98	20994.44	5950.33	S493/S494/S496
4212	39534.99	21016.27	5968.75	S493/S495
4213	39636.45	21000.56	5961.05	S493/S495/S496
4217	39695.95	20991.85	5945.70	S494/S496
4221	39638.23	21014.24	5960.75	S495/S496/S498
4218	39534.83	21030.10	5968.32	S495/S497
4220	39605.30	21019.16	5965.89	S495/S497/S498
4222	39691.23	21006.26	5947.08	S496/S498
4224	39607.63	21032.81	5965.58	S497/S498/S500
4219	39535.16	21043.92	5968.12	S497/S499
4225	39580.45	21037.59	5966.78	S497/S499/S500
4223	39681.07	21021.88	5949.98	S498/S500
4226	39566.31	21054.00	5967.05	S499/S500/S501
4228	39582.60	21051.61	5966.51	S499/S500 S502
4227	39537.08	21057.50	5967.78	S499/S501
6668	39519.97	19456.37	5990.04	S5/S6/S8
6666	39402.80	19456.55	5994.42	S5/S7
6667	39498.78	19456.45	5991.02	S5/S7/S8
6978	39424.66	19681.68	5996.13	S50/S51/S54/S55
4229	39666.42	21037.96	5953.62	S500/S502
4232	39568.34	21067.79	5966.89	S501/S502/S503
4230	39540.69	21071.34	5967.81	S501/S503
4233	39570.92	21067.65	5966.78	S502/S503/S504
4236	39654.37	21055.71	5956.57	S502/S504
4234	39572.90	21081.20	5966.70	S503/S504/S505
4235	39544.45	21085.53	5967.41	S503/S505
4237	39599.57	21076.37	5965.53	S504/S505/S506
4238	39643.42	21069.26	5959.07	S504/S506
4240	39601.73	21090.10	5965.33	S505/S506/S507
4239	39548.60	21099.60	5967.19	S505/507
4241	39623.51	21087.03	5963.92	S506/S506

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4242	39623.52	21087.01	5963.93	S506/S507
4244	39551.93	21113.17	5966.98	S507/S508
4245	39566.05	21110.67	5966.84	S507/S508/S509
4281	39704.58	20790.68	5971.35	S510/S511
4282	39715.18	20782.36	5971.74	S511/S512
4286	39765.19	20916.05	5941.14	S511/S513/S514
4289	39776.96	20907.61	5942.03	S511/S512/S515
4288	39777.90	20910.35	5941.26	S511/S514/S515
4290	39789.29	20901.92	5942.19	S512/S515/S517
4293	39726.00	20773.59	5971.86	S512/S516
4292	39753.50	20828.30	5962.70	S512/S516/S517
4285	39767.20	20920.73	5939.79	S513/S514
4287	39781.26	20918.24	5939.11	S514/S515
4302	39766.13	20822.65	5962.74	S515/S517/S519
4301	39752.15	20793.18	5969.95	S515/S518/S519
4291	39794.77	20914.25	5938.90	S515/S517
4300	39737.41	20765.41	5975.14	S516/S518
4303	39809.21	20912.22	5937.75	S517/S519
4306	39764.52	20786.62	5970.03	S518/S519/S520
4307	39748.74	20756.54	5972.03	S518/S520
4305	39810.54	20881.35	5944.68	S519/S520/S521
4304	39823.36	20909.19	5937.03	S519/S521
6982	39611.90	19691.84	5989.56	S52/S53/S56
6980	39662.37	19690.52	5987.05	S52/S56
4321	39823.18	20875.87	5944.75	S520/S521/S523
4318	39760.24	20748.59	5971.72	S520/S522
4320	39837.47	20906.63	5936.32	S521/S523
4322	39771.14	20739.88	5972.19	S522/S524
4323	39834.50	20866.14	5945.84	S523/S524/S525
4324	39850.62	20901.50	5936.25	S523/S525
4326	39847.30	20860.00	5946.11	S524/S525/ S526
4325	39782.46	20731.26	5972.50	S524/S526
4327	39845.61	20856.23	5947.19	S524/S526/S527
4336	39864.43	20896.59	5936.08	S525/S527
4330	39858.05	20850.25	5947.17	S526/S527/S529
4328	39794.01	20723.29	5972.56	S526/S528
4329	39830.29	20793.08	5963.59	S526/S528/S529
4334	39865.00	20864.69	5943.07	S527/S529 S530
4335	39877.37	20892.17	5935.78	S527/S530
4341	39805.34	20715.38	5972.66	S528/S532
4340	39869.20	20841.42	5948.15	S529/S532/S533
6984	39467.53	19692.20	5994.85	S53/S55/S57
6983	39580.84	19692.63	5990.62	S53/S56/S57
4337	39890.62	20887.03	5935.95	S530/S531
4338	39886.88	20879.27	5938.08	S530/S531/S533
4393	39881.51	20835.70	5948.68	S531/S533/S538
4389	39816.38	20707.68	5973.16	S531/S537
4394	39858.98	20789.28	5962.05	S531/S537/S538
4392	39900.05	20874.24	5938.50	S532/S533
4391	39903.74	20881.79	5936.44	S532/S538

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4631	39840.32	20750.71	5970.10	S532/S536-DS3G
4632	39833.96	20738.52	5971.80	S532/S537-DS3G
4386	39854.99	20694.33	5972.63	S534/S535
4398	39875.44	20786.93	5961.18	S534/S535
4629	39878.41	20792.23	5955.15	S534/S538-DS3H
4927	39901.33	20834.25	5947.00	S534/S539S591
4923	39868.79	20695.91	5972.47	S534/S591
4387	39840.97	20691.77	5972.92	S535/S536
4399	39835.60	20736.71	5972.01	S535/S536/DS3G
4396	39897.21	20835.11	5947.48	S535/S538/S539
4630	39876.45	20788.14	5961.25	S535/S538-DS3H
4388	39827.66	20698.78	5973.07	S536/S537
4397	39909.45	20860.18	5940.82	S538/S539
4932	39913.35	20876.60	5936.27	S538/S595
4931	39907.34	20855.94	5941.61	S539/S538/S595
4928	39902.36	20838.68	5945.94	S539/S591/S595
6979	39282.99	19676.92	5992.91	S54/S50
6986	39423.86	19692.94	5996.31	S54/S55/S59
6987	39417.45	19693.09	5996.59	S54/S58/S59
6992	39278.16	19690.74	5992.62	S54/DS-1N
4548	39807.68	20709.19	5972.96	S540/S546
4655	39680.79	20710.98	6999.00	S541/S540/S546
4545	39538.33	20712.42	5976.89	S541/S543/S545
4546	39623.53	20711.85	5975.83	S541/S545/S547
4547	39668.41	20711.15	5975.05	S541/S546/S547
4543	39452.84	20713.04	5978.48	S542/S543/S544
4542	39422.96	20713.27	5978.71	S542/S544
4544	39478.33	20712.94	5978.10	S543/S544/S545
4557	39478.57	20727.07	5977.47	S544/S545/S550
4558	39429.27	20727.34	5977.97	S544/S550
4555	39623.84	20725.96	5975.41	S545/S547/S549
4556	39531.26	20726.59	5976.67	S545/S549/S550
4554	39668.49	20725.42	5974.62	S546/S547/S549
4553	39677.73	20725.47	5974.48	S546/S548/S549
4562	39765.64	20738.55	5972.64	S548/DS-3J
4566	39677.72	20739.79	5973.97	S548/S549/S552
4563	39753.43	20738.94	5972.94	S548/S551/DS3J
4565	39712.66	20739.39	5973.53	S548/S551/S552
4568	39531.39	20740.80	5975.99	S549/S550/S553
4567	39565.97	20740.87	5975.65	S549/S552/S553
6993	39325.96	19694.19	5994.30	S54/S58/DS-1N
6977	39467.12	19680.53	5994.74	S55/S53/S51
6985	39436.31	19692.69	5995.92	S55/S57/S59
4569	39434.08	20741.44	5977.43	S550/S553
4564	39753.49	20746.84	5972.45	S551/DS-3J
4575	39712.60	20753.65	5973.09	S551/S552/S556
4576	39746.78	20752.85	5972.27	S551/S556
4572	39566.40	20754.86	5975.07	S552/S553/S555
4573	39592.59	20754.97	5974.72	S552/S555/S557
4574	39606.71	20755.03	5974.49	S552/S556/S557

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4570	39439.81	20755.54	5976.83	S553/S554
4571	39446.95	20755.34	5976.77	S553/S554/S555
4654	39447.34	20769.31	6999.00	S554/S555/S558
4593	39592.85	20768.99	5974.17	S555/S557/S559
4595	39446.95	20769.33	5976.34	S555/S558
4594	39564.99	20769.17	5974.46	S555/S558/S559
4592	39607.23	20768.89	5973.91	S556/S557/S559
4597	39565.97	20784.08	5973.83	S558/S559/S561/S560
4596	39451.22	20783.94	5975.69	S558/S561
4591	39709.18	20781.86	5971.96	S559/S560
4901	39581.14	19704.62	5992.72	S56/S57/S60
4603	39566.44	20797.44	5973.31	S560/S561/S563
4604	39599.37	20797.22	5972.89	S560/S562/S564
4605	39650.01	20796.77	5972.28	S560/S562/S564
4602	39457.04	20797.84	5975.09	S561/S563
4610	39650.06	20810.88	5971.82	S562/S564/S565
4611	39599.26	20811.66	5972.43	S563/S564/S565
4612	39572.10	20812.05	5972.72	S563/S565/S566
4613	39462.37	20811.87	5974.45	S563/S566
4654	39572.12	20826.12	5972.07	S565/S566/S568
4656	39650.80	20825.12	5970.75	S565/S567
4655	39625.20	20825.60	5971.34	S565/S567/S568
4657	39478.33	20825.96	5973.57	S566/S568/S569
4658	39466.18	20826.00	5973.63	S566/S569
4663	39625.20	20840.01	5970.67	S567/S568/S572
4664	39631.22	20839.81	5970.50	S567/S572
4660	39478.36	20839.95	5973.07	S568/S569/S570
4661	39601.71	20840.48	5971.05	S568/S570/S571
4662	39616.99	20840.53	5970.75	S568/S571/S572
4659	39470.52	20839.85	5973.14	S569/S570
4667	39601.84	20854.66	5970.45	S570/S571/S573
4668	39487.86	20854.28	5972.26	S570/S573/S574
4669	39474.95	20854.18	5972.33	S570/S574
4665	39616.90	20851.50	5969.86	S571/S572
4666	39612.16	20854.81	5970.04	S571/S573
4672	39487.51	20868.35	5971.80	S573/S574/S575
4673	39577.20	20868.93	5970.13	S573/S575/S576
4674	39593.43	20869.25	5969.78	S573/S576
4671	39479.53	20868.33	5971.97	S574/S575
4675	39576.99	20880.88	5969.54	S575/S576
4676	39573.96	20883.29	5969.30	S575/S577
4677	39550.48	20882.78	5970.07	S575/S577/S578
4678	39484.04	20882.53	5971.28	S575/S578
4681	39550.62	20897.19	5969.56	S577/S578/S580
4682	39554.69	20896.82	5969.38	S577/S580
4679	39488.75	20896.83	5970.86	S578/S579
4680	39537.92	20897.20	5969.83	S578/S579/S580
4683	39538.49	20910.90	5969.18	S579/S580/DS-3Q
4684	39535.60	20910.72	5969.45	S579/S581/DS-3Q
4686	39524.80	20910.64	5969.75	S579/S581/S582

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4687	39492.81	20910.80	5970.19	S579/S582
6991	39276.93	19694.85	5992.70	S58/DS-1N
4688	39533.50	20914.35	5969.42	S581
4692	39532.45	20935.89	5969.03	S581/DS-3R
4689	39524.76	20925.11	5969.49	S581/S582/S583
4693	39525.11	20936.39	5969.25	S581/S583/DS-3R
4690	39497.29	20925.12	5970.11	S582/S583
4691	39501.71	20939.61	5969.74	S583/S584
4694	39525.33	20939.51	5969.25	S583/S584/DS-3R
4695	39531.61	20939.06	5969.10	S584/DS-3R
4697	39531.82	20953.67	5968.73	S584/S585
4698	39506.41	20954.28	5969.45	S584/S585
4699	39502.04	20666.79	5976.04	S584/S585
4700	39531.56	20968.08	5968.80	S585/S586
4701	39510.73	20968.08	5968.97	S585/S586
4702	39514.68	20982.14	5969.20	S587/S586
4703	39531.09	20981.95	5968.88	S587/S586
4704	39519.92	20996.16	5969.10	S587/S588
4705	39531.13	20995.97	5968.94	S587/S588
4706	39531.17	21010.06	5968.60	S588/S589
4707	39523.46	21010.19	5968.73	S588/S589
4708	39531.50	21023.96	5968.28	S589/S590
4709	39526.49	21024.15	5968.30	S589/S590
6996	39417.09	19707.17	5996.76	S58/S59/S63
6994	39271.17	19708.30	5992.53	S58/S62
4710	39531.77	21036.41	5968.07	S590/DS-3S
4711	39530.01	21036.73	5967.70	S590/DS-3S
4924	39882.79	20697.60	5971.95	S591/S592
4929	39916.30	20835.03	5946.69	S591/S592/S595
4936	39930.66	20834.94	5946.33	S592/S593/S596
4930	39917.51	20838.55	5945.75	S592/S595/S596
4925	39897.49	20699.45	5972.13	S593/S592
4926	39911.38	20700.69	5971.99	S593/S594
4937	39945.61	20835.30	5945.94	S593/S594/S597
4935	39932.16	20838.36	5945.44	S593/S596/S597
4938	39946.70	20839.25	5944.95	S594/S597/S598
4945	39960.63	20835.89	5947.77	S594/S598/S602
4941	39926.43	20702.90	5971.77	S594/S600
4943	39956.20	20818.00	5952.38	S594/S600/S602
4933	39926.48	20872.17	5937.32	S595/S596
4934	39940.09	20868.82	5937.64	S596/S597
4939	39950.02	20851.32	5941.82	S597/S598/S599
4940	39953.95	20865.33	5938.17	S597/S599
4946	39964.13	20848.21	5944.68	S598/S599/S602
4947	39967.48	20862.37	5941.10	S599/S602
6662	39547.68	19456.68	5988.80	S6/S8
7018	39565.84	19720.28	5991.53	S60/S61/S65
7012	39683.83	19718.57	5987.06	S60/S64
7016	39582.23	19720.29	5990.92	S60/S64/S65
4942	39942.04	20705.36	5973.69	S600/S601

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4944	39969.28	20814.98	5952.96	S600/S601/S602
4949	39977.70	20845.19	5945.12	S601/S602/S603
4952	39990.74	20841.84	5943.54	S601/S603/S605
4950	39957.09	20706.96	5971.55	S601/S604
4951	39973.02	20770.97	5961.93	S601/S604/S605
4948	39980.97	20859.07	5941.92	S602/S603
4953	39994.30	20855.57	5940.68	S603/S605
5104	39985.69	20770.09	5962.07	S604/S605/S607
4955	39971.96	20709.21	5971.33	S604/S606
5103	39982.28	20757.03	5965.21	S604/S606/S607
5105	40006.42	20852.81	5941.27	S605/S607
4958	39996.43	20751.11	5966.05	S606/S607/S609
4959	40018.62	20838.14	5944.69	S606/S609
4956	39986.64	20711.33	5970.86	S607/S608
4957	39993.20	20738.28	5968.86	S607/S608/S609
4983	40017.76	20835.55	5945.00	S607/S609/S624
4982	40016.10	20840.03	5944.07	S607/S622/S624
4962	40006.48	20735.05	5969.27	S608/S609/S610
4963	40001.67	20713.41	5970.59	S608/S610
4961	40009.53	20747.27	5966.67	S609/S610 S611
4960	40028.52	20822.77	5948.05	S609/S611
4984	40025.71	20823.28	5947.75	S609/S611/S627
4985	40027.85	20819.78	5948.54	S609/S611/S627
7000	39673.53	19705.12	5987.11	S60/S56
7026	39429.81	19720.47	5996.56	S61/S63/S67
7024	39438.13	19720.27	5996.37	S61/S65/S67
4966	40023.04	20744.65	5966.95	S610/S611/S612
4965	40019.29	20728.10	5970.00	S610/S612/S613
4964	40015.73	20715.22	5970.57	S610/S613
4967	40032.58	20783.15	5957.53	S611/S612/S614
4968	40038.82	20807.35	5951.67	S611/S614
4970	40045.86	20779.95	5958.08	S612/S614/S615
4969	40031.13	20716.66	5970.34	S612/S615
4971	40049.10	20790.91	5955.50	S614/S615
4992	40049.06	20790.64	5955.63	S614/S615/S626/S628/S630
4973	40047.64	20729.91	5969.79	S615/S616/S617
4974	40055.29	20760.73	5962.89	S615/S616/S618
4972	40045.24	20718.45	5970.13	S615/S617
4975	40055.02	20719.33	5970.21	S616/S617
4999	40069.43	20757.80	5963.62	S616/S618/S619/S629/S632
4976	40059.54	20719.45	5970.16	S616/S619
4978	40076.75	20732.25	5969.42	S619/S620/S621
5003	40077.87	20737.11	5968.45	S619/S620/S633
4977	40073.82	20720.82	5970.10	S619/S621
5001	40077.32	20743.78	5966.98	S619/S631/S632
5002	40078.97	20741.60	5967.47	S619/S631/S633
6998	39436.39	19706.86	5996.10	S61/S57/S59
6999	39566.83	19706.73	5991.19	S61/S60/S57
7027	39408.10	19720.91	5997.31	S62/S63/S67
7033	39265.45	19722.37	5992.28	S62/S66

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7028	39398.28	19721.16	5997.35	S62/S66/S67
4979	40082.13	20721.97	5970.33	S620/S621
5004	40085.30	20728.50	5970.31	S620/S633/DS-3T
4981	40079.70	20827.04	5960.17	S622/S623/S624
5015	40113.95	20820.17	5966.96	S622/S623/S636
5016	40116.62	20833.05	5966.46	S622/S634/S636
5028	40076.93	20813.43	5960.42	S623/S624/S625
5014	40111.04	20806.28	5967.47	S623/S625/S636
4991	40052.67	20804.39	5954.93	S625/S626/S630
5013	40108.32	20792.62	5967.89	S625/S626/S636
5012	40105.52	20778.97	5968.33	S626/S628/S636
5010	40102.89	20765.44	5968.84	S628/S629/S635
5011	40104.19	20771.80	5968.61	S628/S635/S636
5000	40080.28	20756.18	5966.00	S629/S631/S632
5009	40100.04	20751.86	5969.26	S629/S631/S635
6995	39408.19	19707.10	5997.15	S62/S63/S58
5008	40097.03	20738.05	5969.89	S631/S633/S635
5080	40021.05	20867.27	5942.75	S634/S645
5017	40117.86	20769.10	5968.70	S635/S637
5018	40111.05	20734.55	5969.90	S635/S637
5060	40137.80	20867.77	5965.67	S636/S637/S643
5074	40146.14	20911.42	5964.25	S636/S642/S643
5091	40132.63	20914.59	5963.58	S636/S642/S651/S653
5086	40124.58	20873.62	5965.01	S636/S646/S648
5087	40126.97	20887.14	5964.57	S636/S648/S649
5088	40129.76	20900.60	5964.00	S636/S649/S651
5019	40127.70	20745.06	5969.55	S637/S638
5061	40151.83	20865.05	5965.93	S637/S638/S643
5063	40169.06	20878.19	5965.79	S638/S639/S644
5062	40155.57	20880.67	5965.52	S638/S643/S644
6997	39429.10	19706.84	5996.32	S63/S61/S59
7017	39582.16	19734.49	5991.01	S64/S65/S70
7013	39694.33	19732.16	5986.64	S64/S70
5069	40190.60	20915.36	5964.61	S640/S641
5070	40196.77	20967.59	5963.58	S641
5071	40184.25	20965.55	5963.59	S641/S644
5073	40155.62	20956.63	5963.19	S642/S643
5092	40135.45	20928.39	5963.25	S642/S653/S654
5101	40137.97	20941.35	5962.83	S642/S654/S646
5100	40140.65	20954.68	5962.50	S642/S656
5072	40170.26	20961.39	5963.39	S643/S644
5082	40050.21	20874.79	5949.16	S645/S647/S650
5081	40027.20	20880.08	5943.15	S645/S650
5085	40091.46	20880.47	5958.98	S646/S647/S648
5083	40053.19	20888.78	5948.92	S647/S648/S650
5093	40041.74	20905.70	5944.75	S648/S649
5084	40034.24	20892.71	5943.95	S648/S650
5089	40104.01	20906.15	5960.08	S648/S651/S652
5094	40048.88	20918.13	5945.77	S649/S652
7025	39438.02	19734.66	5996.62	S65/S67/S69

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7022	39501.44	19734.13	5994.17	S65/S69/S71
7019	39564.09	19734.37	5991.62	S65/S70/S71
5090	40106.53	20919.74	5959.73	S651/S652/S653
5095	40055.34	20930.84	5946.65	S652/S653
5096	40058.26	20936.15	5946.95	S653
5097	40077.45	20940.58	5951.37	S653/S654
5098	40106.87	20947.67	5957.64	S654/S655
5102	40127.99	20943.40	5962.07	S654/S655/S656
5099	40130.01	20952.17	5961.85	S655/S656
5157	40043.57	20702.21	5971.33	S657/S658/S660
5153	39966.61	20704.92	5971.50	S657/S659
5154	39966.15	20700.07	5971.70	S657/S659
5155	39989.84	20701.45	5971.49	S657/S659/S660
5158	40138.48	20700.99	5971.53	S658/S660/S661
5159	40164.93	20699.34	5971.43	S658/S661
5156	39989.87	20708.53	5971.06	S659/S660
7029	39398.27	19735.27	5997.55	S66/S67/S69
7034	39260.82	19736.31	5992.12	S66/S68
7032	39353.61	19735.63	5995.48	S66/S68/S69
5161	40138.87	20715.19	5970.89	S660/S661/S662
5162	40062.85	20715.97	5970.66	S660/S662
5160	40166.63	20713.17	5970.45	S661/S662
5163	40092.40	20719.26	5970.57	S662
5164	40111.60	20730.71	5970.06	S662/663
5165	40168.93	20727.23	5969.58	S662/S663
5166	40170.40	20741.28	5968.99	S663/S664
5168	40134.07	20744.02	5969.48	S663/S664
5167	40147.75	20742.81	5969.53	S663/S664/S665
5169	40148.05	20751.30	5969.10	S664/S665
7031	39353.66	19750.07	5995.55	S68/S69/S74
7035	39254.83	19750.56	5992.01	S68/S74
7021	39501.68	19748.46	5994.31	S69/S71/S73
7023	39494.88	19748.41	5994.55	S69/S73/S75
7030	39389.31	19749.53	5997.28	S69/S74/S75
6671	39498.84	19442.27	5990.94	S7/S8/S9
6672	39427.38	19442.40	5993.59	S7/S9
7020	39564.08	19748.12	5991.89	S70/S71/S73
7014	39704.14	19745.92	5986.69	S70/S72
7015	39640.09	19747.58	5989.08	S70/S72/S73
7046	39713.09	19760.36	5986.84	S72/S76
7054	39250.73	19764.16	5991.93	S74/S79
7063	39723.57	19774.05	5986.68	S76/S81
7048	39639.96	19761.78	5989.33	S77/S73/S72
7047	39688.73	19760.64	5987.81	S77/S76/S72
7062	39689.21	19774.78	5988.02	S77/S76/S81
7061	39610.59	19776.60	5990.81	S77/S82/S81
7050	39494.71	19762.57	5994.81	S78/S75/S73
7049	39544.80	19762.51	5992.99	S78/S77/S73
7060	39544.88	19776.38	5993.27	S78/S77/S82
7059	39469.14	19777.12	5996.36	S78/S84/S82

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GCL Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7056	39381.74	19778.12	5996.96	S79/S83/S84
6669	39538.92	19442.22	5989.34	S8/S10
6670	39514.67	19442.19	5990.23	S8/S9/S10
7052	39389.58	19763.61	5997.26	S80/S74/S75
7051	39397.39	19763.66	5997.50	S80/S78/S75
7058	39397.13	19777.49	5997.62	S80/S78/S84
7053	39383.05	19763.98	5996.92	S80/S79/S74
7057	39383.55	19778.06	5997.05	S80/S83/S84
7066	39610.05	19791.01	5991.09	S81/S82/S86
7064	39733.00	19787.88	5986.50	S81/S85
7065	39689.86	19789.42	5988.06	S81/S85/S86
7055	39246.70	19778.04	5991.93	S83/S79
7069	39382.65	19792.06	5997.00	S83/S84/S89
7067	39241.65	19792.37	5991.88	S83/S88
7068	39378.59	19792.57	5996.80	S83/S88/S89
7071	39469.98	19791.22	5996.73	S84/S82/S87
7072	39395.67	19791.70	5997.73	S84/S87/S89
7339	39689.98	19803.39	5988.24	S85/S86/S90
7338	39741.46	19801.20	5986.29	S85/S90
7350	39545.82	19805.19	5993.56	S86/S87/S91
7340	39659.56	19804.40	5989.30	S86/S90/S91
7070	39544.54	19790.80	5993.53	S87/S86/S82
7354	39395.11	19806.18	5997.70	S87/S89/S92
7353	39516.06	19805.25	5994.81	S87/S91/S92
7355	39378.38	19806.46	5996.82	S88/S89/S92
7356	39369.84	19806.49	5996.39	S88/S92/S93
7357	39238.86	19806.33	5991.78	S88/S93
6675	39514.83	19427.85	5990.39	S9/S10/S11
6676	39455.03	19428.27	5992.41	S9/S11
7364	39659.78	19818.51	5989.61	S90/S91/S94
7365	39751.48	19814.72	5986.36	S90/S94
7362	39515.94	19819.19	5995.15	S91/S92/S95
7363	39618.45	19819.44	5991.21	S91/S94/S95
7359	39369.66	19820.81	5996.48	S92/S93/S96
7361	39473.43	19819.78	5996.94	S92/S95/S97
7360	39373.35	19820.88	5996.64	S92/S96/S97
7358	39237.12	19820.58	5991.50	S93/S96
7370	39618.60	19833.91	5991.38	S94/S95/S99
7368	39760.67	19828.45	5986.47	S94/S98
7369	39729.65	19830.78	5987.49	S94/S98/S99
7372	39473.60	19834.21	5997.34	S95/S97/S100
7371	39584.68	19834.32	5992.75	S95/S99/S100
7375	39235.34	19834.45	5991.57	S96/S101
7374	39373.97	19834.92	5996.81	S96/S97/S101/S102
7373	39438.92	19834.56	5998.65	S97/S100/S102
7406	39769.60	19842.03	5986.38	S98/S103
7405	39730.23	19844.88	5987.58	S98/S99/S103
7403	39584.51	19848.39	5993.02	S99/S100/S104
7404	39703.73	19846.22	5988.41	S99/S103/S104

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
6746	39525.38	19478.06	5990.21	DFP-001
6904	39403.58	19500.02	5994.20	DFP-002
6919	39392.79	19543.66	5994.85	DFP-003
6925	39591.67	19565.64	5988.56	DFP-004
6942	39438.90	19609.94	5994.79	DFP-005
3624	39956.80	20570.72	5978.66	DFP-066D
3342	39441.70	20588.35	5982.33	DFP-070
3344	39414.21	20653.85	5980.04	DFP-075
3356	40134.98	20666.42	5972.70	DFP-076
3363	39651.39	20674.34	5976.40	DFP-077
4415	39824.62	20718.00	5972.95	DFP-087/DP-22I
4581	39423.53	20697.46	5979.37	DFP-089/DP-22R
4649	39632.24	20805.32	5971.96	DFP-091/DP-23B
4646	39528.89	20784.11	5974.30	DFP-092/DP-23C
3626	39868.32	20541.31	5980.34	DFP-660
3272	39806.56	20542.43	5980.39	DP-17X
3284	40127.53	20535.92	5978.36	DP-18A
3311	39573.10	20544.19	5982.45	DP-18B
3276	39830.14	20541.91	5980.39	DP-18C
3274	39807.64	20563.84	5979.84	DP-18D
3280	39957.14	20562.26	5978.84	DP-18E
3267	39561.74	20565.71	5981.85	DP-18G
3263	39410.69	20566.41	5982.32	DP-18H
3279	39957.42	20583.76	5978.20	DP-18I
3266	39409.97	20588.38	5981.88	DP-18M
3299	39666.24	20586.79	5979.85	DP-18N
3291	40080.23	20602.04	5975.99	DP-18Q
3292	39915.52	20606.39	5976.57	DP-18R
3302	39667.14	20608.08	5978.66	DP-18S
3295	39916.20	20627.74	5975.67	DP-18T
3290	40080.16	20624.09	5974.83	DP-18W
3307	39503.91	20631.48	5980.51	DP-18X
3303	39609.62	20631.32	5978.68	DP-19A
3306	39609.24	20652.61	5977.82	DP-19B
3298	39719.77	20651.90	5976.11	DP-19C
3289	40151.27	20644.19	5973.13	DP-19D
3296	39908.25	20626.86	5975.66	DP-19E
3368	40158.72	20644.02	5973.12	DP-19J
3691	39626.14	20612.64	5979.15	DP-20A
3690	39521.50	20669.30	5978.67	DP-20B
3689	39495.62	20670.04	5979.20	DP-20C
6709	39966.90	20610.40	5977.50	DP-20E
7823	39780.42	19911.86	5986.45	DP-5X
7824	39448.84	20000.56	5998.26	DP-6H
6905	39444.70	19499.69	5993.04	DP-1I
8731	39610.29	20137.82	5996.09	DP-10A
8729	39499.13	20145.00	5996.85	DP-10B
8730	39537.29	20145.54	5998.23	DP-10C
8743	39542.76	20261.63	5994.75	DP-10D
8745	39701.05	20260.93	5993.36	DP-10E
8748	39800.52	20260.70	5989.20	DP-10F
8746	39794.92	20259.42	5989.39	DP-10G
8750	39873.30	20260.09	5986.36	DP-10H
8752	39949.90	20258.66	5983.33	DP-10I
8754	40031.78	20256.43	5980.20	DP-10J
8977	40004.37	20192.15	5980.44	DP-10K
8781	39248.91	20143.73	5988.67	DP-10M
9062	39335.49	20283.48	5988.22	DP-10N
9070	39538.84	20305.64	5993.40	DP-10P
9059	39701.02	20282.31	5993.25	DP-10Q
9058	39713.03	20282.36	5992.87	DP-10R
9053	39889.37	20286.17	5985.96	DP-10S
9054	39889.62	20292.82	5985.95	DP-10T
9052	39890.60	20280.26	5985.87	DP-10W
9055	39890.79	20301.86	5985.92	DP-10X

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9236	39304.30	20218.36	5989.03	DP-11A
9050	39958.29	20300.81	5983.49	DP-11B
9243	40017.63	20213.22	5980.38	DP-11C
9082	40070.43	20298.54	5978.87	DP-11D
9061	39604.11	20283.13	5994.92	DP-11E
9069	39468.60	20305.27	5991.47	DP-11F
8964	39804.81	20253.33	5988.95	DP-11G
8963	39623.41	20231.02	5996.35	DP-11H
9232	39251.15	20217.88	5987.55	DP-11I
9233	39253.95	20239.57	5987.02	DP-11J
9234	39257.48	20261.60	5986.46	DP-11K
9067	39434.97	20327.27	5989.92	DP-11M
9073	39539.25	20327.10	5992.57	DP-11M
9237	39539.16	20327.18	5992.56	DP-11N
9076	39796.68	20325.18	5989.76	DP-11P
9077	39960.96	20322.73	5983.59	DP-11Q
9064	39306.55	20326.92	5986.12	DP-11R
9085	39974.12	20344.01	5983.16	DP-11S
9078	39973.16	20322.51	5983.19	DP-11T
9092	39434.05	20348.40	5989.25	DP-11W
9088	39722.84	20347.60	5990.85	DP-11X
9087	39788.33	20368.55	5989.47	DP-12A
9091	39569.79	20370.48	5990.84	DP-12B
9083	39997.42	20365.32	5982.42	DP-12C
9089	39691.24	20369.41	5989.96	DP-12D
9074	39691.43	20347.73	5991.02	DP-12E
9094	39444.56	20370.35	5989.06	DP-12F
9065	39335.21	20304.91	5987.61	DP-12G
9080	40082.97	20320.08	5978.78	DP-12H
9081	40076.47	20307.86	5978.75	DP-12I
9057	39878.44	20305.58	5986.36	DP-12J
9569	39894.40	20388.69	5985.88	DP-12K
9582	39399.28	20392.61	5986.77	DP-12M
9566	39521.81	20392.51	5989.47	DP-12N
9578	39893.22	20419.39	5985.70	DP-12Q
9581	39534.31	20414.52	5988.52	DP-12R
9239	39707.86	20282.91	5993.03	DP-12T
9238	39650.10	20279.44	5994.75	DP-12W
9241	39660.13	20315.05	5993.06	DP-12X
9240	39657.12	20306.49	5993.37	DP-13A
9242	39654.03	20334.79	5992.12	DP-13B
9575	40036.16	20430.13	5981.02	DP-13C
9639	40030.21	20451.99	5981.24	DP-13D
9589	39358.69	20436.09	5984.22	DP-13E
9601	39593.99	20457.69	5985.98	DP-13F
9593	39833.88	20433.39	5985.37	DP-13G
9599	39833.88	20455.02	5984.31	DP-13H
9595	39893.15	20432.55	5985.11	DP-13I
9591	39544.12	20436.29	5987.60	DP-13J
9791	39543.98	20436.29	5987.68	DP-13J
9590	39450.82	20436.22	5986.95	DP-13K
9800	39451.65	20436.28	5987.04	DP-13K
9609	39535.56	20458.16	5986.34	DP-13M
9780	39536.37	20458.06	5986.38	DP-13M
9597	39893.77	20475.95	5983.00	DP-13N
9610	39357.27	20479.49	5982.91	DP-13P
9608	39557.54	20479.65	5985.21	DP-13Q
9644	39557.60	20479.66	5985.23	DP-13Q
9607	39572.11	20479.72	5985.03	DP-13R
9604	39595.69	20479.72	5984.90	DP-13S
9605	39577.69	20479.71	5985.04	DP-13T
9623	39625.30	20501.26	5983.45	DP-13W
9621	39597.38	20501.48	5983.56	DP-13X
9619	39571.47	20501.46	5983.77	DP-14A
9635	39578.44	20522.45	5982.80	DP-14B

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9633	39626.02	20521.90	5982.52	DP-14C
9631	40127.19	20514.06	5977.82	DP-14D
9624	39716.30	20500.18	5982.70	DP-14E
9640	40009.24	20516.53	5980.30	DP-14F
9636	39500.04	20522.49	5984.21	DP-14G
9565	39444.81	20392.53	5988.03	DP-14H
9584	39358.94	20414.11	5984.96	DP-14I
9586	39280.72	20370.47	5984.05	DP-14J
9585	39286.41	20392.66	5983.46	DP-14K
9587	39294.37	20414.34	5983.06	DP-14M
9568	39751.12	20390.82	5988.05	DP-14N
9580	39750.94	20412.54	5986.99	DP-14P
9576	39892.92	20410.92	5985.96	DP-14Q
9571	39998.95	20386.71	5982.27	DP-14R
9638	40073.86	20385.44	5979.40	DP-14S
9637	40053.79	20385.77	5980.23	DP-14T
9572	40123.65	20406.17	5977.24	DP-14W
9573	40129.12	20427.67	5977.29	DP-14X
9574	40134.18	20449.50	5977.17	DP-15A
9596	40137.41	20471.21	5977.29	DP-15B
9626	40140.56	20492.90	5977.16	DP-15C
9629	40143.73	20513.71	5977.13	DP-15D
9551	39435.50	20349.26	5988.89	DP-15E
9642	39594.46	20468.20	5985.60	DP-15F
9641	39824.34	20455.43	5984.30	DP-15G
9771	39824.31	20455.31	5984.41	DP-15G
9643	39317.51	20457.89	5982.91	DP-15H
9774	39698.83	20456.63	5985.08	DP-15I
9778	39592.68	20457.91	5986.08	DP-15N
9779	39540.94	20458.02	5986.34	DP-15N
9777	39593.96	20458.02	5986.06	DP-15P
9775	39696.06	20456.76	5985.13	DP-15Q
9776	39595.29	20457.80	5986.03	DP-15Q
9772	39821.17	20455.20	5984.38	DP-15R
9773	39701.77	20456.67	5985.06	DP-15R
9781	40015.63	20494.55	5981.35	DP-15S
9769	39832.98	20455.07	5984.39	DP-15X
9770	39827.24	20455.19	5984.39	DP-15X
9766	39919.54	20454.05	5983.81	DP-16A
9763	39988.91	20452.59	5982.74	DP-16B
9760	40004.30	20452.27	5982.13	DP-16C
9757	40016.91	20451.98	5981.75	DP-16D
9752	40045.38	20451.57	5980.82	DP-16E
9749	40057.91	20451.33	5980.34	DP-16F
9746	40072.85	20451.07	5979.72	DP-16G
9767	39917.89	20453.98	5983.85	DP-16H
9768	39835.34	20455.05	5984.40	DP-16H
9764	39987.64	20452.56	5982.79	DP-16I
9765	39921.04	20453.91	5983.84	DP-16I
9761	40003.07	20452.29	5982.19	DP-16J
9762	39990.22	20452.55	5982.71	DP-16J
9758	40015.61	20452.13	5981.79	DP-16K
9759	40005.53	20452.33	5982.11	DP-16K
9755	40027.71	20451.88	5981.44	DP-16M
9756	40018.22	20452.07	5981.69	DP-16M
9753	40044.28	20451.50	5980.84	DP-16N
9754	40033.30	20451.71	5981.25	DP-16N
9750	40056.81	20451.31	5980.37	DP-16P
9751	40046.61	20451.51	5980.76	DP-16P
9747	40071.49	20451.12	5979.77	DP-16Q
9748	40059.09	20451.34	5980.26	DP-16Q
9744	40132.88	20449.40	5977.26	DP-16R
9745	40074.01	20451.10	5979.68	DP-16R
9803	39397.50	20436.26	5985.27	DP-16S
9794	39515.77	20436.48	5988.00	DP-16T

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9788	39572.38	20436.32	5987.28	DP-16W
9785	39626.21	20435.82	5986.78	DP-16X
9782	39691.16	20434.94	5986.18	DP-17A
9783	39689.45	20435.20	5986.18	DP-17B
9784	39626.94	20435.88	5986.78	DP-17B
9786	39625.61	20435.95	5986.87	DP-17C
9787	39573.15	20436.21	5987.30	DP-17C
9789	39571.54	20436.33	5987.23	DP-17D
9790	39547.02	20436.44	5987.60	DP-17D
9792	39541.02	20436.41	5987.72	DP-17E
9793	39516.98	20436.42	5987.95	DP-17E
9795	39514.82	20436.46	5988.01	DP-17F
9796	39481.83	20436.35	5987.85	DP-17F
9797	39481.21	20436.31	5987.83	DP-17G
9798	39480.55	20436.41	5987.82	DP-17H
9799	39452.97	20436.43	5987.11	DP-17H
9801	39450.46	20436.28	5987.01	DP-17I
9802	39399.40	20436.29	5985.37	DP-17I
3270	39579.45	20544.60	5982.36	DP--17W
3345	40029.62	20560.56	5978.46	DP-18F
3346	40058.07	20581.43	5977.31	DP-18J
3341	39441.65	20588.38	5982.30	DP-18K
3273	39810.16	20543.92	5980.48	DP-18P
3340	39588.17	20559.78	5981.67	DP-19F
3627	39846.49	20541.28	5980.48	DP-19F
3343	39414.21	20653.81	5980.01	DP-19G
3357	39956.02	20670.70	5973.38	DP-19H
3355	40134.94	20666.42	5972.70	DP-19I
3354	39812.79	20555.38	5979.81	DP-19K
3353	39819.27	20555.23	5979.75	DP-19M
3360	39719.64	20673.73	5975.46	DP-19N
3359	39749.15	20673.29	5975.07	DP-19P
3362	39651.36	20674.35	5976.42	DP-19Q
3625	39868.58	20541.15	5980.35	DP-19R
3628	39820.78	20541.29	5980.59	DP-19T
3622	39957.22	20578.00	5978.35	DP-19W
3623	39956.80	20570.72	5978.65	DP-19X
6745	39540.45	19478.15	5989.49	DP-1B
6736	39532.52	19434.04	5989.75	DP-1C
6759	39553.86	19491.06	5988.95	DP-1D
6758	39544.05	19490.87	5989.47	DP-1E
6747	39371.22	19477.98	5994.82	DP-1F
6935	39354.34	19499.45	5994.57	DP-1G
6903	39403.03	19499.94	5994.22	DP-1H
6913	39403.15	19522.93	5994.52	DP-1J
6937	39357.10	19503.11	5994.54	DP-1J
6900	39345.30	19521.56	5994.48	DP-1K
6915	39364.41	19521.67	5994.52	DP-1M
6911	39504.90	19521.73	5991.18	DP-1N
6910	39534.52	19521.87	5990.05	DP-1P
6912	39469.88	19521.74	5992.57	DP-1Q
6920	39403.07	19542.20	5994.84	DP-1R
6918	39392.41	19543.75	5994.85	DP-1S
6926	39428.35	19565.71	5994.42	DP-1T
6932	39428.62	19587.88	5994.73	DP-1W
6916	39335.02	19543.10	5994.34	DP-1X
4159	39645.58	20857.84	5969.28	DP-206/DFP-079
4152	39614.59	20891.92	5968.98	DP-20F/DFP-078
4160	39684.58	20827.43	5969.40	DP-20H
4162	39699.59	20857.68	5961.46	DP-20I
4165	39714.67	20888.20	5953.32	DP-20J
4167	39729.93	20918.96	5945.12	DP-20K
4193	39567.25	20894.67	5969.39	DP-20M
4197	39582.57	20958.97	5967.40	DP-20N/DFP-080
4199	39604.38	20911.36	5968.42	DP-20P

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4200	39641.80	20927.49	5960.38	DP-20Q
4203	39679.88	20944.30	5950.69	DP-20R
4266	39689.07	20964.78	5947.58	DP-20S/DFP-081
4256	39556.72	20984.78	5968.18	DP-20T
4258	39559.93	21006.40	5967.95	DP-20W
4264	39587.87	21024.16	5966.55	DP-20X
4268	39656.59	21035.05	5956.27	DP-21A/DFP-082
4263	39560.73	21050.22	5967.38	DP-21B
4274	39564.75	21071.62	5967.04	DP-21C
4348	39707.38	20956.17	5943.38	DP-21D
4309	39697.09	20803.14	5971.17	DP-21E/DFP-083
4313	39747.60	20857.32	5956.40	DP-21F
4315	39776.18	20866.02	5951.43	DP-21G
4371	39770.77	20756.41	5971.52	DP-21H/DFP-084
4370	39810.21	20787.06	5966.53	DP-21I/DFP-085
4374	39805.04	20727.56	5972.56	DP-21J/DFP-086
4343	39554.10	21117.13	5966.95	DP-21K
4344	39548.69	21096.33	5967.32	DP-21M
4342	39577.70	21113.70	5966.20	DP-21N
4346	39625.73	21084.13	5963.48	DP-21P
4373	39768.36	20751.63	5971.77	DP-21Q
4372	39788.10	20741.18	5972.05	DP-21R
4356	39852.58	20823.93	5953.90	DP-21S
4358	39863.88	20858.96	5944.39	DP-21T
4361	39874.50	20868.58	5941.43	DP-21W
4359	39874.56	20858.56	5943.50	DP-21X
4360	39875.17	20855.52	5944.02	DP-22A
4345	39543.48	21075.31	5967.67	DP-22B
4347	39650.98	21058.03	5957.34	DP-22C
4366	39535.75	20987.82	5968.87	DP-22D
4369	39535.92	20921.72	5969.11	DP-22E
4384	39842.58	20901.94	5936.96	DP-22F
4382	39884.05	20878.50	5938.50	DP-22G
4383	39882.67	20881.73	5937.93	DP-22G
4381	39884.39	20856.82	5943.17	DP-22H
4414	39837.39	20743.89	5971.74	DP-22J
4743	39863.13	20795.56	5959.90	DP-22K
4407	39873.97	20800.22	5961.47	DP-22M
4409	39868.39	20807.64	5956.68	DP-22N
4411	39883.88	20839.16	5947.72	DP-22P
4737	39651.29	20718.29	5974.90	DP-22Q/DFP-088
4577	39505.63	20697.13	5978.02	DP-22S
4579	39505.70	20718.88	5977.33	DP-22T
4584	39699.35	20739.70	5973.72	DP-22W
4635	39521.03	20740.60	5975.95	DP-22X/DFP-090
4638	39699.69	20761.25	5972.75	DP-23A
4641	39479.01	20762.65	5975.74	DP-23D
4645	39478.49	20784.48	5975.01	DP-23E
4636	39826.98	20694.61	5973.01	DP-23F
4742	39851.95	20714.04	5972.42	DP-23H
4739	39677.60	20805.08	5971.39	DP-23I
4738	39836.16	20687.50	5973.15	DP-23J
4744	39904.75	20880.68	5936.22	DP-23K
4731	39499.08	20893.92	5970.72	DP-23M
4734	39499.17	20915.87	5970.39	DP-23N
4740	39491.80	20871.84	5971.57	DP-23P/DFP-093
4741	39519.70	20981.06	5969.31	DP-23Q/DFP-094
4736	39503.28	20828.24	5972.98	DP-23R
4761	39488.77	20894.01	5970.94	DP-23S
4812	39531.31	20959.31	5969.07	DP-23T
4762	39532.58	20915.59	5969.43	DP-23W
4763	39559.37	20893.57	5969.51	DP-23X
5110	40017.91	20837.05	5944.80	DP-245
4764	39591.18	20870.07	5969.84	DP-24A
4765	39619.67	20848.03	5970.51	DP-24B

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4766	39647.67	20826.70	5970.87	DP-24C
4782	39530.95	20981.09	5969.01	DP-24D
5031	39898.11	20718.58	5971.82	DP-24E/DFP-095
5039	39941.80	20713.98	5971.36	DP-24F/DFP-096
5036	39935.85	20778.38	5960.80	DP-24G
5041	39951.64	20752.38	5966.69	DP-24H
5047	40009.69	20805.59	5952.16	DP-24I
5049	40025.65	20781.46	5958.18	DP-24J
5055	40140.01	20818.95	5967.15	DP-24K
5203	40094.85	20828.81	5963.76	DP-24M/DFP-097
5129	40079.92	20764.79	5965.09	DP-24Q/DFP-098
5108	40012.74	20845.66	5942.92	DP-24R
5112	40028.85	20820.06	5948.61	DP-24T
5113	40028.96	20819.99	5948.60	DP-24T
5115	40033.97	20812.86	5950.29	DP-24W
5117	40046.36	20794.00	5954.78	DP-24X
5119	40050.00	20788.34	5956.12	DP-25A
5121	40065.34	20765.65	5961.62	DP-25B
5124	40083.11	20741.56	5968.15	DP-25C
5204	40084.27	20875.51	5957.53	DP-25D/DFP-099
5132	40144.43	20840.71	5966.57	DP-25E
5201	40111.18	20914.70	5961.16	DP-25G
5199	40106.29	20893.30	5961.52	DP-25H
5202	40086.64	20942.14	5953.52	DP-25I
5197	40136.13	20753.31	5969.25	DP-25J
5182	40057.19	20690.00	5972.02	DP-25K/DFP-100
5184	39956.70	20692.86	5972.29	DP-25M
5188	40074.51	20711.74	5971.04	DP-25N
5205	40169.05	20730.97	5969.32	DP-25T
5211	40093.75	20724.93	5970.64	DP-25W
5210	40091.23	20740.53	5969.56	DP-25X
5208	40145.42	20840.50	5966.52	DP-26B
5209	40111.22	20913.74	5961.32	DP-26B
5212	40113.90	20736.20	5970.02	DP-26C
5213	40114.64	20732.44	5970.13	DP-26D
6928	39326.68	19565.18	5994.14	DP-2A
6906	39499.96	19499.77	5990.93	DP-2B
6907	39532.81	19499.84	5989.94	DP-2C
6924	39591.72	19565.65	5988.56	DP-2D
6899	39348.96	19516.39	5994.55	DP-2E
6930	39317.93	19587.05	5993.84	DP-2F
6939	39412.20	19610.04	5995.60	DP-2G
6941	39439.48	19609.88	5994.78	DP-2H
6946	39593.02	19631.93	5989.55	DP-2J
6949	39323.87	19630.97	5994.30	DP-2K
6947	39411.45	19632.09	5996.14	DP-2M
6961	39323.30	19641.89	5994.36	DP-2N
6936	39357.03	19503.82	5994.54	DP-2P
6943	39617.76	19609.35	5987.69	DP-2Q
7152	39321.54	19646.87	5994.28	DP-2R
7003	39323.39	19652.84	5994.41	DP-2R
7039	39321.67	19652.63	5994.36	DP-2R
7038	39297.49	19652.72	5993.29	DP-2S/DFP-006
7153	39589.37	19653.90	5989.82	DP-2T
7155	39548.46	19675.85	5991.70	DP-2W
7160	39414.14	19675.60	5996.52	DP-2X
7164	39415.66	19697.24	5996.75	DP-3A
7044	39276.81	19695.85	5992.73	DP-3B
7165	39518.77	19698.00	5993.03	DP-3C
7166	39549.34	19697.40	5991.81	DP-3D
7161	39284.27	19674.00	5993.01	DP-3E
7005	39291.82	19652.66	5992.82	DP-3F
7037	39292.72	19652.44	5993.27	DP-3F
7169	39618.65	19697.17	5989.41	DP-3G
7157	39531.54	19671.84	5992.37	DP-3H

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7168	39602.57	19700.45	5989.88	DP-3I
7176	39294.54	19717.89	5993.50	DP-3J
7175	39327.50	19718.35	5994.34	DP-3K
7172	39415.28	19719.09	5997.07	DP-3M
7171	39594.26	19719.00	5990.45	DP-3N
7181	39662.02	19739.84	5988.24	DP-3P
7186	39443.00	19762.91	5997.10	DP-3Q
7184	39620.65	19762.31	5990.16	DP-3R
7188	39294.70	19783.35	5993.29	DP-3S
7189	39693.50	19783.50	5987.99	DP-3T
7185	39456.91	19762.90	5996.63	DP-3W
7180	39326.87	19740.08	5994.34	DP-3X
7395	39587.57	19806.22	5992.05	DP-4I
7394	39682.54	19805.09	5988.54	DP-4J
7485	39694.40	19804.73	5988.36	DP-4K
7492	39683.67	19826.85	5989.12	DP-4M
7494	39533.50	19828.47	5994.81	DP-4N
7496	39478.05	19848.03	5997.40	DP-4P
7515	39678.34	19847.33	5989.54	DP-4Q
7516	39698.75	19847.19	5988.78	DP-4R
7517	39765.53	19846.70	5986.71	DP-4S
7498	39530.41	19847.78	5995.02	DP-4T
7497	39526.12	19855.96	5995.32	DP-4W
7493	39678.81	19826.92	5989.29	DP-4X
7768	39727.69	19880.36	5987.94	DP-5A
7519	39731.41	19868.79	5988.04	DP-5B
7520	39699.02	19869.06	5989.22	DP-5C
7495	39265.07	19868.99	5992.38	DP-5D
7518	39759.68	19868.49	5986.84	DP-5E
7573	39388.29	19891.34	5997.82	DP-5F
7574	39639.46	19890.88	5991.64	DP-5G
7576	39731.58	19890.52	5988.18	DP-5H
7578	39780.45	19890.38	5986.40	DP-5I
7521	39242.20	19890.59	5991.94	DP-5J
7769	39786.58	19868.39	5986.02	DP-5K
7585	39462.21	19913.39	5999.22	DP-5M
7591	39431.36	19935.18	5999.17	DP-5N
7582	39241.19	19912.52	5991.90	DP-5P
7584	39313.43	19912.80	5994.48	DP-5Q
7590	39313.49	19934.55	5994.39	DP-5R
7606	39505.36	19956.89	5998.28	DP-5S
7593	39668.76	19934.50	5991.29	DP-5T
7609	39668.95	19956.29	5991.37	DP-5W
7586	39780.64	19912.14	5986.66	DP-5X
7604	39323.80	19956.57	5994.63	DP-6A
7607	39608.15	19956.42	5993.73	DP-6B
7678	39668.82	19939.58	5991.18	DP-6C
7674	39534.28	19978.38	5997.35	DP-6D
7669	39476.87	19978.69	5999.11	DP-6E
7671	39476.71	20000.51	5999.01	DP-6F
7673	39506.41	19978.40	5998.58	DP-6G
7667	39225.94	19999.60	5990.03	DP-6H
7677	39752.72	19999.47	5988.85	DP-6I
7804	39389.05	19852.75	5997.62	DP-6J
7805	39803.74	19902.45	5985.56	DP-6K
7806	39286.60	19710.90	5993.16	DP-6M
8661	39291.93	19929.75	5993.56	DP-6Q
8665	39356.05	19947.03	5995.85	DP-6R
8666	39374.14	19949.79	5996.50	DP-6R
8667	39395.28	19947.34	5997.30	DP-6S
8662	39276.10	19941.58	5992.83	DP-6T
8663	39295.09	19943.20	5993.49	DP-6T
8664	39341.62	19947.27	5995.22	DP-6W
8388	39767.83	20021.19	5988.57	DP-7D
8387	39752.37	20021.36	5989.23	DP-7E

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8511	39683.65	20021.82	5991.97	DP-7F
8395	39274.76	20021.67	5991.49	DP-7G
8371	39608.42	20043.35	5995.06	DP-7H
8373	39683.55	20043.37	5992.10	DP-7I
8386	39671.31	20043.63	5992.61	DP-7J
8389	39386.28	20066.39	5994.98	DP-7K
8391	39386.25	20076.67	5994.66	DP-7M
8393	39608.40	20065.72	5995.41	DP-7N
8506	39522.15	20065.74	5998.91	DP-7P
8505	39502.89	20065.99	5999.10	DP-7Q
8510	39661.41	20065.24	5993.18	DP-7R
8512	39689.69	20032.97	5991.86	DP-7S
8520	39777.37	20086.78	5988.99	DP-7T
8509	39627.59	20087.18	5994.84	DP-7W
8504	39386.59	20087.94	5994.47	DP-7X
8609	39371.37	20087.78	5993.95	DP-8A
8518	39598.88	20109.29	5996.44	DP-8B
8516	39546.85	20109.53	5998.73	DP-8C
8522	39777.26	20108.20	5989.06	DP-8D
8618	39629.38	20130.77	5995.18	DP-8E
8626	39398.10	20131.35	5994.20	DP-8F
8615	39924.29	20128.36	5983.15	D-P8G
8611	39950.01	20128.08	5982.07	DP-8H
8614	39950.73	20149.50	5982.27	DP-8I
8690	39750.47	20152.23	5990.43	DP-8J
8639	39979.10	20150.51	5981.04	DP-8K
8623	39479.36	20161.94	5995.55	DP-8M
8619	39599.01	20130.74	5996.54	DP-8N
8622	39479.83	20152.99	5995.77	DP-8P
8625	39409.57	20131.57	5994.55	DP-8Q
8629	39409.72	20153.43	5993.69	DP-8R
8616	39846.39	20107.97	5986.22	DP-8S
8617	39750.82	20152.05	5990.38	DP-8T
8630	39259.76	20152.57	5988.89	DP-8T
8692	39259.72	20152.55	5989.03	DP-8T
8636	39709.83	20174.09	5992.12	DP-8W
8632	39479.26	20174.66	5995.22	DP-8X
8631	39415.88	20175.12	5993.55	DP-9A
8637	39765.36	20173.88	5989.85	DP-9B
8610	39610.47	20109.03	5995.86	DP-9C
8644	39709.49	20195.61	5992.43	DP-9D
8627	39392.17	20131.41	5994.00	DP-9E
8648	39274.87	20196.31	5988.49	DP-9G
8645	39576.44	20196.41	5997.58	DP-9H
8634	39569.00	20174.43	5998.13	DP-9I
8691	39896.76	20216.57	5985.00	DP-9J
8681	39696.23	20046.63	5991.69	DP-9K
8716	39563.40	20218.39	5996.71	DP-9M
8721	39471.15	20218.56	5993.76	DP-9N
8717	39563.22	20229.60	5996.17	DP-9P
8722	39345.95	20240.07	5989.56	DP-9Q
8719	39563.16	20239.65	5996.00	DP-9R
8714	39800.02	20239.03	5989.29	DP-9S
8965	39800.52	20239.04	5989.19	DP-9S
8711	39872.77	20238.32	5986.06	DP-9T
8709	39949.16	20236.81	5983.13	DP-9W
8712	39846.49	20238.57	5987.27	DP-9W
8966	39846.52	20238.58	5987.19	DP-9X
7154	39638.70	19652.92	5987.20	P14/P16
7156	39548.46	19675.88	5991.70	P16/P17/P18
7167	39549.97	19697.53	5991.75	P17/P18/P19
7162	39284.28	19674.44	5992.97	P18/P16
7163	39415.27	19697.71	5996.78	P18/P19/P20
7173	39415.23	19718.76	5997.08	P19/P20/P21
7170	39682.07	19717.58	5987.13	P19/P21

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7174	39327.51	19718.33	5994.33	P20/P21/P22
7179	39327.11	19739.80	5994.38	P21/P22/P23
7182	39697.88	19739.13	5986.97	P21/P23
7177	39259.19	19738.93	5992.06	P22/P23
7178	39251.55	19760.80	5991.94	P23/P24
7183	39712.97	19760.71	5986.93	P23/P24
7191	39727.53	19782.36	5986.61	P24/P25
7187	39245.13	19782.44	5991.92	P24/P26
7190	39693.50	19783.47	5987.96	P25/P26/P24
6744	39559.65	19478.16	5988.46	P1/P2
6748	39370.96	19477.87	5994.77	P1/P2
6908	39570.76	19500.05	5987.99	P1/P5
6902	39355.02	19499.56	5994.66	P1/PS
6931	39317.94	19587.08	5993.85	P10/P11
9632	39626.18	20521.85	5982.53	P100/P101/P103
9630	40127.21	20514.23	5977.80	P100/P103/P104
9628	40145.13	20513.67	5977.10	P100/P104
9617	39337.16	20523.07	5981.06	P101/P102
9634	39578.70	20522.51	5982.80	P101/P102/P103
3268	39578.72	20544.25	5979.06	P102/P103/P105
3269	39578.72	20544.33	5982.65	P102/P103/P105
3283	40127.58	20535.81	5978.37	P103/P104/P106
3271	39806.76	20542.42	5980.41	P103/P105/P106
3282	40147.06	20535.13	5977.55	P104/P106
3260	39348.07	20545.33	5981.22	P105/P102
3275	39807.71	20563.86	5979.87	P105/P106/P108
3261	39358.66	20566.59	5981.04	P105/P109
3281	40149.93	20556.86	5977.29	P106/P107
3277	39956.62	20561.12	5978.85	P106/P107/P108
3278	39957.31	20583.65	5978.13	P107/P108/P110
3285	40152.90	20578.69	5976.43	P107/ P110
3264	39410.41	20566.50	5982.32	P108/P105/P109
3300	39666.19	20586.77	5979.83	P108/P110/P111
3265	39410.38	20588.23	5981.93	P108/P111/P109
6938	39309.26	19608.99	5993.36	P11/P12
6940	39412.38	19609.93	5995.58	P11/P12/P13
6944	39618.03	19609.36	5987.63	P11/P13
3301	39667.14	20608.10	5978.64	P110/P111/P113
3286	40154.26	20600.77	5975.37	P110/P112
3293	39915.44	20606.35	5976.54	P110/P112/P113
3262	39368.88	20588.54	5980.76	P111/P109
3304	39609.61	20631.50	5978.67	P113/P114/P115
3308	39380.19	20610.41	5980.31	P113/P111
3309	39391.56	20632.26	5979.89	P113/P115
3287	40157.46	20622.25	5974.53	P114/P112
3294	39916.12	20627.71	5975.65	P114/P112/P113
3297	39719.68	20651.81	5976.15	P114/P116/P117
3288	40158.84	20643.94	5973.20	P114/P117
3305	39609.29	20652.56	5977.87	P116/P114/P115
3310	39402.59	20653.51	5979.59	P116/P115
3361	39719.66	20673.72	5975.48	P116/P117/P118
3364	39409.74	20675.83	5979.21	P116/P118
3358	39956.00	20670.67	5973.39	P117/P118/P119
3365	40162.08	20665.69	5972.50	P117/P119
5183	39956.68	20692.71	5972.31	P118/P119/P198
4560	39826.38	20694.76	5973.25	P118/P154
4578	39505.65	20697.17	5977.98	P118/P154/P155
4582	39416.58	20697.67	5979.12	P118/P155
5185	39881.98	20694.05	5972.51	P118/P198
5181	40163.98	20687.47	5971.82	P119/P198
6948	39411.14	19631.99	5996.16	P12/P13/P14
6950	39323.51	19630.92	5994.29	P12/P14/P15
6951	39300.81	19630.84	5993.37	P12/P15
4168	39737.58	20933.88	5941.26	P120/P122
4166	39729.93	20918.96	5945.10	P120/P122/P123

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4164	39714.67	20888.17	5953.33	P120/P123/P124
4163	39699.61	20857.69	5961.48	P120/P124/P125
4161	39684.58	20827.41	5969.42	P120/P125/P126
4308	39694.27	20797.83	5971.50	P120/P140
4310	39756.00	20922.53	5940.64	P120/P140
4151	39585.29	20878.96	5969.44	P12/ P122
4158	39727.24	20941.53	5941.74	P121/P122
4204	39708.84	20956.98	5942.77	P121/P127
4202	39679.87	20944.32	5950.67	P121/P127/P128
4201	39641.86	20927.69	5960.36	P121/P128/P129
4198	39604.36	20911.39	5968.42	P121/P129/P130
4192	39567.24	20894.66	5969.39	P121/P130
4367	39566.75	20893.52	5969.15	P121/DP-20M
4153	39605.71	20864.25	5969.95	P122/P123
4154	39626.50	20849.49	5969.83	P123/P124
4155	39645.50	20834.10	5970.35	P124/P125
4156	39666.11	20819.42	5970.78	P125/P126
4157	39678.82	20808.89	5971.02	P126/P120
4196	39535.05	20966.65	5968.72	P127/P128
4265	39706.43	20962.12	5943.70	P127/P131
4255	39556.67	20984.84	5968.16	P127/P131/P132
4254	39534.89	20988.23	5968.79	P127/P132
4195	39535.72	20944.52	5968.72	P128/P129
4194	39535.55	20922.23	5969.12	P129/P130
6945	39628.31	19631.55	5987.56	P13/P14
4368	39557.81	20900.55	5969.10	P130/DP-20M
4257	39559.82	21006.37	5968.01	P131/P132/P133
4376	39559.79	21006.38	5967.86	P131/P132/P133
4378	39698.68	20985.12	5945.21	P131/P133
4259	39534.86	21010.22	5968.80	P132/P133
4267	39698.57	20985.07	5945.19	P132/P133
4260	39535.22	21032.41	5968.34	P133/P134
4269	39690.36	21008.25	5947.46	P133/P134
4270	39671.40	21032.81	5952.53	P134/P135
4262	39560.73	21050.17	5967.37	P134/P135/P136
4261	39536.45	21054.17	5968.08	P134/P136
4273	39564.77	21071.62	5967.03	P135/P136/P137
4271	39653.28	21057.28	5956.62	P135/P137
4275	39541.49	21075.25	5967.58	P136/P137
4272	39628.05	21083.16	5962.92	P137
4276	39547.39	21096.32	5967.24	P137/P138
4377	39548.15	21096.41	5967.32	P137/P138
4277	39552.79	21117.20	5966.83	P138/P139
4279	39581.23	21112.57	5966.01	P138/P139
4278	39556.66	21127.16	5966.74	P139
7002	39323.02	19652.82	5994.42	P14/P15/P16
7001	39638.60	19652.99	5987.32	P14/P16
4311	39778.30	20918.89	5939.46	P140/P141
4312	39747.63	20857.36	5956.38	P140/P141/P142
4379	39778.19	20918.70	5939.36	P140/P141
4380	39748.02	20857.57	5956.28	P140/P141/P142
4375	39712.16	20784.99	5971.64	P140/P142
4314	39776.18	20866.08	5951.45	P141/P142/P143
4316	39800.18	20914.05	5938.37	P141/P143
4317	39729.26	20770.77	5971.99	P142/P143
4349	39747.01	20757.47	5972.08	P143/P144
4365	39821.95	20909.31	5937.14	P143/P144
4351	39764.99	20744.45	5971.93	P144/P145
4352	39768.74	20751.74	5971.81	P144/P145/P146
4353	39787.85	20741.45	5972.04	P145/P146/P147
4354	39782.42	20731.62	5972.71	P145/P147
4364	39843.63	20904.19	5936.17	P146/P144
4363	39864.35	20896.99	5935.86	P147/P146
4362	39884.99	20889.77	5935.64	P147/P148
4357	39852.59	20824.13	5953.86	P147/P148/P149

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4355	39800.67	20719.18	5972.79	P147/P149
4412	39904.91	20881.42	5936.21	P148/P150
4410	39883.88	20839.16	5947.72	P148/P150/P151
4408	39868.42	20807.64	5956.71	P148/P151/P152
4413	39837.32	20743.89	5971.71	P148/P152/P153
4400	39817.87	20705.86	5973.02	P149/P153
7040	39322.83	19652.56	5994.40	P15/P14/P16
7004	39292.24	19652.48	5993.13	P15/P16
4406	39873.97	20800.22	5961.47	P150/P151/P152
4403	39846.38	20692.68	5972.82	P150/P152
5029	39869.97	20696.21	5972.26	P150/P173
5032	39915.82	20875.06	5936.96	P150/P173
4402	39837.35	20690.67	5973.15	P152
4401	39826.10	20699.96	5973.15	P152/P153
4580	39505.71	20718.92	5977.30	P154/P155/P156
4559	39797.01	20716.77	5973.12	P154/P156
4583	39425.76	20719.48	5978.36	P155/P156
4586	39765.91	20738.41	5972.87	P156/P157
4585	39699.35	20739.68	5973.70	P156/P157/P158
4634	39433.99	20741.13	5977.38	P156/P158
4637	39736.19	20760.87	5972.15	P157/P158
4639	39699.71	20761.23	5972.77	P157/P158/P159
4640	39479.05	20762.63	5975.74	P158/P159/P160
4642	39442.85	20763.06	5976.35	P158/P160
4644	39478.48	20784.51	5975.00	P159/P160/P161
4647	39708.45	20782.65	5971.77	P159/P161
7036	39292.17	19652.47	5993.11	P16/P15
7041	39649.07	19674.69	5987.75	P16/P17
4643	39451.68	20784.54	5975.37	P160/P161/DP-23G
4648	39677.99	20805.12	5971.39	P161/P162
4650	39460.49	20806.50	5974.64	P161/P162
4713	39648.00	20827.18	5970.70	P162/P163
4715	39467.21	20828.64	5973.69	P162/P163
4714	39619.86	20849.01	5970.38	P163/P164
4716	39474.18	20850.33	5972.48	P163/P164
4717	39480.46	20870.90	5971.83	P164/P165
4718	39590.38	20871.22	5969.75	P164/P165
4719	39560.83	20893.21	5969.49	P165/P166
4730	39499.04	20893.92	5970.72	P165/P166/P172
4732	39487.98	20894.10	5970.87	P165/P172
4720	39533.12	20915.14	5969.51	P166/P167
4733	39499.17	20915.87	5970.40	P166/P167/P172
4721	39532.40	20937.00	5969.01	P167/P168
4722	39500.68	20937.18	5969.82	P167/P168
4735	39494.48	20915.61	5970.35	P167/P172
4723	39508.77	20959.08	5969.33	P168/P169
4724	39532.25	20958.93	5968.69	P168/P169
4725	39531.64	20981.09	5968.74	P169/P170
4726	39514.38	20980.80	5969.27	P169/P170
7042	39666.83	19696.37	5987.12	P17/P19
4727	39531.68	21001.99	5968.83	P170/P171
4728	39521.38	21002.51	5968.84	P170/P171
4729	39531.48	21045.76	5966.86	P171
5030	39893.10	20698.85	5972.06	P173/P174
5033	39936.78	20869.99	5937.51	P173/P174
5037	39916.16	20701.62	5972.08	P174/P176
5034	39957.82	20864.43	5938.45	P174/P175
5035	39935.86	20778.37	5960.82	P174/P175/P176
5040	39951.63	20752.36	5966.68	P175/P176/P177
5042	39979.08	20859.38	5939.68	P175/P177
5038	39939.16	20704.79	5971.60	P176/P177
5043	40000.25	20854.69	5941.01	P177/P178
5044	39962.30	20707.90	5971.46	P177/P178
5046	40009.68	20805.58	5952.18	P178/P179/P180
5109	40017.92	20837.03	5944.79	P178/P179/P187

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
5045	39985.27	20711.33	5970.98	P178/P180
5106	40007.41	20854.29	5941.38	P178/P186
5107	40012.79	20845.67	5942.89	P178/P186/P187
5048	40025.69	20781.44	5958.18	P179/P180/P181
5114	40033.99	20812.84	5950.28	P179/P181/P188
5111	40028.85	20820.06	5948.63	P179/P187/P188
7043	39276.32	19695.85	5992.73	P18/P20
5050	40008.58	20714.13	5970.68	P180/P181
5051	40031.64	20716.74	5970.36	P181/P182
5118	40049.98	20788.35	5956.13	P181/P182/P189
5116	40046.34	20794.01	5954.78	P181/P188/P189
5052	40054.74	20719.06	5970.21	P182/P183
5122	40066.38	20764.19	5962.05	P182/P183/P190
5120	40064.20	20767.80	5961.03	P182/P189/P190
5125	40078.08	20721.20	5970.34	P183/P184
5123	40083.20	20741.60	5968.14	P183/P184/P184A/P190/P190A
5126	40094.05	20724.29	5970.37	P184/P184A
5127	40100.08	20728.59	5970.42	P184A/P190A
5054	40140.00	20818.99	5967.16	P185/P186/P187
5131	40144.49	20840.57	5966.59	P185/P186/P191
5053	40178.80	20810.90	5967.12	P186/P187
5130	40181.52	20832.74	5966.77	P186/P191
5147	40021.15	20866.39	5942.91	P186/P191
5056	40177.39	20788.77	5967.61	P187/P188
5058	40174.97	20772.77	5968.19	P188
5057	40169.16	20768.82	5968.42	P188/P189
5059	40141.49	20752.16	5969.16	P189/P190
5128	40113.43	20735.70	5969.90	P190A/P190
5133	40184.09	20854.55	5966.55	P191/P192
5146	40031.07	20886.42	5943.61	P191/P192
5145	40042.52	20906.46	5945.00	P192/P193
5198	40106.24	20893.34	5961.52	P192/P193/P194
5134	40186.74	20876.51	5965.86	P192/P194
5200	40111.19	20914.71	5961.16	P193/P194/P195
5144	40053.31	20926.50	5946.34	P193/P195
5135	40188.52	20898.42	5965.21	P194/P195
5143	40059.11	20936.50	5947.17	P195
5136	40191.11	20920.19	5964.48	P195/P196
5142	40085.75	20942.43	5953.39	P195/P196
5137	40192.46	20942.45	5964.24	P196/P197
5141	40138.13	20953.77	5962.60	P196/P197
5138	40196.02	20962.04	5963.85	P197/P197A
5140	40184.05	20964.93	5963.67	P197/P197A
5139	40196.79	20967.09	5963.80	P197A
5186	40027.10	20712.67	5970.82	P198/P199
5187	40074.49	20711.76	5971.05	P198/P199/P200
5189	40166.73	20709.36	5970.60	P198/P200
5196	40074.78	20717.69	5970.58	P199/P200
6742	39403.79	19456.01	5994.55	P2/P3
6743	39547.17	19456.33	5989.00	P2/P3
5195	40092.45	20719.09	5970.70	P200
5190	40169.39	20730.64	5969.09	P200/P201
5191	40114.34	20732.60	5970.01	P200/P201
5192	40150.84	20753.24	5969.11	P201/P202
5193	40171.94	20752.34	5968.38	P201/P202
5194	40173.10	20766.36	5968.37	P202
7045	39267.74	19717.56	5992.48	P20/P22
7392	39694.60	19804.77	5988.15	P25/P26/P27
7391	39742.79	19803.30	5986.40	P25/P27
7393	39682.83	19805.13	5988.55	P26/P27/P28
7561	39240.22	19804.00	5992.13	P26/P28
7564	39683.94	19826.94	5989.06	P27/P28/P29
7565	39758.04	19824.69	5986.66	P27/P29
7563	39678.92	19826.94	5989.29	P28/P29/P30
7562	39236.36	19825.92	5991.94	P28/P30

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7568	39678.30	19847.29	5989.57	P29/P30/P32
7566	39772.81	19846.53	5986.55	P29/P31
7567	39698.78	19847.03	5988.78	P29/P31/P32
6741	39424.67	19444.35	5993.66	P3
6737	39532.74	19433.93	5989.71	P3/P4
6740	39442.49	19434.10	5992.98	P3/P4
7773	39234.77	19846.78	5991.64	P30/P32
7772	39698.99	19868.79	5989.04	P31/P32/P34
7770	39786.19	19868.44	5985.99	P31/P33
7771	39731.55	19868.79	5987.87	P31/P33/P34
7570	39231.77	19868.86	5991.73	P32/P34
7575	39731.71	19890.70	5988.19	P33/P34/P36
7579	39802.07	19890.19	5985.60	P33/P35
7577	39780.38	19890.39	5986.40	P33/P35/P36
7572	39242.10	19890.58	5991.91	P34/P36/P37
7571	39229.24	19890.45	5991.82	P34/P37
7822	39780.71	19912.21	5986.44	P35/P36/P38
7586	39780.64	19912.14	5986.66	P35/P36/P38
7587	39816.50	19912.10	5985.52	P35/P38
7581	39241.04	19912.42	5991.90	P36/P37/P39
7583	39313.21	19912.85	5994.49	P36/P38/P39
7589	39313.74	19934.57	5994.37	P38/P39/P40
7592	39668.74	19934.29	5991.28	P38/P40/P41
7594	39831.81	19933.71	5985.24	P38/P41
7580	39227.71	19912.34	5991.68	P39/P37
7588	39226.42	19934.01	5991.48	P39/P40
6738	39505.53	19419.26	5990.68	P4
6739	39476.42	19422.10	5991.77	P4
7608	39668.95	19956.07	5991.38	P40/P41/P42
7605	39505.53	19956.82	5998.27	P40/P42/P43
7603	39226.05	19955.94	5991.03	P40/P43
7610	39846.28	19955.20	5985.09	P42/P41
7672	39506.41	19978.42	5998.58	P42/P43/P45
7675	39860.74	19976.80	5984.68	P42/P45
7666	39225.47	19977.82	5990.41	P43/P44
7668	39476.89	19978.52	5999.10	P44/P43/P45
7670	39477.12	20000.55	5999.03	P44/P45/P47
7774	39875.77	19998.31	5984.04	P45/P46
7676	39752.27	19999.50	5988.88	P45/P46/P47
8514	39752.26	20021.37	5989.28	P46/P47/P49
8277	39889.71	20020.08	5983.63	P46/P49
7667	39225.94	19999.60	5990.03	P47/P44
8276	39752.39	20021.34	5989.20	P47/P46/P49
8274	39226.33	20021.61	5989.93	P47/P48
8275	39683.60	20021.76	5991.90	P47/P48/P49
8372	39683.72	20043.31	5992.08	P48/P49/P50
8370	39608.77	20043.43	5995.05	P48/P50/P51
8508	39608.58	20043.56	5995.12	P48/P50/P51
8369	39228.28	20043.23	5989.74	P48/P51
8374	39904.92	20041.44	5983.29	P49/P50
6909	39580.64	19521.93	5988.09	P5/P6
6914	39403.23	19521.79	5994.47	P5/P6/P7
6901	39343.16	19521.26	5994.43	P5/P7
8513	39683.67	20043.43	5992.19	P50/P49/P48
8392	39608.67	20065.65	5995.39	P50/P51/P53
8394	39920.07	20063.36	5982.88	P50/P53
8385	39228.96	20065.33	5989.31	P51/P52
8390	39386.43	20066.39	5994.96	P51/P52/P53
8502	39386.20	20066.21	5995.00	P51/P52/P53
8503	39386.88	20087.95	5994.47	P52/P53/P54
8499	39230.34	20087.10	5989.12	P52/P54
8519	39777.11	20086.73	5988.93	P53/P54/P55
8515	39934.63	20084.70	5982.45	P53/P55
8521	39777.45	20108.17	5989.05	P54/P55/P56
8517	39598.89	20108.98	5996.44	P54/P56/P57

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8500	39232.76	20108.95	5988.66	P54/P57
8523	39948.95	20106.22	5982.01	P55/P56
8620	39599.27	20130.87	5996.54	P56/P57/P59
8612	39950.21	20127.79	5982.07	P56/P59/P60
8524	39963.26	20127.75	5981.52	P56/P60
8501	39235.64	20130.43	5988.44	P57/P58
8624	39409.77	20131.66	5994.56	P57/P58/P59
8628	39409.79	20153.29	5993.72	P58/P59/P62
8578	39239.24	20152.42	5988.24	P58/P62
8613	39950.97	20149.30	5982.25	P59/P60/P61
8621	39479.70	20153.04	5995.78	P59/P61/P62
6921	39403.16	19543.76	5994.84	P6/P7/P8
6922	39589.58	19543.53	5988.12	P6/P8
8525	39978.60	20149.10	5981.02	P60/P61
8638	39978.38	20148.97	5980.96	P60/P61
8633	39479.30	20174.61	5995.24	P61/P62/P64
8640	39991.97	20170.57	5980.75	P61/P63
8635	39709.81	20174.14	5992.12	P61/P63/P64
8579	39242.38	20174.01	5988.01	P62/P64
8643	39709.26	20195.60	5992.42	P63/P64/P65
8641	40006.32	20192.06	5980.35	P63/P65
8642	40006.46	20191.99	5980.35	P63/P65
8646	39471.10	20196.67	5994.38	P64/P65/P66
8580	39246.06	20196.33	5987.79	P64/P66
8720	39471.06	20218.59	5993.75	P65/P66/P67
8715	39563.34	20218.34	5996.68	P65/P68/P67
8649	39249.71	20217.94	5987.39	P66/P67
8718	39563.26	20239.63	5996.00	P67/P68/P69
8723	39252.82	20239.64	5986.98	P67/P69
8706	40019.42	20213.44	5980.28	P68/P65
8713	39800.40	20239.00	5989.28	P68/P69/P70
8710	39872.69	20238.37	5986.05	P68/P70/P71
8708	39949.22	20236.70	5983.09	P68/P71/P72
8707	40031.87	20234.52	5979.90	P68/P72
8747	39800.39	20260.71	5989.22	P69/P70/P74
8742	39256.48	20261.58	5986.37	P69/P73
8744	39700.95	20260.84	5993.35	P69/P73/P74
6917	39334.56	19542.70	5994.32	P7/P8
8749	39873.28	20260.27	5986.38	P70/P71/P74
8751	39949.85	20258.65	5983.34	P71/P72/P74
8753	40045.43	20255.61	5979.37	P72/P74
9060	39701.07	20282.45	5993.25	P73/P74/P76
9063	39335.54	20283.20	5988.25	P73/P76/P77
9524	39259.09	20283.23	5985.49	P73/P77
8808	40059.17	20276.76	5979.00	P74/P75
9051	39890.61	20280.42	5985.88	P74/P75/P76
9056	39890.92	20301.95	5985.94	P74/P75/P78
9533	40071.39	20298.45	5978.39	P75/P78
3688	30890.79	20301.86	5985.92	P75P76P78
9066	39335.34	20305.05	5987.62	P76/P77/P79
9071	39538.88	20305.48	5993.42	P76/P78/P79
9525	39263.02	20305.53	5985.07	P77/P79
9072	39539.28	20327.14	5992.56	P78/P79/P81
9079	39973.13	20322.38	5983.21	P78/P81/P82
9534	40083.83	20320.11	5978.18	P78/P82
9526	39268.39	20327.32	5984.59	P79/P80
9068	39434.94	20326.98	5989.92	P79/P80/P81
6929	39326.28	19565.27	5994.03	P8/P10
6923	39598.96	19565.66	5987.72	P8/P9
6927	39428.30	19565.70	5994.42	P8/P9/P10
9093	39434.57	20348.77	5989.25	P80/P81/P83
9537	39274.44	20348.59	5984.26	P80/P83
9086	39974.11	20344.00	5983.16	P81/P82/P84
9075	39691.45	20347.75	5991.03	P81/P83/P84
9535	40095.43	20341.59	5978.04	P82/P84

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

FML Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9090	39691.41	20369.20	5989.98	P83/P84/P86
9095	39444.48	20370.48	5989.04	P83/P86/P87
9538	39279.08	20370.32	5984.07	P83/P87
9615	39279.02	20370.46	5983.96	P83/P87
9536	40106.35	20363.11	5977.74	P84/P85
9084	39997.53	20365.27	5982.43	P84/P85/P86
9570	39997.75	20386.79	5982.30	P85/P86/P88
9244	40116.36	20384.59	5977.97	P85/P88
9564	39444.78	20392.58	5988.02	P86/P87/P89
9567	39751.24	20390.81	5988.05	P86/P88/P89
9539	39284.81	20392.34	5983.41	P87/P89
9579	39751.11	20412.42	5987.02	P88/P89/P90
9577	39892.88	20410.98	5985.96	P88/P90/P92
9245	40125.08	20406.37	5977.60	P88/P92
9583	39358.82	20414.37	5984.96	P89/P90/P91
9540	39292.44	20414.30	5982.97	P89/P91
6933	39428.62	19587.88	5994.72	P9/P10/P11
6934	39607.03	19587.72	5987.79	P9/P11
9588	39358.69	20435.98	5984.22	P90/P91/P94
9594	39893.17	20432.54	5985.12	P90/P92/P93
9592	39833.79	20433.25	5985.39	P90/P93/P94
9235	39301.97	20436.41	5983.39	P91/P94
9246	40130.84	20427.89	5977.59	P92/P93
9598	39834.03	20455.02	5984.30	P93/P94/P95
9247	40135.98	20449.43	5977.50	P93/P95
9600	39593.92	20457.86	5985.98	P94/P95/P96
9616	39310.70	20458.12	5982.66	P94/P96
9602	39594.31	20479.68	5984.89	P95/P96/P99
9627	40138.95	20471.14	5977.09	P95/P98
9603	39597.12	20479.78	5984.89	P95/P98/P99
9611	39318.41	20479.57	5982.03	P96/P97
9606	39571.94	20479.69	5985.03	P96/P97/P99
9612	39327.86	20501.36	5981.36	P97/P101
9618	39571.73	20501.32	5983.76	P97/P99/P101
9625	40142.16	20492.89	5977.07	P98/P100
9622	39625.47	20501.33	5983.45	P98/P100/P101
9620	39597.36	20501.38	5983.58	P98/P99/P101
8647	39470.89	20196.59	5994.35	P9F

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9478	39394.07	20167.62	5992.75	A/C/T214
9481	39579.30	20170.07	5997.85	A/C/T223
9485	39579.45	20170.08	5997.87	A/C/T223
9479	39392.85	20179.55	5992.45	B/C/T214
9480	39566.78	20183.94	5997.50	B/C/T226
9499	39398.28	20193.77	5992.29	B/T15/T16
9500	39364.96	20192.70	5991.25	B/T215/T16
9484	39599.83	20170.27	5996.91	C/T224/T223
9482	39598.85	20183.72	5997.16	C/T224/T226
5420	39643.87	20701.55	5975.35	DP26H
7197	39459.26	19779.78	5996.91	DP4B-FML
7257	39269.04	19712.43	5992.19	DP-4C
7196	39602.90	19701.13	5989.98	DS1Q-GCL
7198	39458.58	19779.21	5996.92	DS1R-GCL
9501	39459.35	20162.68	5994.78	DT1
7252	39312.73	19530.05	5992.18	DT-1A-T23
7253	39317.85	19530.81	5992.34	DT1A-T23-T26
7254	39317.37	19543.83	5992.43	DT1A-T26-T27
7255	39306.42	19543.02	5991.84	DT1A-T27
7612	39308.64	19648.19	5993.69	DT1D
7239	39339.56	19504.53	5994.05	DT1D/T2/T21/T22
7240	39339.44	19512.40	5994.33	DT1D/T21/T22
7243	39338.85	19518.18	5994.48	DT1D/T21/T22/T23
7611	39317.07	19668.46	5994.20	DT1E
7232	39394.96	19498.84	5994.43	DT1E/T1/T2
7238	39394.24	19504.91	5994.52	DT1E/T1/T2/T21
7231	39395.32	19491.37	5994.38	DT1E/T1/T2/T3
7233	39469.53	19492.14	5992.04	DT1F/T1/T3/T4
7228	39469.40	19485.52	5992.00	DT1F/T3/T4
7227	39469.39	19478.47	5991.98	DT1F/T3/T4/T6
8084	39443.69	19749.57	5996.78	DT1G
7226	39501.67	19478.46	5990.99	DT1G/T4/T5/T6
7222	39501.95	19472.40	5990.93	DT1G/T5/T6
7221	39502.07	19465.16	5990.82	DT1G/T5/T6/T8
8085	39434.78	19749.58	5997.03	DT1H
7236	39538.91	19505.14	5989.80	DT1H/T1/T20/T21
7237	39538.51	19511.95	5989.90	DT1H/T20/T21
7246	39538.20	19518.69	5989.91	DT1H/T20/T21/T24
8086	39425.91	19749.81	5997.26	DT1I
7244	39495.62	19517.95	5991.43	DT1I/T21/T23/T24
7245	39495.38	19525.60	5991.54	DT1I/T23/T24
7251	39495.45	19530.97	5991.73	DT1I/T23/T24/T26
8126	39491.34	19880.38	5997.56	DT1J
7249	39518.65	19530.99	5990.86	DT1J/T24/T25/T26
7250	39518.66	19538.52	5990.91	DT1J/T25/T26
8127	39482.26	19880.80	5997.89	DT1K
8137	39567.04	19894.89	5994.40	DT1M
8196	39853.43	19963.43	5984.92	DT1N
8197	39854.05	19966.96	5985.03	DT1N
7223	39539.96	19465.56	5989.39	DT1N/T5/T7/T8
7218	39539.94	19456.64	5989.26	DT1N/T7/T8
7217	39539.78	19451.94	5989.32	DT1N/T7/T8/T9
8105	39764.31	19864.01	5986.55	DT1P
7210	39542.38	19432.18	5988.68	DT1P/T10/T11
7209	39542.24	19425.92	5987.95	DT1P/T13/T10/T11
8135	39515.41	19894.01	5996.54	DT1Q
8145	39516.61	19898.82	5996.54	DT1Q
7211	39491.62	19425.78	5991.22	DT1Q/T11/T12/T13
7203	39491.48	19418.58	5991.12	DT1Q/T12/T13
7955	39656.50	19682.51	5987.50	DT1R
7275	39491.04	19590.10	5992.70	DT1R/T35
8019	39292.60	19619.37	5991.88	DT1S

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7271	39561.87	19566.56	5989.53	DT1S/T29
7964	39446.85	19711.82	5995.87	DT1T
7965	39455.81	19713.32	5995.61	DT1W
7979	39596.78	19764.23	5991.10	DT1X
8056	39598.84	19709.41	5990.17	DT2A
8040	39317.43	19548.17	5992.57	DT2B
8041	39302.51	19602.00	5992.62	DT2C
8042	39272.20	19670.03	5991.08	DT2D
8043	39258.37	19706.10	5990.35	DT2E
8044	39254.91	19708.75	5989.80	DT2E
8045	39257.59	19711.26	5990.53	DT2E
8046	39249.66	19720.37	5989.35	DT2F
8047	39257.88	19718.97	5991.01	DT2G
8048	39264.05	19720.33	5992.24	DT2H
8049	39269.54	19717.38	5992.57	DT2I
8060	39661.01	19671.70	5985.54	DT2J
8061	39674.93	19707.30	5987.27	DT2K
8059	39650.31	19700.95	5988.03	DT2M
8058	39616.02	19715.38	5989.61	DT2N
8057	39611.22	19708.57	5989.68	DT2P
8054	39571.62	19715.94	5991.29	DT2Q
8053	39548.92	19713.15	5992.15	DT2R
8052	39532.98	19706.55	5992.67	DT2S
8051	39474.76	19710.27	5995.08	DT2T
8050	39350.91	19722.48	5995.48	DT2W
8055	39596.17	19716.17	5990.44	DT2X
8075	39630.63	19720.73	5989.09	DT3A
8074	39609.21	19776.50	5990.98	DT3B
8077	39578.90	19780.11	5992.13	DT3C
8092	39343.11	19775.69	5995.07	DT3D
8093	39333.11	19776.75	5994.71	DT3D
8091	39369.63	19787.85	5996.36	DT3E
8089	39404.18	19782.08	5998.05	DT3F
8090	39411.98	19781.44	5998.17	DT3F
8606	39404.25	19782.98	5998.22	DT3F
8607	39411.69	19782.24	5998.18	DT3F
8088	39423.68	19787.11	5998.27	DT3G
8082	39486.41	19782.80	5995.86	DT3H
8079	39542.97	19791.05	5993.73	DT3I
8080	39542.52	19795.38	5993.75	DT3I
8078	39561.14	19786.69	5992.90	DT3J
8097	39235.90	19760.22	5988.38	DT3K
8094	39231.70	19770.57	5987.93	DT3M
8095	39239.09	19773.12	5989.99	DT3M
8096	39240.90	19774.01	5990.53	DT3M
8138	39566.75	19899.02	5994.35	DT3N
8073	39745.16	19804.73	5986.55	DT3P
8098	39239.44	19744.79	5988.23	DT3Q
8101	39226.76	19819.95	5989.24	DT3R
8100	39228.16	19809.71	5989.25	DT3S
8099	39224.94	19798.05	5987.78	DT3T
8136	39519.75	19898.84	5996.32	DT3W
8123	39784.02	19878.06	5986.04	DT3X
8190	39634.06	19987.24	5993.19	DT4B
8184	39410.18	19978.56	5997.51	DT4C
8185	39413.84	19977.70	5997.63	DT4C
8200	39605.32	20000.92	5994.38	DT4D
8273	39695.14	19965.77	5990.35	DT4E
8605	39472.18	19794.89	5996.79	DT4F
8608	39412.38	19807.42	5998.50	DT4G
8806	39634.67	20027.07	5993.95	DT4H
9347	39634.57	20031.71	5994.00	DT4H

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8805	39625.81	20027.76	5994.30	DT4I
9346	39625.84	20031.86	5994.32	DT4I
8804	39622.25	20027.65	5994.39	DT4J
9345	39622.16	20031.84	5994.48	DT4J
9105	39777.55	20101.70	5989.07	DT4M
9613	39530.67	20110.52	5998.38	DT4N
9128	39507.86	20089.44	5998.90	DT4P
9100	39662.52	20066.30	5993.27	DT4Q
9386	39661.93	20071.67	5993.32	DT4Q
9108	39915.89	20110.29	5983.56	DT4R
9126	39458.29	20120.36	5996.52	DT4S
9434	39458.49	20121.94	5996.09	DT4S
9127	39458.58	20133.13	5996.11	DT4T
9109	39929.90	20151.62	5983.51	DT4W
9324	39370.02	20145.93	5992.80	DT4X
9326	39209.03	20142.69	5980.01	DT5A
9327	39208.34	20155.51	5979.07	DT5A
9328	39197.93	20154.91	5978.98	DT5A
9329	39197.30	20142.58	5979.25	DT5A
9295	39773.85	20013.86	5988.31	DT5B
9357	39773.79	20011.07	5988.23	DT5B
9296	39801.12	20134.97	5988.25	DT5C
9315	39415.77	20171.02	5993.66	DT5D
9330	39272.05	20171.72	5989.01	DT5E
9433	39528.28	20120.28	5998.16	DT5F
9353	39715.96	20001.00	5990.44	DT5G
9354	39715.98	20006.71	5990.54	DT5G
9351	39713.26	20018.30	5990.83	DT5H
9352	39717.21	20013.70	5990.59	DT5H
9349	39716.68	20028.99	5990.73	DT5I
9350	39715.84	20025.57	5990.79	DT5I
9414	39307.97	20095.97	5991.63	DT5J
9435	39428.48	20102.40	5995.23	DT5K
9436	39428.53	20114.32	5995.24	DT5K
9503	39485.63	20116.24	5997.31	DT5M
9504	39485.04	20129.04	5996.88	DT5M
9367	39414.04	20015.86	5996.83	DT5N
9502	39389.10	20016.11	5995.71	DT5N
9614	39459.73	20162.70	5994.69	DT5P
9427	39551.70	20081.44	5997.81	DT5Q
9428	39566.00	20082.55	5997.28	DT5R
9429	39529.63	20089.74	5998.52	DT5S
9430	39512.00	20090.09	5998.57	DT5S
9431	39481.18	20089.13	5997.47	DT5S
9432	39458.82	20088.18	5996.62	DT5S
9681	39808.25	20367.84	5988.85	DT5T
3645	40022.83	20522.67	5980.30	DT6M
3646	39990.64	20523.37	5980.57	DT6N
3652	39807.24	20524.13	5981.28	DT6P
3654	39778.95	20523.96	5981.56	DT6Q
3657	39746.70	20524.45	5981.74	DT6R
3659	39719.15	20529.11	5981.54	DT6S
3661	39687.30	20530.07	5981.79	DT6T
3662	39663.52	20528.95	5982.09	DT6W
3663	39652.25	20528.47	5982.24	DT6X
3666	39629.06	20528.34	5982.47	DT7A
3667	39565.43	20529.15	5983.04	DT7B
3671	39498.98	20528.30	5984.35	DT7C
3675	39396.16	20529.26	5983.42	DT7D
3707	40163.69	20570.55	5975.29	DT7E
3708	40170.75	20570.31	5974.20	DT7E
3709	40177.83	20570.24	5972.94	DT7E

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
3710	40164.33	20576.29	5975.01	DT7F
3711	40171.34	20576.04	5973.96	DT7F
3714	40164.32	20610.54	5974.10	DT7G
3715	40164.88	20615.99	5973.76	DT7G
4775	39386.44	20688.47	5973.38	DT7J
4461	39717.63	20962.11	5941.51	DT7K
4482	39577.74	20901.89	5969.17	DT7M
4776	39386.39	20702.03	5971.73	DT7N
4795	39393.90	20728.49	5970.28	DT7P
4808	39395.98	20740.35	5969.24	DT7Q
4811	39403.31	20754.74	5969.35	DT7R
4863	39444.20	20847.45	5968.26	DT7S
4873	39446.85	20874.70	5965.95	DT7T
4914	39503.31	21020.39	5964.55	DT7W
5241	39828.96	20700.94	5972.86	DT7X
5238	39827.05	20699.20	5972.90	DT7X T552
5239	39831.16	20706.43	5972.85	DT7X T552 T557
5240	39829.47	20697.64	5972.78	DT7X T557
5359	39964.75	20679.07	5972.94	DT82
5368	40087.36	20679.11	5972.30	DT8A
5380	40173.61	20673.72	5971.35	DT8B
5385	40178.73	20769.77	5967.88	DT8C
5417	39974.63	20667.61	5973.36	DT8E
5418	40034.37	20676.49	5972.42	DT8E/DT8F
5419	40109.87	20672.33	5972.44	DT8F
5421	39644.11	20701.86	5975.42	DT8G
5470	39866.56	20858.56	5944.31	DT8H
5469	39871.89	20859.00	5943.65	DT8I
5467	39872.47	20855.32	5944.48	DT8J
5466	39882.91	20854.91	5943.57	DT8K
7290	39694.59	19731.25	5986.86	MD100
5274	40091.42	20740.57	5969.56	P190 P190A P184A
7214	39542.61	19438.92	5989.26	PT1P/T9/T10/T11
4804	39552.62	20735.30	5975.86	S502 S503 S506
9489	39841.21	20146.43	5986.39	T1/T2/T3
7235	39592.76	19505.43	5986.51	T1/T20
7234	39585.34	19492.82	5986.57	T1/T4
8004	39248.55	19845.71	5991.80	T100/T102/T103
8102	39247.74	19845.73	5991.87	T100/T102/T103
8032	39206.65	19845.38	5985.36	T100/T103
8366	39206.39	19845.20	5985.38	T100/T103
8367	39210.98	19846.26	5985.48	T100/T103
8002	39252.85	19833.06	5992.04	T100/T98/T93
8108	39461.69	19860.70	5998.38	T101/T102/T113
8288	39461.66	19860.60	5998.33	T101/T102/T113
8110	39247.68	19859.23	5991.78	T102/T103/T122
8290	39247.64	19859.09	5991.79	T102/T103/T122
8109	39413.26	19860.99	5998.89	T102/T113/T122
8289	39413.37	19860.98	5998.82	T102/T113/T122
8291	39205.17	19858.39	5984.95	T103/DT4A
8111	39205.12	19858.35	5984.97	T103/T122/DT4A
8122	39817.43	19868.69	5981.10	T104/T105
8259	39817.42	19868.68	5981.02	T104/T105
8260	39813.37	19871.49	5981.15	T104/T105
8124	39627.49	19874.61	5991.81	T104/T105/T114
8125	39614.18	19874.15	5992.25	T104/T113/T114
8285	39807.77	19855.69	5981.15	T104/T99
8141	39826.82	19881.79	5980.83	T105/T106
8299	39826.65	19881.72	5980.82	T105/T106
8300	39822.90	19884.78	5981.16	T105/T106
8140	39639.34	19887.44	5991.51	T105/T106/T115
8139	39627.40	19887.23	5991.99	T105/T114/T115

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8142	39837.33	19894.89	5980.64	T106/T107
8301	39837.37	19894.93	5980.71	T106/T107
8302	39833.05	19897.88	5980.75	T106/T107
8143	39645.93	19900.20	5991.34	T106/T107/T116
8144	39639.73	19900.28	5991.65	T106/T115/T116
8303	39845.49	19907.55	5980.54	T107/T108
8304	39841.14	19910.38	5980.80	T107/T108
8155	39657.30	19913.36	5991.18	T107/T108/T117
8305	39855.18	19920.25	5980.29	T108/T109
8306	39850.77	19923.58	5980.56	T108/T109
8156	39659.83	19926.32	5991.43	T108/T109/T118
8307	39862.89	19932.75	5979.98	T109/T110
8308	39859.13	19935.12	5980.21	T109/T110
8167	39674.54	19939.40	5991.12	T109/T110/T119
7212	39422.61	19425.45	5991.25	T11/T12
7213	39397.01	19438.75	5992.39	T11/T9
8309	39872.31	19945.67	5979.78	T110/T111
8310	39867.84	19948.75	5979.94	T110/T111
8168	39683.90	19952.26	5990.68	T110/T111/T120
8169	39675.62	19952.61	5990.95	T110/T119/T120
8311	39881.85	19958.59	5979.54	T111/T112
8312	39876.96	19961.66	5979.96	T111/T112
8193	39691.53	19965.51	5990.55	T111/T112/T121
8194	39733.34	19977.53	5989.26	T112/T144/T145
8313	39891.31	19971.47	5979.23	T112/T145
8314	39886.54	19974.73	5979.57	T112/T145
8128	39441.05	19874.77	5999.28	T113/T114/T123
8129	39414.06	19873.89	5998.91	T113/T122/T123
8146	39450.87	19901.30	5999.32	T115/T116/T125
8147	39438.01	19900.82	5999.41	T115/T124/T125
8154	39646.36	19913.62	5991.61	T116/T117/T107
8153	39460.22	19914.66	5999.29	T116/T117/T126
8157	39657.30	19926.38	5991.53	T117/T118/T108
8166	39660.30	19940.10	5991.55	T118/T119/T109
8165	39471.69	19941.12	5999.18	T118/T119/T128
8170	39482.25	19954.35	5998.96	T119/T120/T129
8171	39471.31	19953.59	5999.12	T119/T128/T129
7200	39467.99	19411.57	5989.69	T12/T14/T15
7201	39481.33	19411.78	5989.77	T12/T15/T16
7202	39491.28	19411.93	5989.80	T12/T16/DT1Q
8192	39684.50	19965.85	5990.81	T120/T121/T111
8187	39492.42	19967.86	5998.88	T120/T121/T130
8188	39492.34	19980.60	5999.14	T121/T130/T143
8191	39692.27	19978.61	5990.81	T121/T144/T112
8189	39535.81	19981.04	5997.47	T121/T144/T143
8121	39241.41	19872.76	5991.78	T122/T123/T131
8130	39241.64	19872.63	5991.74	T122/T123/T131
8134	39441.51	19887.54	5999.31	T123/T114/T115
8133	39437.78	19888.10	5999.30	T123/T124/T115
8132	39241.25	19885.73	5991.85	T123/T124/T131
8148	39250.72	19899.20	5991.71	T124/T125/T133
8149	39233.58	19898.94	5991.69	T124/T132/T133
8152	39451.17	19913.96	5999.46	T125/T126/T116
8151	39255.37	19912.59	5992.21	T125/T126/T134
8158	39460.98	19927.08	5999.40	T126/T127/T118/T117
8159	39255.42	19925.31	5992.30	T126/T127/T134
8164	39460.96	19940.52	5999.35	T127/T128/T118
8163	39269.43	19938.97	5992.61	T127/T128/T136
8160	39253.61	19925.40	5992.17	T127/T135/T134
8162	39253.04	19939.26	5992.09	T127/T135/T136
8172	39280.94	19952.17	5992.77	T128/T129/T137
8173	39269.27	19952.33	5992.39	T128/T136/T137

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8186	39481.78	19967.35	5999.05	T129/T120/T130
8181	39293.67	19965.70	5993.22	T129/T130/T139
7204	39494.51	19411.71	5989.68	T13/T16/T17
7205	39507.95	19412.02	5989.19	T13/T17/T18
7206	39521.35	19412.03	5988.35	T13/T18/T19
7207	39535.16	19411.88	5987.85	T13/T19
7208	39549.12	19425.36	5987.76	T13/T19
8183	39331.01	19978.93	5994.44	T130/T141/T143
8131	39234.19	19885.39	5991.76	T131/T132/T124
8859	39198.16	19885.29	5984.29	T132/T131
8857	39198.34	19897.70	5984.07	T133/T132
8150	39250.46	19912.19	5991.98	T133/T134/T125
8855	39197.28	19910.83	5983.89	T134/T133
8853	39195.66	19924.28	5983.59	T135/T134
8161	39214.36	19938.20	5988.64	T135/T138/T136
8174	39214.19	19951.04	5988.72	T136/T137/T138
8180	39279.91	19965.89	5992.73	T137/T129/T139
8849	39194.05	19950.53	5983.10	T137/T138
8178	39224.86	19965.18	5990.70	T137/T139/T140
8847	39194.47	19964.17	5982.82	T137/T140
8851	39194.71	19937.47	5983.46	T138/T135
8179	39224.75	19978.32	5990.57	T139/T140/T141
8182	39294.19	19978.61	5993.04	T139/T141/T130
7199	39455.13	19411.63	5990.00	T14/T12
7341	39467.82	19405.08	5989.59	T14/T15
8845	39193.53	19977.08	5982.40	T140/T141
8204	39330.82	19992.22	5994.16	T141/T142/T143
8843	39193.77	19990.81	5982.22	T142/T141
8203	39394.54	19993.41	5996.63	T142/T143/T146
8971	39392.89	20006.54	5996.28	T142/T146/T152
8201	39535.76	19993.75	5997.60	T143/T144/T147
8202	39420.29	19993.83	5997.64	T143/T146/T147
8195	39733.95	19990.32	5989.65	T144/T145/T148
8199	39628.70	19993.97	5993.55	T144/T147/T148
8198	39828.38	19987.09	5985.94	T145/T148/T149
8315	39900.61	19983.69	5978.83	T145/T149
8316	39896.38	19987.52	5979.20	T145/T149
8972	39420.70	20006.84	5997.37	T146/T147/T152
9348	39628.56	20010.52	5993.91	T147/T148/T151
8803	39523.53	20007.25	5998.41	T147/T151/T152
8973	39524.00	20007.42	5998.34	T147/T152/T151
9358	39829.17	20002.66	5986.34	T148/T149/T150
7342	39481.06	19403.87	5989.25	T15/T16
9356	39728.71	20022.40	5990.27	T151/T150/T153
8802	39524.40	20020.52	5998.50	T151/T152/T155
9355	39720.77	20023.28	5990.55	T151/T154/T153
8801	39531.73	20020.74	5998.25	T151/T154/T155
9344	39529.06	20022.82	5998.36	T151/T154/T155
8974	39524.56	20020.21	5998.46	T152/T151/T155
9342	39342.06	20022.46	5993.94	T152/T155/T174
8969	39342.52	20005.68	5994.36	T152/T174/T142
8970	39342.27	20018.77	5994.07	T152/T174/T155
9096	39721.15	20030.63	5990.62	T153/T154/T157
9362	39721.63	20036.14	5990.67	T153/T154/T157
9097	39723.25	20030.51	5990.64	T153/T156/T157
9098	39720.80	20017.75	5990.60	T154/T151/T153
8975	39532.02	20020.99	5998.19	T154/T155/T151
9365	39531.73	20037.07	5998.51	T154/T155/T157
9343	39523.91	20022.20	5998.61	T155/T152/T151
8976	39531.70	20034.02	5998.44	T155/T154/T157
9369	39325.11	20035.47	5993.41	T155/T175/T158
9361	39723.04	20036.04	5990.70	T156/T157/T153

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9099	39723.32	20044.06	5990.82	T156/T157/T160
9360	39723.60	20049.30	5990.64	T156/T157/T160
8807	39744.51	20043.21	5989.96	T156/T159/T160
8800	39531.55	20033.64	5998.53	T157/T155/T154
8978	39527.73	20047.17	5998.79	T157/T158/T161
9366	39524.33	20048.14	5998.92	T157/T158/T161
8979	39537.07	20047.12	5998.40	T157/T160/T161
9363	39537.22	20051.16	5998.43	T157/T160/T161
9364	39537.21	20048.22	5998.42	T157/T161
8980	39527.44	20034.33	5998.58	T158/T155/T157
8985	39338.35	20045.37	5993.56	T158/T161/T178
9370	39315.94	20048.69	5992.85	T158/T176/T178
9359	39744.01	20047.83	5990.00	T159/T160/T156
7343	39494.48	19402.85	5988.83	T16/T17
9388	39744.32	20060.92	5989.81	T160/T159/T162
9379	39536.98	20061.44	5998.51	T160/T161/T164
9101	39742.33	20056.94	5989.91	T160/T162/T163
9387	39741.86	20061.16	5989.88	T160/T162/T163
9380	39537.17	20065.35	5998.46	T160/T163/T164
9004	39537.50	20060.99	5998.40	T160/T163/T164/T161
9368	39337.52	20048.71	5993.55	T161/T178/T158
9102	39744.26	20056.77	5989.91	T162/T159/T160
9442	39712.40	20076.68	5991.15	T162/T165/T166
9003	39558.82	20073.79	5997.78	T163/T167/T166
9381	39536.51	20074.14	5998.63	T164/T163/T167
9378	39361.55	20074.97	5993.83	T164/T167/T181
8997	39363.53	20072.69	5994.00	T164/T181/T167
8996	39338.27	20072.00	5993.14	T164/T181/T180
8797	39758.15	20069.50	5989.50	T165/T166/T162
8798	39759.57	20083.16	5989.70	T165/T166/T169
9391	39758.63	20085.52	5989.84	T165/T166/T169
8796	39777.08	20082.30	5988.97	T165/T168/T169
9392	39776.51	20084.45	5989.06	T165/T168/T169
9389	39742.87	20073.81	5990.25	T166/T162/T163
8799	39742.91	20069.16	5990.06	T166/T163/T162
9103	39758.01	20069.26	5989.61	T166/T165/T162
9390	39757.00	20072.64	5989.68	T166/T165/T162
9104	39758.96	20083.23	5989.81	T166/T165/T169
8794	39558.77	20086.33	5998.15	T166/T167/T170
9384	39557.32	20090.50	5998.28	T166/T167/T170
9005	39577.87	20087.35	5997.23	T166/T169/T170
9385	39576.62	20091.43	5997.42	T166/T169/T170
8793	39578.00	20087.38	5997.29	T166/T170/T169
9383	39557.21	20078.73	5998.06	T167/T166/T163
9382	39536.94	20078.09	5998.71	T167/T167/T163
9413	39369.76	20088.04	5993.98	T167/T170/T183
8998	39363.42	20085.71	5993.78	T167/T181/T183
8999	39371.88	20086.34	5994.11	T167/T183/T170
9441	39712.91	20089.83	5991.23	T169/T166/T165
8795	39776.74	20095.54	5989.05	T169/T168/T172/T171
8791	39577.46	20100.26	5997.38	T169/T170/T173
9006	39578.22	20100.67	5997.28	T169/T170/T173
9443	39776.42	20097.35	5988.67	T169/T172/T171/T168
9440	39583.61	20104.52	5996.76	T169/T172/T173
7344	39508.07	19402.32	5988.41	T17/T18
9002	39559.31	20086.68	5998.01	T170/T166/T167
9438	39382.46	20101.63	5993.70	T170/T173/T185
9437	39369.58	20101.41	5993.27	T170/T183/T185
9001	39383.61	20099.71	5994.12	T170/T185/T173
9000	39371.59	20099.42	5993.67	T170/T185/T183
9116	39776.89	20108.75	5989.23	T171/T172/T188
9106	39794.79	20107.85	5988.46	T171/T187/T188

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9445	39792.69	20108.88	5988.13	T171/T188/T187
8792	39585.30	20100.47	5997.02	T172/T173/T169
9007	39585.55	20100.77	5996.95	T172/T173/T169
9008	39586.10	20113.81	5997.11	T172/T173/T189
9450	39583.97	20117.61	5996.75	T172/T173/T189
9125	39595.03	20113.75	5996.76	T172/T188/T189
9449	39593.71	20118.38	5996.36	T172/T188/T189
9439	39576.18	20104.64	5997.15	T173/T170/T169
9323	39382.44	20121.14	5994.05	T173/T185/T206
9453	39382.86	20114.15	5993.78	T173/T185/T206
9452	39398.05	20114.58	5994.31	T173/T189/T206
8841	39194.57	20003.80	5981.98	T174/T142
8839	39194.98	20016.76	5981.48	T174/T175
8982	39327.89	20019.18	5993.59	T174/T175/T155
9341	39325.13	20022.56	5993.43	T174/T175/T155
8981	39327.48	20031.86	5993.44	T175/T155/T158
8983	39321.92	20032.26	5993.32	T175/T176/T158
8986	39282.89	20032.81	5991.65	T175/T176/T177
9372	39279.95	20035.46	5991.55	T175/T176/T177
8987	39282.15	20045.41	5991.46	T176/T177/T178
9371	39279.55	20048.01	5991.34	T176/T177/T178
8984	39321.53	20044.91	5992.98	T176/T178/T158
8837	39196.83	20029.98	5981.32	T177/T175
8988	39232.41	20045.37	5989.93	T177/T178/T179
9373	39228.12	20047.93	5989.76	T177/T178/T179
8835	39196.52	20044.11	5981.08	T177/T179
8989	39232.05	20058.61	5989.71	T178/T179/T180
9374	39227.34	20060.42	5989.36	T178/T179/T180
7345	39521.81	19404.41	5988.09	T18/T19
8995	39338.12	20058.66	5993.50	T180/T164/T161/T178
9376	39335.81	20061.67	5993.39	T180/T164/T178/T161
9377	39334.97	20074.37	5992.91	T180/T181/T164
8990	39307.55	20072.68	5992.10	T180/T181/T182
9375	39304.09	20074.69	5992.01	T180/T181/T182
8991	39307.79	20085.60	5991.92	T181/T182/T183
9411	39304.22	20087.16	5991.79	T181/T182/T183
9412	39360.09	20087.69	5993.59	T181/T183/T167
8992	39287.53	20086.07	5991.15	T182/T183/T184
9410	39284.16	20087.39	5991.12	T182/T183/T184
8993	39287.24	20099.26	5990.84	T183/T184/T186
8994	39290.46	20099.25	5990.83	T183/T185/T186
9416	39288.44	20099.67	5990.80	T183/T185/T186
9325	39288.48	20120.02	5990.51	T185/T186/T206
9415	39284.13	20099.90	5990.72	T186/T184/T183
9446	39793.74	20122.06	5988.05	T187/T188/T191/T192
9297	39979.09	20113.02	5977.97	T187/T192/T193
9444	39777.22	20110.25	5988.80	T188/T172/T171
9107	39795.79	20121.00	5988.53	T188/T187/T192
9448	39594.81	20131.20	5996.37	T188/T189/T190
9123	39598.40	20127.25	5996.73	T188/T191/T190
9115	39791.04	20121.53	5988.67	T188/T191/T192
9451	39485.33	20115.84	5997.18	T189/T189/T173
9465	39484.86	20128.83	5996.94	T189/T189/T190
9124	39596.07	20127.42	5996.91	T189/T190/T191
9322	39398.50	20122.03	5994.56	T189/T206/T173
9447	39596.65	20131.66	5996.27	T190/T191/T188
9122	39599.09	20140.42	5996.76	T190/T191/T196
9321	39397.40	20135.71	5994.28	T190/T207/T187/T206
9463	39396.40	20140.89	5993.66	T190/T207/T222
9320	39397.15	20149.53	5993.54	T190/T208/T207
9464	39455.41	20141.87	5995.37	T190/T222/T196
9114	39791.96	20134.93	5988.77	T191/T192/T195

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9468	39792.48	20135.44	5988.34	T191/T192/T195
9117	39656.11	20139.59	5994.25	T191/T196/T195
9298	39981.42	20126.40	5978.83	T192/T193/T194
9111	39841.57	20133.57	5986.55	T192/T194/T195
9469	39839.99	20132.61	5986.25	T192/T194/T195
9470	39841.11	20146.08	5986.41	T194/T195/T197
9118	39656.47	20152.40	5994.28	T195/T196/T198
9472	39655.12	20157.33	5994.00	T195/T196/T198
9112	39823.35	20147.39	5987.58	T195/T197/T198
9471	39822.78	20147.93	5987.17	T195/T197/T198
9466	39596.68	20144.59	5996.52	T196/T190/T191
9319	39454.68	20150.49	5995.15	T196/T190/T208
9467	39653.69	20144.75	5994.15	T196/T195/T191
9120	39621.89	20153.70	5995.85	T196/T198/T199
9473	39623.30	20157.40	5995.44	T196/T198/T223
9475	39454.89	20154.44	5994.74	T196/T222/T223A
9474	39579.74	20157.71	5997.79	T196/T223/T223A
9110	39841.51	20147.16	5986.79	T197/T195/T194
9318	39454.91	20163.78	5994.81	T199/T196/T208
9316	39416.53	20164.75	5993.76	T199/T210/T208
7241	39328.34	19504.07	5993.08	T2/T22
7230	39335.49	19491.73	5993.66	T2/T3
7247	39597.33	19518.66	5986.42	T20/T24
9113	39823.32	20160.48	5987.47	T200/T201/T198DT197
9300	39829.88	20185.81	5987.42	T200/T201/T204
9299	39842.82	20186.14	5986.82	T200/T203/T204
9119	39637.82	20166.60	5995.30	T201/T202/T198
9488	39642.16	20184.65	5995.04	T201/T204/T225
9491	39826.43	20173.31	5987.06	T201/T204/T6
9487	39637.27	20184.37	5995.24	T201/T224/T225
9490	39826.08	20160.06	5986.98	T201/T4/T5
9121	39621.90	20166.57	5996.10	T202/T198/T199
9304	39621.53	20179.17	5996.31	T202/T198/T199
9303	39637.43	20179.62	5995.55	T202/T201/T198
9492	39842.35	20173.01	5986.45	T202/T203/T204
9317	39434.88	20177.42	5994.10	T202/T212/T199
9306	39435.20	20191.32	5993.72	T202/T212/T214
9305	39449.13	20191.93	5994.04	T202T205/T214
9493	39845.15	20185.49	5986.40	T203/T204/T7
9301	39644.39	20192.63	5995.28	T204/T205/T201
9495	39643.47	20196.90	5994.93	T204/T225/T10
9494	39790.12	20188.38	5988.84	T204/T8/T9
9302	39638.18	20192.64	5995.64	T205/T201/T202
9455	39288.44	20114.12	5990.23	T206/T186/T185
9454	39397.34	20128.03	5994.06	T206/T207/T189/T190
9312	39253.05	20146.06	5988.88	T207/T208/T209
9456	39249.33	20140.93	5988.50	T207/T209/T210
9462	39384.30	20140.61	5993.32	T207/T222/T210
9311	39252.09	20158.58	5988.66	T208/T209/T211
9457	39250.09	20154.50	5988.34	T209/T210/T211
9461	39385.63	20153.61	5992.82	T210/T199/T202
9310	39271.41	20161.38	5989.28	T210/T211/T208
9458	39269.41	20154.27	5989.00	T210/T211/T212
9309	39270.35	20173.78	5989.01	T210/T211/T213
9314	39416.28	20177.57	5993.62	T210/T212/T199
9460	39382.47	20154.04	5992.68	T210/T212/T202
9313	39317.55	20176.53	5990.34	T210/T212/T213
9459	39315.29	20166.08	5990.33	T212/T213/T214
9308	39317.18	20189.20	5990.19	T212/T213/T215
9307	39363.98	20191.55	5991.65	T212/T214/T215
9476	39315.51	20179.13	5989.99	T213/T214/T215
9477	39364.30	20179.69	5991.70	T214/T215/*

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7242	39320.39	19517.04	5992.52	T22/T23
9486	39637.73	20171.73	5995.07	T224/T198/T201
9483	39615.64	20185.13	5996.40	T224/T225/T226
9496	39615.29	20197.33	5996.49	T225/T226/T11
9498	39567.29	20196.30	5997.20	T226/B/T14
9497	39591.49	20196.60	5997.31	T226/T12/T13
9512	39548.29	20222.44	5995.78	T227/T228/T233
9507	39395.45	20219.78	5991.40	T227/T231/T232
9509	39540.75	20223.50	5995.54	T227/T232/T233
9513	39723.46	20220.45	5991.93	T228/T233/T234
9515	39744.86	20218.54	5991.05	T229/T230/T234
9517	39942.89	20208.90	5983.19	T229/T230/T235
9516	39925.12	20209.65	5983.85	T229/T235/T234
9518	40037.19	20200.05	5976.14	T230/T235/T236
9505	39335.50	20219.71	5989.56	T231/T227/T221
9508	39397.04	20233.42	5991.01	T231/T232/T238
9506	39348.77	20232.56	5989.63	T231/T237/T238
9510	39542.04	20236.36	5995.30	T232/T233/T238
9514	39724.84	20232.94	5991.98	T233/T234/T239
9521	39925.68	20223.71	5983.71	T234/T235/T240
9522	39741.92	20232.81	5991.30	T234/T240/T239
9519	40039.36	20212.89	5976.84	T235/T236/T241
9520	39939.32	20223.09	5983.30	T235/T241/T240
9523	39348.66	20246.26	5989.26	T237/T238/T243
9511	39549.66	20236.59	5995.43	T238/T239/T233
9528	39548.70	20250.29	5994.99	T238/T239/T244
9530	39743.35	20245.79	5991.15	T239/T240/T245
9527	39404.67	20247.34	5990.83	T239/T243/T244
9529	39608.34	20251.91	5995.81	T239/T244/T245
7248	39601.42	19531.43	5986.16	T24/T25
9532	39938.39	20235.88	5983.31	T240/T241/T246
9531	39797.84	20242.26	5989.08	T240/T245/T246
9743	40029.09	20228.00	5979.75	T241/T242/T247
9549	39994.46	20231.64	5981.26	T241/T246/T247
9542	39402.62	20260.60	5990.53	T243/T244/T249
9541	39371.63	20260.25	5989.67	T243/T248/T249
9544	39609.05	20264.48	5995.43	T244/T245/T250
9543	39570.97	20264.65	5995.12	T244/T249/T250
9546	39798.08	20255.64	5989.03	T245/T246/T251
9545	39766.71	20257.41	5990.27	T245/T250/T251
9548	39995.76	20245.38	5981.39	T246/T247/T252
9547	39961.56	20248.12	5982.54	T246/T251/T252
9550	40030.11	20240.92	5979.86	T247/T242/T252
9553	39371.44	20272.92	5989.38	T248/T249/T254
9552	39276.74	20273.51	5986.30	T248/T253/T254
9555	39570.82	20276.88	5994.63	T249/T250/T255
9554	39471.68	20276.04	5992.16	T249/T254/T255
9556	39668.61	20276.30	5994.21	T250/T255/T256
9558	39870.10	20265.53	5986.26	T251/T256/T257
9670	40064.97	20250.01	5976.00	T252/T257/T258
9559	39275.67	20286.56	5985.90	T253/T254/T259
9562	39470.67	20289.21	5991.73	T254/T255/T260
9560	39372.55	20285.77	5988.92	T254/T259/T260
9563	39571.44	20290.68	5994.14	T255/T260/T261
9664	39571.39	20290.57	5994.12	T255/T260/T261
9557	39766.49	20270.14	5990.45	T256/T250/T251
9666	39769.13	20283.27	5990.40	T256/T261/T262
9668	39960.64	20261.52	5982.64	T257/T251/T252
9742	40067.13	20262.45	5976.71	T257/T258/T263
9669	39966.75	20273.90	5982.60	T257/T262/T263
9659	39372.29	20299.26	5988.64	T259/T260/T264
7258	39518.81	19544.39	5991.18	T25-T26-T28

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7259	39608.14	19544.80	5986.31	T25-T28
9662	39570.67	20303.38	5993.56	T260/T261/T265
9561	39405.25	20299.47	5989.31	T260/T264/T265
9665	39668.37	20289.62	5993.62	T261/T255/T256
9732	39770.70	20296.40	5990.41	T261/T262/T266
9663	39601.09	20304.23	5993.37	T261/T265/T266
9667	39871.41	20278.46	5986.26	T262/T256/T257
9731	39796.74	20294.81	5989.31	T262/T266/T267
9739	39968.58	20287.28	5982.65	T263/T262/T267
9738	39989.54	20285.79	5981.79	T263/T267/T268
9660	39403.23	20313.01	5988.89	T264/T265/T269
9661	39420.43	20313.91	5989.35	T265/T269/T270
9724	39621.38	20317.73	5992.71	T266/T270/T271
9729	39811.56	20307.12	5988.69	T267/T271/T272
9736	40002.22	20298.92	5981.39	T268/T272/T273
9719	39420.19	20326.71	5989.17	T269/T270/T275
9718	39288.95	20326.62	5985.30	T269/T274/T275
7256	39496.37	19544.53	5991.86	T26-T27-T28
7367	39497.12	19557.84	5991.77	T27/T28/T30
7265	39334.08	19557.28	5994.34	T27/T30/T31
7266	39300.34	19556.33	5991.42	T27/T31
9723	39600.25	20317.55	5992.87	T270/T265/T266
9725	39622.03	20330.32	5992.17	T270/T271/T276
9721	39498.33	20329.28	5991.34	T270/T275/T276
9730	39797.73	20307.76	5989.26	T271/T266/T267
9726	39693.78	20328.22	5991.71	T271/T276/T277
9737	39990.59	20299.38	5981.81	T272/T267/T268
9735	40003.29	20310.90	5981.53	T272/T273/T278
9733	39892.12	20317.68	5985.53	T272/T277/T278
9741	40080.94	20300.00	5977.51	T273/T278/T279
9722	39498.70	20342.25	5990.94	T275/T276/T281
9720	39427.13	20340.12	5988.95	T275/T280/T281
9727	39694.88	20341.22	5991.15	T276/T277/T282
9705	39624.06	20344.61	5991.45	T276/T281/T282
9728	39812.31	20320.90	5988.70	T277/T271/T272
9734	39893.14	20330.97	5985.76	T277/T278/T283
9699	39822.01	20333.81	5988.53	T277/T283/T282
9694	40083.93	20313.07	5978.11	T278/T279/T284
9740	40022.61	20322.55	5980.86	T278/T283/T284
9717	39288.80	20340.01	5984.95	T280/T274/T275
9716	39280.83	20353.12	5984.40	T280/T285/T286
9710	39476.77	20355.87	5990.02	T281/T287/T286
9698	39822.81	20347.75	5988.85	T282/T283/T288
9703	39673.64	20356.10	5990.53	T282/T288/T287
9696	39867.20	20345.57	5987.08	T283/T289/T288
9692	40046.13	20332.29	5979.96	T284/T290/T289
9711	39427.15	20354.26	5988.55	T286/T281/T280
9714	39300.96	20365.51	5984.58	T286/T292/T291
9704	39624.24	20357.49	5991.06	T287/T281/T282
9708	39491.09	20368.70	5989.98	T287/T293/T292
9700	39691.55	20368.67	5989.66	T288/T294/T293
9693	40024.21	20335.76	5980.86	T289/T284/T283
9695	39888.56	20357.46	5986.36	T289/T295/T294
7260	39613.51	19557.68	5985.91	T28-T29
7261	39538.26	19557.75	5990.50	T28-T29-T30
7270	39538.67	19571.27	5990.50	T29/T30/T33
7272	39618.21	19570.64	5985.69	T29/T33
9690	40082.26	20341.41	5978.55	T290/T295/T296
9715	39281.34	20365.57	5984.39	T291/T286/T285
9709	39477.04	20368.42	5989.61	T292/T287/T286
9712	39323.97	20378.53	5984.93	T292/T298/T297
9702	39674.17	20369.32	5989.87	T293/T288/T287

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
9701	39693.34	20381.42	5988.96	T293/T294/T299
9706	39520.25	20382.18	5989.88	T293/T299/T298
9697	39868.94	20358.29	5987.15	T294/T288/T289
9683	39889.39	20370.71	5986.28	T294/T295/T300
9680	39730.10	20379.90	5988.79	T294/T299/T300
9691	40048.58	20345.75	5979.88	T295/T290/T289
9684	39926.18	20368.38	5984.95	T295/T300/T301
9713	39301.02	20378.83	5984.28	T297/T292/T291
9707	39492.18	20381.59	5989.59	T298/T293/T292
9674	39424.86	20394.31	5987.56	T298/T303/T304
9677	39629.94	20397.53	5988.71	T299/T304/T305
7229	39345.52	19478.56	5993.89	T3/T6
7268	39333.59	19570.49	5994.34	T30/T31/T32
7269	39452.43	19570.65	5993.64	T30/T32/T33
9682	39820.67	20386.73	5987.79	T300/T305/T306
9687	40084.34	20353.89	5978.56	T301/T295/T296
9689	40128.40	20346.44	5975.29	T301/T302/T296
9688	40130.24	20359.36	5975.87	T301/T302/T307
9686	40018.41	20375.28	5981.43	T301/T306/T307
9672	39324.53	20391.60	5984.49	T303/T297/T298
9673	39424.79	20407.31	5987.10	T303/T304/T309
9671	39276.19	20405.93	5980.88	T303/T308/T309
9676	39520.64	20395.69	5989.52	T304/T298/T299
9678	39629.11	20410.34	5988.17	T304/T305/T310
9675	39469.80	20408.30	5988.39	T304/T309/T310
9679	39730.94	20393.18	5988.14	T305/T299/T300
9685	39927.57	20381.68	5984.95	T306/T300/T301
7267	39294.67	19569.96	5991.04	T31/T32
7276	39452.37	19583.80	5993.93	T32/T33/T35
7277	39407.15	19583.59	5995.45	T32/T35/T36
7278	39292.62	19583.18	5990.82	T32/T36
7273	39622.63	19583.82	5985.57	T33/T34
7274	39605.60	19584.29	5988.23	T33/T34/T35
7284	39627.98	19596.85	5985.42	T34/T38
7283	39605.67	19597.25	5988.39	T35/T34/T38
7281	39407.43	19597.01	5995.60	T35/T36/T39
7282	39431.50	19597.03	5994.96	T35/T38/T39
3679	39338.92	20523.37	5981.56	T356 T366 T372
3680	39288.13	20523.34	5970.80	T356 T366 T372
3681	39283.60	20523.80	5970.78	T356 T372
7279	39287.44	19596.02	5990.64	T36/T37
8328	39287.26	19595.63	5990.66	T36/T37
8329	39291.51	19598.29	5990.72	T36/T37
7280	39361.01	19597.03	5995.38	T36/T37/T39
3630	40169.97	20512.55	5973.60	T360 T361 T370
3629	40143.44	20512.95	5977.50	T360 T370 T371
3631	40184.36	20513.07	5970.00	T361 T370
3632	40187.67	20513.65	5969.79	T361 T370
3670	39533.68	20535.91	5983.40	T366 T367 T374
3676	39370.58	20536.10	5982.59	T366 T373 T374
3658	39732.62	20534.79	5981.19	T367 T368 T375
3668	39561.85	20535.70	5982.92	T367 T374 T375
3649	39930.07	20531.94	5980.28	T368 T369 T376
3655	39756.59	20534.43	5981.02	T368 T375 T376
3641	40123.71	20527.65	5978.30	T369 T370 T377
3647	39953.90	20532.47	5980.11	T369 T376 T377
7288	39360.75	19609.91	5995.44	T37/T39/T40
7289	39282.45	19608.62	5990.42	T37/T40
3640	40142.86	20525.81	5977.55	T370 T371 T377
3639	40160.26	20525.66	5975.68	T371 T377 T378
3633	40188.58	20526.29	5969.45	T371 T378
3634	40192.22	20526.87	5969.39	T371 T378

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
3678	39339.40	20536.35	5981.02	T372 T366 T373
3682	39293.67	20537.20	5970.54	T372 T373
3683	39288.51	20538.34	5970.48	T372 T373
3677	39369.62	20549.60	5982.15	T373 T374 T379
3684	39299.52	20549.72	5970.37	T373 T379
3685	39294.82	20550.26	5970.36	T373 T379
3669	39562.40	20549.26	5982.32	T374 T375 T380
3674	39447.03	20549.11	5983.74	T374 T379 T380
3656	39757.11	20547.64	5980.44	T375 T376 T381
3664	39642.24	20548.95	5981.42	T375 T380 T381
3648	39954.43	20545.24	5979.44	T376 T377 T382
3651	39834.57	20546.94	5980.06	T376 T381 T382
3638	40159.86	20539.72	5975.97	T377 T378 T383
3643	40029.50	20543.20	5979.27	T377 T382 T383
3635	40189.40	20539.59	5969.42	T378 T383
3673	39446.72	20562.41	5983.12	T379 T380 T384
3686	39304.29	20562.67	5970.11	T379 T384
3687	39300.04	20562.94	5970.10	T379 T384
7286	39431.22	19610.18	5995.28	T38/T39/T41
7366	39635.15	19609.90	5984.90	T38/T42
3665	39641.36	20561.96	5980.97	T380 T381 T385
3672	39490.42	20562.91	5983.27	T380 T384 T385
3653	39835.32	20560.39	5979.49	T381 T382 T386
3660	39685.77	20562.04	5980.44	T381 T385 T386
3644	40030.49	20556.06	5978.67	T382 T383 T387
3650	39881.84	20559.55	5979.47	T382 T386 T387
3642	40083.64	20554.92	5978.30	T383 T387 T388
3636	40193.11	20552.78	5969.07	T383 T388
3637	40196.97	20552.76	5968.90	T383 T388
3699	39491.20	20575.25	5982.94	T384 T385 T390
3695	39309.38	20576.80	5973.26	T384 T389
3696	39309.39	20576.79	5969.88	T384 T389
3697	39305.95	20577.56	5969.74	T384 T389
3698	39375.89	20576.41	5981.38	T384 T389 T390
3701	39687.22	20575.23	5979.95	T385 T386 T391
3700	39566.38	20575.52	5981.57	T385 T390 T391
3703	39882.83	20573.52	5978.85	T386 T387 T392
3702	39762.48	20573.64	5979.26	T386 T391 T392
3705	40084.10	20568.75	5977.83	T387 T388 T393
3704	39960.69	20571.24	5978.61	T387 T392 T393
3706	40154.92	20566.26	5976.58	T388 T393 T394
3712	40195.73	20565.98	5968.86	T388 T394
3713	40199.62	20565.11	5968.85	T388 T394
3777	39374.44	20589.59	5981.06	T389 T390 T395
3788	39316.74	20589.82	5969.67	T389 T395
3789	39312.48	20589.96	5969.60	T389 T395
3765	39566.16	20588.20	5981.16	T390 T391 T396
3771	39456.65	20589.12	5982.53	T390 T395 T396
3753	39763.00	20587.24	5978.62	T391 T392 T397
3759	39661.08	20589.37	5979.70	T391 T396 T397
3742	39961.90	20584.09	5977.91	T392 T393 T398
3748	39849.20	20586.79	5978.34	T392 T397 T398
3728	40155.27	20579.75	5976.20	T393 T394 T399
3737	40041.87	20582.36	5977.44	T393 T398 T399
3716	40198.44	20578.85	5968.71	T394 T399
3717	40201.96	20578.89	5968.55	T394 T399
3772	39457.49	20601.28	5982.26	T395 T396 T400
3786	39323.53	20602.53	5969.50	T395 T400
3787	39319.49	20602.72	5969.40	T395 T400
3760	39661.75	20601.90	5978.99	T396 T397 T401
3770	39513.52	20601.57	5981.51	T396 T400 T401
3747	39849.45	20599.58	5977.61	T397 T398 T402

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
3758	39703.91	20601.07	5978.40	T397 T401 T402
3736	40042.13	20595.56	5976.57	T398 T399 T403
3746	39895.05	20598.78	5977.30	T398 T402 T403
3733	40093.30	20595.06	5976.28	T399 T403 T404
3732	40124.56	20594.66	5976.21	T399 T404 T405
3718	40201.00	20590.87	5968.51	T399 T405
3719	40204.42	20590.80	5968.37	T399 T405
7225	39580.39	19478.98	5986.78	T4/T5
8330	39281.75	19608.73	5990.40	T40/T37
8331	39287.13	19610.63	5990.51	T40/T37
7287	39404.30	19610.17	5996.04	T40/T41/T39
7302	39403.44	19623.80	5996.32	T40/T41/T43
7301	39277.13	19621.78	5990.08	T40/T43
8332	39277.26	19621.93	5990.11	T40/T43
8333	39281.98	19623.95	5990.25	T40/T43
3769	39513.36	20614.16	5981.12	T400 T401 T407
3784	39330.87	20614.93	5969.23	T400 T406
3785	39327.15	20614.72	5969.23	T400 T406
3776	39427.97	20615.37	5981.53	T400 T406 T407
3757	39704.68	20614.80	5977.86	T401 T402 T407
3761	39631.91	20615.30	5978.93	T401 T407 T408
3745	39895.46	20611.38	5976.42	T402 T403 T409
3749	39826.73	20612.56	5976.68	T402 T408 T409
3734	40093.16	20608.01	5975.68	T403 T404 T410
3741	40020.76	20609.59	5976.05	T403 T409 T410
3731	40125.23	20607.47	5975.57	T404 T405 T410
3720	40203.79	20603.98	5968.44	T405 T410
3721	40206.96	20603.73	5968.12	T405 T410
3775	39428.51	20628.66	5981.16	T406 T407 T411
3782	39338.57	20628.78	5968.87	T406 T411
3783	39334.96	20628.22	5968.75	T406 T411
3762	39632.13	20627.53	5978.53	T407 T408 T412
3768	39525.93	20628.03	5980.36	T407 T411 T412
3750	39828.29	20625.77	5976.07	T408 T409 T413
3756	39721.49	20626.97	5977.13	T408 T412 T413
3740	40021.29	20622.36	5975.17	T409 T410 T414
3744	39918.15	20624.16	5975.75	T409 T413 T414
7305	39597.13	19623.69	5989.09	T41/T42/T44
7303	39414.99	19623.51	5995.93	T41/T43/T45
7304	39450.89	19624.05	5994.43	T41/T44/T45
3722	40208.08	20617.04	5968.02	T410 T415
3723	40211.67	20617.05	5967.96	T410 T415
3767	39526.94	20640.33	5979.82	T411 T412 T417
3780	39344.62	20642.20	5968.45	T411 T416
3781	39340.73	20642.66	5968.37	T411 T416
3774	39424.21	20641.76	5980.73	T411 T416 T417
3755	39722.86	20640.75	5976.62	T412 T413 T418
3763	39619.80	20641.08	5978.30	T412 T417 T418
3743	39918.75	20637.84	5975.08	T413 T414 T419
3751	39823.39	20638.79	5975.62	T413 T418 T419
3735	40115.46	20621.12	5974.82	T414 T415 T410
3730	40115.94	20634.12	5973.89	T414 T415 T420
3738	40020.92	20635.44	5974.50	T414 T419 T420
3724	40211.50	20629.91	5967.94	T415 T420
3725	40215.29	20629.76	5967.91	T415 T420
3773	39423.52	20654.62	5980.37	T416 T417 T421
3778	39350.50	20655.40	5967.83	T416 T421
3779	39346.78	20655.91	5967.95	T416 T421
3764	39619.20	20654.03	5977.83	T417 T418 T422
3766	39538.60	20653.38	5978.99	T417 T421 T422
3752	39822.91	20652.36	5975.09	T418 T419 T423
3754	39741.95	20653.61	5975.70	T418 T422 T423

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
3739	40020.73	20648.35	5973.98	T419 T420 T424
2280	39939.34	20650.01	5974.65	T419\T423\T424
7285	39597.54	19610.58	5988.92	T42/T41/T38
7306	39641.95	19623.78	5984.64	T42/T44
3729	40141.35	20646.40	5973.20	T420 T424 T425
3726	40214.55	20642.17	5967.81	T420 T425
3727	40218.64	20642.78	5967.79	T420 T425
3846	39356.87	20668.36	5967.79	T421 T426
3847	39351.26	20668.45	5967.76	T421 T426
3840	39939.25	20663.66	5973.87	T423 T424 T428
3843	40141.66	20659.75	5972.93	T424 T425 T430 T429
3841	39941.49	20663.70	5973.88	T424 T428 T429
3842	40133.85	20659.77	5972.97	T424 T429 T430
3844	40214.90	20657.54	5967.93	T425 T430
3845	40219.91	20657.29	5967.72	T425 T430
3838	39540.51	20667.85	5978.24	T426 T427 T421 T422
4770	39540.84	20680.70	5977.97	T426 T427 T492
4771	39363.39	20682.16	5967.57	T426 T492
4772	39359.63	20682.37	5967.61	T426 T492
3839	39742.29	20667.09	5975.46	T427 T428 T421 T423
4768	39743.15	20680.32	5974.93	T427 T428 T493
4769	39547.92	20681.06	5977.81	T427 T492 T493
4767	39756.17	20679.69	5974.83	T428 T493 T494
5356	39942.41	20679.97	5972.97	T428T429T568
5355	39932.10	20679.90	5973.13	T428T567T568
5379	40135.69	20674.51	5972.41	T429T430T606
5357	39945.33	20679.49	5973.09	T429T568T571
5358	39959.22	20678.99	5973.08	T429T571T572
5360	39973.14	20678.77	5972.93	T429T572T573
5361	39986.27	20678.89	5972.77	T429T573T575
5362	39999.62	20679.26	5972.60	T429T575T577
5363	40014.33	20679.45	5972.44	T429T577T579
5364	40028.31	20679.83	5972.34	T429T579T580
5365	40041.18	20679.81	5972.27	T429T580T581
5366	40055.20	20679.58	5972.30	T429T581T582
5367	40068.68	20679.07	5972.34	T429T582T583
5369	40082.39	20677.48	5972.46	T429T583T605
7310	39414.79	19636.72	5996.20	T43/T45/T47
7312	39270.75	19635.60	5989.74	T43/T46
8334	39270.96	19635.30	5989.81	T43/T46
8335	39275.05	19637.22	5989.77	T43/T46
7311	39412.38	19636.68	5996.25	T43/T46/T47
5382	40224.95	20670.36	5967.29	T430T604
4437	39520.27	21076.07	5963.66	T431 T432
4438	39516.61	21077.86	5963.52	T431 T432
4490	39689.48	21049.62	5949.68	T431 T432
4440	39569.42	21054.21	5967.36	T431 T440 T441
4441	39694.12	21035.35	5947.58	T431 T441
4487	39525.86	21089.06	5963.76	T432 T433
4488	39520.78	21090.58	5963.14	T432 T433
4489	39540.72	21087.31	5967.11	T432 T433 T434
4435	39525.67	21089.14	5963.71	T432 T434
4436	39520.75	21090.63	5963.14	T432 T434
4432	39542.45	21100.13	5966.54	T433 T434 T436
4433	39528.14	21102.47	5963.15	T433 T436
4434	39523.06	21103.50	5962.99	T433 T436
4430	39660.62	21081.26	5956.36	T434 T435
4431	39602.22	21089.88	5965.88	T434 T435 T436
4422	39604.97	21102.83	5965.34	T435 T436 T437
4421	39637.16	21098.20	5961.71	T435 T437
4428	39532.07	21115.79	5962.90	T436 T437
4429	39527.13	21115.98	5962.71	T436 T437

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4420	39625.04	21113.29	5963.75	T437 T438
4423	39536.40	21128.23	5962.72	T437 T438
4424	39530.90	21129.27	5962.35	T437 T438
4416	39540.51	21141.31	5962.22	T438 T439
4417	39535.27	21141.94	5962.04	T438 T439
4418	39582.12	21135.17	5966.30	T438 T439
4419	39565.81	21149.37	5966.17	T439
4425	39528.28	21156.90	5962.37	T439
4426	39542.35	21154.09	5962.21	T439
4427	39536.03	21154.92	5961.97	T439
7309	39450.38	19637.31	5994.58	T44/T45/T47
7308	39610.11	19637.72	5988.79	T44/T47/T49
7307	39650.27	19635.87	5984.42	T44/T49
4439	39529.48	21061.03	5967.10	T440 T431
4445	39567.53	21041.78	5967.55	T440 T441 T443
4446	39534.58	21046.87	5968.36	T440 T443
4442	39709.41	21019.22	5944.48	T441 T442
4444	39669.35	21024.99	5953.27	T441 T442 T443
4448	39667.17	21012.91	5953.85	T442 T443 T445
4443	39714.13	21004.64	5943.23	T442 T444
4449	39669.21	21012.41	5953.22	T442 T444 T445
4447	39534.96	21032.78	5968.57	T443 T445
4452	39667.70	20998.96	5953.39	T444 T445 T447
4450	39718.20	20990.58	5942.11	T444 T446
4451	39670.96	20998.12	5952.57	T444 T446 T447
4453	39534.56	21019.43	5969.06	T445 T447
4455	39669.29	20985.35	5952.95	T446 T447 T449
4457	39722.17	20976.57	5941.36	T446 T448
4456	39677.84	20983.49	5950.62	T446 T448 T449
4454	39534.54	21005.51	5969.13	T447 T449
4463	39675.34	20970.37	5951.38	T448 T449 T450 T451
4458	39715.09	20963.86	5942.08	T448 T450 DT7K
4462	39731.20	20966.27	5940.58	T448 T460
4460	39722.64	20962.79	5940.81	T448 T460 DT7K
4464	39535.26	20992.18	5969.27	T449 T451
4465	39534.66	20978.20	5969.12	T449 T451
4468	39701.25	20953.08	5945.47	T450 T452 T460
4459	39715.27	20959.50	5942.16	T450 T460 DT7K
4466	39653.50	20959.85	5957.30	T451 T452 T453
4467	39672.75	20957.79	5952.26	T451 T452 T453
4491	39534.83	20978.18	5969.11	T451 T453
4470	39651.98	20947.08	5957.81	T452 T453 T454
4469	39680.40	20943.62	5951.08	T452 T454 T460
4471	39604.71	20953.36	5967.43	T453 T454 T455
4472	39535.61	20964.64	5969.14	T453 T455
4474	39602.77	20940.81	5967.78	T454 T455 T456
4475	39657.36	20933.53	5957.00	T454 T456 T460
4473	39535.34	20951.82	5968.86	T455 T456
4477	39535.44	20938.01	5969.11	T456 T457
4476	39632.96	20923.18	5963.09	T456 T457 T460
4478	39535.47	20923.94	5969.47	T457 T458
4479	39609.58	20913.32	5968.64	T457 T458 T460
4486	39535.51	20917.00	5969.44	T458
4480	39547.89	20908.25	5969.58	T458 T459
4481	39562.35	20906.20	5969.46	T458 T459 T461
4483	39586.46	20902.79	5969.18	T458 T460 T461
4485	39561.23	20897.50	5969.53	T459 T461
7314	39411.69	19650.21	5996.42	T46/T47/T48
7313	39265.32	19648.72	5989.47	T46/T48
8336	39265.41	19648.24	5989.40	T46/T48
8337	39270.78	19650.77	5989.52	T46/T48
4484	39566.50	20893.96	5969.65	T460 T461

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4492	39578.11	20885.08	5969.39	T460 T462
4493	39742.66	20956.76	5939.27	T460 T462
4516	39590.12	20875.57	5969.74	T462 T463
4494	39742.34	20942.80	5939.62	T462 T463 T473
4495	39753.41	20948.07	5938.35	T462 T473
4514	39602.89	20866.38	5970.16	T463 T464
4515	39615.31	20872.63	5969.81	T463 T464 T465
4496	39734.28	20925.74	5943.46	T463 T465 T473
4512	39620.72	20860.71	5970.24	T464 T465 T466
4513	39614.33	20857.71	5970.26	T464 T466
4511	39667.00	20881.94	5963.72	T465 T466 T467
4497	39724.80	20906.79	5948.41	T465 T467 T473
4510	39672.85	20869.24	5964.78	T466 T467 T468
4509	39627.28	20848.36	5970.31	T466 T468
4499	39714.79	20887.86	5953.73	T467 T468 T474
4498	39716.89	20890.60	5952.80	T467 T473 T474
4508	39638.83	20839.32	5970.46	T468 T469
4507	39672.51	20854.74	5967.17	T468 T469 T470
4500	39705.13	20868.70	5958.78	T468 T470 T474
4506	39677.93	20842.68	5968.33	T469 T470 T471
4505	39650.85	20829.75	5970.56	T469 T471
7315	39446.33	19650.26	5994.82	T47/T48/T50
7321	39609.84	19650.59	5989.05	T47/T49/T52
7316	39603.13	19650.15	5989.41	T47/T50/T52
4501	39695.86	20850.45	5963.74	T470 T471 T474
4504	39662.92	20820.96	5970.81	T471 T472
4502	39686.36	20831.70	5968.69	T471 T472 T474
4503	39676.49	20810.85	5971.36	T472 T474
4519	39727.94	20884.77	5952.38	T473 T474 T475
4520	39759.15	20946.94	5937.96	T473 T475
4518	39713.02	20855.26	5960.68	T474 T475 T476
4517	39686.72	20802.98	5971.51	T474 T476
4521	39724.76	20849.66	5960.96	T475 T476 T477
4533	39770.98	20941.99	5937.10	T475 T477
4522	39713.76	20826.62	5967.30	T476 T477 T478
4523	39697.84	20795.04	5971.32	T476 T478
4526	39725.85	20820.98	5967.25	T477 T478 T479
4532	39784.47	20939.24	5936.26	T477 T479
4525	39711.54	20792.89	5971.66	T478 T479 T480
4524	39708.78	20787.67	5971.86	T478 T480
4527	39723.25	20786.44	5971.74	T479 T480 T481
4531	39798.45	20937.44	5935.33	T479 T481
8021	39265.51	19648.27	5989.42	T48/T46
7323	39445.43	19663.59	5995.06	T48/T50/T51
7324	39260.53	19661.93	5989.16	T48/T51
8338	39260.80	19661.64	5989.12	T48/T51
8339	39265.32	19663.80	5989.14	T48/T51
4528	39719.11	20778.34	5972.14	T480 T481
4529	39730.10	20770.13	5972.40	T481 T482
4530	39812.07	20935.30	5934.51	T481 T482
4651	39824.34	20931.11	5933.56	T482 T483
4615	39744.20	20768.68	5972.18	T482 T483 T484
4614	39740.35	20762.64	5972.40	T482 T484
4616	39755.15	20763.70	5972.09	T483 T484 T485
4617	39755.65	20764.99	5971.95	T483 T485 T486
4626	39836.63	20925.61	5933.30	T483 T486
4620	39750.61	20754.53	5972.06	T484 T485
4618	39768.32	20758.97	5971.87	T485 T486 T488
4619	39767.07	20755.93	5972.03	T485 T487 T488
4627	39851.54	20926.17	5932.14	T486 T488
4621	39778.35	20750.81	5972.00	T487 T488 T490
4622	39777.82	20749.32	5972.05	T487 T488 T490

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4623	39772.67	20738.26	5972.54	T487 T489
4652	39863.02	20918.54	5931.71	T488 T490
4624	39789.72	20743.00	5972.35	T489 T490 T491
4625	39783.26	20730.22	5972.82	T489 T491
7317	39657.11	19648.63	5984.22	T49/T52
4653	39875.74	20916.04	5930.90	T490 T491
5226	39852.06	20838.08	5950.80	T491 T547 T548
5223	39794.78	20722.82	5972.68	T491 T548
5471	39861.03	20856.56	5945.28	T491T547T627
5461	39887.07	20911.03	5930.73	T491T627
4778	39548.10	20695.48	5977.15	T492 T493 T496
4773	39368.98	20694.69	5967.65	T492 T495
4774	39363.86	20695.76	5967.25	T492 T495
4777	39467.90	20695.29	5978.68	T492 T495 T496
4780	39756.65	20693.54	5974.29	T493 T494 T497
4779	39664.42	20695.22	5975.53	T493 T496 T497
4781	39829.56	20693.03	5972.92	T494 T497
4788	39467.89	20708.38	5978.21	T495 T496 T499
4790	39374.48	20707.62	5967.38	T495 T498
4791	39369.46	20709.38	5967.25	T495 T498
4789	39388.85	20708.31	5971.54	T495 T498 T499
4786	39664.51	20708.40	5974.94	T496 T497 T500
4787	39591.00	20707.90	5976.22	T496 T499 T500
4785	39794.12	20706.56	5973.26	T497 T500 T501
4784	39811.64	20706.30	5972.99	T497 T501
4794	39389.06	20721.13	5969.96	T498 T499 T502
4792	39380.48	20720.90	5967.42	T498 T502
4793	39375.83	20721.04	5967.11	T498 T502
4797	39590.35	20721.75	5975.86	T499 T500 T503
4796	39553.30	20722.16	5976.30	T499 T502 T503
7224	39573.01	19465.89	5987.01	T5/T7
7322	39474.32	19663.89	5994.26	T50/T51/T53
7320	39602.72	19663.48	5989.62	T50/T52/T53
4800	39795.25	20717.46	5972.93	T500 T501
4798	39740.52	20720.24	5973.45	T500 T503 T504
4799	39791.55	20720.11	5972.82	T500 T504
4806	39383.74	20734.05	5967.16	T502 T505
4807	39377.51	20734.25	5966.84	T502 T505
4805	39505.27	20734.95	5976.44	T502 T505 T506
4802	39740.25	20734.05	5973.07	T503 T504 T507
4803	39700.49	20734.72	5973.67	T503 T506 T507
4801	39771.84	20733.45	5972.71	T504 T507
4814	39504.50	20748.42	5975.89	T505 T506 T509
4809	39390.78	20747.47	5967.07	T505 T508
4810	39386.17	20747.34	5966.90	T505 T508
4813	39489.95	20748.10	5976.14	T505 T508 T509
4816	39700.68	20748.61	5973.18	T506 T507 T510
4815	39691.74	20748.95	5973.31	T506 T509 T510
4817	39753.06	20747.46	5972.17	T507 T510
4822	39489.60	20761.77	5975.62	T508 T509 T511
4823	39395.73	20760.70	5967.01	T508 T511
4824	39390.95	20759.89	5966.63	T508 T511
4820	39693.29	20762.30	5972.74	T509 T510 T512
4821	39507.54	20762.24	5975.30	T509 T511 T512
8020	39260.87	19661.51	5989.11	T51/T48
7327	39474.23	19677.00	5994.43	T51/T53/T56
7325	39256.18	19674.27	5988.82	T51/T54
8340	39256.05	19674.61	5988.69	T51/T54
8341	39259.80	19676.15	5988.87	T51/T54
7326	39454.36	19677.45	5995.06	T51/T54/T56
4819	39705.28	20761.98	5972.77	T510 T512 T513
4818	39735.87	20760.92	5972.17	T510 T513

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4827	39507.04	20775.45	5974.98	T511 T512 T514
4825	39402.28	20773.96	5966.98	T511 T514
4826	39397.18	20774.01	5966.70	T511 T514
4829	39705.16	20774.83	5972.31	T512 T513 T515
4828	39558.89	20775.30	5974.04	T512 T514 T515
4830	39715.67	20775.22	5972.12	T513 T515
4834	39559.37	20788.68	5973.66	T514 T515 T517
4832	39407.72	20787.64	5966.86	T514 T516
4833	39402.42	20787.54	5966.72	T514 T516
4831	39438.43	20788.94	5973.80	T514 T516 T517
4835	39643.88	20789.14	5972.36	T515 T517 T518
4836	39701.90	20788.46	5971.76	T515 T518
4840	39437.97	20801.49	5972.34	T516 T517 T519
4841	39413.69	20800.81	5966.75	T516 T519
4842	39407.54	20801.15	5966.47	T516 T519
4838	39643.31	20801.61	5972.08	T517 T518 T520
4839	39540.08	20801.97	5973.39	T517 T519 T520
4837	39683.64	20801.48	5971.33	T518 T520
4846	39540.36	20815.38	5972.92	T519 T520 T522
4843	39421.64	20814.05	5966.78	T519 T521
4844	39416.57	20814.14	5966.30	T519 T521
4845	39462.48	20815.18	5974.39	T519 T521 T522
7319	39604.37	19663.45	5989.58	T52/T53/T55
7318	39664.69	19661.45	5983.96	T52/T55
4847	39665.36	20815.01	5971.20	T520 T522
4850	39462.31	20828.92	5973.93	T521 T522 T523
4851	39427.10	20828.79	5966.31	T521 T523
4852	39421.84	20827.98	5966.01	T521 T523
4849	39616.06	20828.64	5971.32	T522 T523 T524
4848	39645.45	20828.87	5970.86	T522 T524
4856	39615.39	20841.90	5970.73	T523 T524 T526
4853	39432.85	20841.89	5966.18	T523 T525
4854	39427.06	20841.79	5965.85	T523 T525
4855	39584.12	20841.57	5971.34	T523 T525 T526
4857	39628.63	20842.36	5970.53	T524 T526
4861	39438.61	20855.53	5965.86	T525 T527
4862	39432.95	20854.80	5965.84	T525 T527
4860	39573.78	20854.85	5970.99	T525 T527 T528
4859	39584.19	20854.97	5970.78	T526 T525 T528
4858	39611.87	20854.60	5970.43	T526 T528
4870	39573.02	20868.02	5970.31	T527 T528 T530
4871	39443.88	20868.37	5965.86	T527 T529
4872	39438.85	20866.90	5965.56	T527 T529
4869	39568.29	20868.15	5970.47	T527 T529 T530
4868	39595.40	20867.87	5970.01	T528 T530
4876	39568.26	20880.69	5969.91	T529 T530 T531
4874	39446.61	20881.50	5965.66	T529 T531
4875	39441.61	20881.43	5965.27	T529 T531
7329	39604.78	19676.62	5989.60	T53/T55/T57
7328	39588.67	19677.20	5990.15	T53/T56/T57
4877	39576.64	20881.61	5969.63	T530 T531
4880	39453.05	20894.84	5965.73	T531 T532
4881	39448.22	20895.80	5965.33	T531 T532
4879	39470.94	20895.31	5968.73	T531 T532 T533
4878	39558.12	20894.56	5969.50	T531 T533
4884	39471.10	20908.35	5967.74	T532 T533 T534
4882	39457.20	20908.07	5965.62	T532 T534
4883	39452.19	20907.35	5965.27	T532 T534
4885	39540.85	20908.54	5969.42	T533 T534
4886	39532.36	20921.45	5969.38	T534 T535
4887	39516.64	20921.33	5969.87	T534 T535 T536
4888	39461.84	20920.32	5965.33	T534 T536

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
4889	39457.07	20920.56	5965.27	T534 T536
4892	39516.58	20934.12	5969.64	T535 T536 T537
4893	39532.93	20934.53	5968.94	T535 T537
4890	39468.80	20933.89	5965.31	T536 T537
4891	39463.37	20934.01	5965.12	T536 T537
4896	39472.97	20946.43	5964.98	T537 T538
4897	39467.93	20947.16	5964.95	T537 T538
4895	39510.77	20947.57	5969.80	T537 T538 T539
4894	39531.69	20947.18	5969.08	T537 T539
4900	39511.06	20960.32	5969.58	T538 T539 T540
4898	39478.74	20960.66	5964.74	T538 T540
4899	39473.61	20961.09	5964.67	T538 T540
4901	39532.08	20960.54	5969.12	T539 T540
7334	39454.05	19690.27	5995.33	T54/T56/T59
7335	39396.89	19690.03	5997.07	T54/T59/T60
7336	39250.13	19687.54	5988.45	T54/T60
8342	39250.23	19687.52	5988.42	T54/T60
8343	39254.71	19689.97	5988.49	T54/T60
4902	39531.71	20974.53	5969.12	T540 T541
4903	39483.07	20973.60	5964.67	T540 T541
4904	39478.41	20973.97	5964.56	T540 T541
4905	39487.49	20987.12	5964.54	T541 T542
4906	39483.26	20987.30	5964.48	T541 T542
4907	39531.29	20987.67	5969.11	T541 T542
4908	39531.31	20987.71	5969.09	T541 T542
4909	39531.65	21000.92	5968.86	T542 T543
4910	39493.14	21000.16	5964.53	T542 T543
4911	39488.45	21000.18	5964.38	T542 T543
4912	39497.42	21013.00	5964.12	T543 T544
4913	39492.60	21013.57	5964.32	T543 T544
4915	39531.52	21013.91	5968.87	T543 T544
4916	39531.60	21027.41	5968.58	T544 T545
4917	39503.25	21026.46	5964.03	T544 T545
4918	39498.32	21026.35	5964.15	T544 T545
4919	39508.22	21039.30	5963.98	T545 T546
4920	39503.56	21039.67	5963.95	T545 T546
4921	39531.75	21040.69	5967.66	T545 T546
4922	39529.41	21050.35	5967.06	T546
5227	39863.72	20832.77	5950.81	T547 T548 T549
5468	39873.08	20851.00	5945.33	T547T549T627
5228	39852.20	20808.37	5957.69	T548 T549 T550
5224	39805.47	20714.75	5972.55	T548 T550
5229	39863.78	20803.23	5957.94	T549 T550
5233	39871.91	20818.19	5953.67	T549 T551 T552
5465	39875.15	20853.75	5944.58	T549T626T627
7330	39675.89	19674.49	5983.80	T55/T57
7954	39652.70	19675.39	5987.64	T55/T57
5225	39816.29	20707.01	5972.85	T550 T552
5232	39883.84	20812.30	5953.91	T551 T552 T555
5235	39889.11	20825.05	5950.44	T551 T553 T554
5272	39916.42	20879.69	5935.86	T551 T553 T558
5234	39887.34	20819.36	5951.92	T551 T554 T555
5273	39920.71	20895.13	5932.30	T551 T558
5464	39886.15	20847.84	5945.13	T551T549T626
5462	39904.56	20883.57	5935.66	T551T553T626
5463	39901.29	20877.23	5937.45	T551T553T626
5231	39873.27	20791.92	5959.92	T552 T555 T556
5230	39856.90	20757.80	5968.96	T552 T556 T557
5236	39901.55	20821.24	5950.27	T553 T554 T558
5237	39880.03	20790.29	5959.58	T554 T555 T556
5244	39855.63	20694.02	5972.38	T554 T556
5285	39854.35	20690.44	5972.64	T554 T556

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
5246	39872.64	20709.36	5972.29	T554 T556 T562
5245	39869.38	20696.15	5972.49	T554 T562
5286	39868.30	20692.42	5972.39	T554 T562
5242	39841.57	20691.80	5972.65	T556 T557
5284	39839.97	20688.29	5973.11	T556 T557 T*
5243	39837.03	20691.01	5972.91	T557
5247	39933.23	20891.46	5933.06	T558 T559
5253	39886.73	20710.96	5972.09	T558 T559 T563
5252	39884.74	20706.44	5972.04	T558 T562 T563
5248	39946.54	20888.67	5933.94	T559 T560
5256	39899.77	20709.28	5972.01	T559 T560 T564
5255	39898.65	20707.81	5972.01	T559 T563 T564
7333	39589.03	19690.05	5990.38	T56/T57/T59
5249	39958.49	20883.41	5935.00	T560 T561
5260	39914.01	20714.26	5971.72	T560 T561 T565
5257	39912.09	20706.72	5971.92	T560 T564 T565
5262	39926.81	20711.33	5971.64	T561 T565 T567
5250	39971.39	20880.13	5936.24	T561 T566
5263	39959.78	20836.79	5945.42	T561 T566 T567
5251	39883.11	20697.75	5972.07	T562 T563
5287	39881.72	20694.15	5972.55	T562 T563
5254	39896.93	20699.21	5972.07	T563 T564
5288	39895.41	20695.61	5972.27	T563 T564
5258	39910.18	20700.07	5971.91	T564 T565
5259	39910.20	20700.32	5971.88	T564 T565
5289	39909.04	20696.53	5972.10	T564 T565
5261	39924.70	20702.74	5971.80	T565 T567
5290	39923.19	20698.63	5972.02	T565 T567
5354	39918.31	20680.40	5973.09	T565T567T428
5264	39972.58	20833.81	5945.84	T566 T567 T568
5265	39977.25	20851.45	5941.41	T566 T568 T569
5266	39984.61	20877.83	5937.78	T566 T569
5267	39938.42	20704.49	5971.59	T567 T568
5291	39937.21	20701.14	5971.92	T567 T568
5269	39990.20	20848.44	5942.05	T568 T569 T571
5268	39952.54	20706.20	5971.64	T568 T571
5292	39951.51	20702.92	5971.67	T568 T571
5271	39997.63	20873.86	5938.89	T569 T570
5270	39993.97	20861.23	5939.78	T569 T570 T571
8229	39675.37	19674.22	5983.85	T57/T55
8230	39670.39	19677.41	5983.97	T57/T55
7331	39685.71	19687.77	5983.50	T57/T58
8231	39685.15	19687.42	5983.74	T57/T58
8232	39680.31	19690.74	5983.85	T57/T58
7332	39594.01	19690.53	5990.22	T57/T58/T59
5406	40006.71	20858.02	5940.94	T570T571T572T584
5275	39967.29	20708.43	5971.44	T571 T572
5293	39965.93	20704.96	5971.38	T571 T572
5407	40000.69	20869.44	5939.04	T571T584T607
5276	39981.20	20710.68	5971.00	T572 T573
5294	39979.56	20705.98	5971.43	T572 T573
5404	40016.57	20844.31	5943.71	T572T573T587
5405	40008.87	20853.88	5941.47	T572T584T587
5306	40020.47	20806.82	5951.68	T573 T574 T575
5277	39995.53	20712.35	5970.83	T573 T575
5295	39993.86	20708.78	5971.19	T573 T575
5402	40025.81	20827.30	5947.13	T573T574T589
5403	40019.40	20838.61	5944.84	T573T587T589
5307	40032.74	20803.51	5952.42	T574 T575 T576
5400	40035.32	20813.13	5950.43	T574T576T590
5401	40027.46	20824.17	5947.70	T574T589T590
5304	40020.16	20753.84	5965.17	T575 T576 T577

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
5278	40010.07	20714.28	5970.42	T575 T577
5296	40008.66	20710.61	5970.86	T575 T577
5305	40032.52	20750.58	5965.60	T576 T577 T578
5398	40045.09	20798.26	5953.85	T576T578T592
5399	40038.22	20809.09	5951.44	T576T590T592
5279	40023.37	20715.84	5970.28	T577 T578
5297	40022.64	20712.68	5970.73	T577 T578
5298	40017.44	20693.07	5971.88	T577 T578 T579
5299	40030.07	20691.15	5971.92	T578 T579 T560
5280	40037.43	20717.31	5970.37	T578 T580
5300	40036.28	20713.65	5970.76	T578 T580
5396	40054.55	20782.43	5957.59	T578T580T594
5397	40048.41	20793.55	5954.98	T578T592T594
8062	39684.64	19687.20	5983.65	T58/T57
7968	39593.92	19703.31	5990.34	T58/T59/T61
8063	39693.68	19699.90	5983.48	T58/T61
8233	39693.57	19699.93	5983.43	T58/T61
8234	39688.79	19703.70	5983.83	T58/T61
5281	40051.10	20718.74	5970.16	T580 T581
5301	40050.35	20714.86	5970.68	T580 T581
5394	40064.99	20766.95	5961.47	T580T581T596
5395	40058.58	20777.77	5958.75	T580T594T596
5282	40065.13	20719.98	5970.01	T581 T582
5302	40064.06	20716.53	5970.53	T581 T582
5392	40074.80	20752.46	5965.24	T581T582T598
5393	40068.46	20761.84	5962.75	T581T598T596
5283	40078.89	20721.28	5970.27	T582 T583
5303	40077.67	20718.30	5970.71	T582 T583
5391	40078.30	20746.13	5966.63	T582T598T599
5390	40083.18	20738.85	5968.40	T583T582T599
5389	40090.14	20731.44	5970.17	T583T599
5373	40094.58	20729.89	5970.40	T583T599T600
5372	40092.15	20718.48	5970.67	T583T600T602
5371	40089.22	20705.31	5971.25	T583T602T604
5370	40085.46	20692.76	5971.81	T583T604T605
5315	40159.51	20823.71	5967.08	T584 T585 T587
5317	40197.06	20816.96	5966.48	T585 T586
5314	40165.51	20822.26	5967.15	T585 T586 T587
5422	40208.51	20827.46	5965.60	T585T607
5423	40162.18	20835.97	5966.76	T585T607T584
5316	40162.79	20809.52	5967.48	T586 T587 T588
5318	40197.30	20802.82	5966.81	T586 T588
5308	40065.24	20830.37	5956.21	T587 T588 T589
5309	40062.16	20817.09	5956.39	T588 T589 T590
5310	40086.07	20812.38	5962.82	T588 T590 T591
5319	40198.18	20789.46	5966.88	T588 T591
7962	39396.69	19702.60	5997.25	T59/T60/T63
7966	39503.99	19702.66	5993.74	T59/T61/T63
5311	40083.00	20799.45	5963.03	T590 T591 T592
5312	40112.04	20793.59	5968.03	T591 T592 T593
5320	40183.67	20778.49	5967.56	T591 T593
5321	40189.77	20779.22	5967.47	T591 T593
5322	40205.24	20776.37	5966.57	T591 T593
5388	40112.73	20793.24	5967.96	T591T592T593
5313	40108.58	20780.84	5968.36	T592 T593 T594
5387	40109.31	20780.73	5968.42	T592T593T594
5330	40136.75	20774.90	5968.43	T593 T594 T595
5323	40168.33	20768.36	5968.39	T593 T595
5324	40177.89	20767.91	5967.91	T593 T595
5325	40207.20	20762.66	5966.79	T593 T595
5386	40136.09	20774.82	5968.45	T593T594T595
5331	40133.63	20761.72	5969.05	T594 T595 T596

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
5328	40157.06	20757.39	5968.81	T595 T596
5329	40150.42	20758.33	5968.93	T595 T596
5327	40170.60	20754.79	5968.77	T595 T596 T597
5326	40210.21	20748.86	5966.85	T595 T597
5334	40167.68	20742.38	5969.17	T596 T597 T598
5332	40134.02	20748.80	5969.61	T596 T598
5333	40140.34	20748.09	5969.47	T596 T598
5335	40212.96	20734.82	5966.87	T597 T598
5336	40119.44	20739.61	5969.63	T598 T59
5337	40123.59	20738.34	5969.87	T598 T59
5338	40212.19	20721.68	5967.22	T598 T59
5374	40146.26	20719.66	5970.67	T599T600T601
5375	40219.56	20707.22	5966.92	T599T601
7220	39360.51	19464.90	5993.76	T6/T8
7956	39245.61	19700.62	5988.13	T60/T62
8344	39245.10	19700.96	5988.16	T60/T62
8345	39250.54	19703.44	5988.27	T60/T62
7958	39285.98	19702.18	5993.11	T60/T62/T64
7960	39306.14	19702.14	5993.91	T60/T63/T64
5378	40144.49	20707.03	5971.33	T600T601T602
5377	40205.82	20697.16	5968.31	T601T602T603
5376	40224.09	20694.55	5966.84	T601T603
5384	40203.87	20683.99	5968.72	T602T603T604
5383	40223.18	20680.97	5967.02	T603T604
5408	40008.50	20881.33	5939.91	T607T608
5409	40028.99	20661.62	5974.19	T607T608
5424	40142.74	20853.39	5966.18	T607T608T609
5425	40144.83	20867.57	5965.85	T608T609T610T611
5452	40014.57	20893.12	5940.38	T608T610
5427	40207.59	20840.98	5965.61	T609T607
5426	40209.38	20853.27	5965.37	T609T611
7967	39503.74	19715.25	5993.97	T61/T63/T67
7969	39607.43	19716.24	5989.87	T61/T67/T69
8064	39703.38	19713.06	5983.21	T61/T69
8235	39703.32	19712.94	5983.24	T61/T69
8236	39698.85	19716.45	5983.60	T61/T69
5445	40147.65	20880.10	5965.39	T610T611T612T613
5453	40020.34	20905.10	5940.77	T610T612
5428	40210.61	20866.46	5965.24	T611T613
5454	40028.64	20917.31	5941.72	T612T614
5429	40208.32	20880.72	5965.14	T613T615
5444	40150.68	20892.52	5965.02	T614T612T613
5443	40160.99	20889.99	5965.34	T614T615T613
5442	40163.60	20903.12	5964.98	T614T615T617
5455	40032.09	20930.18	5942.24	T614T616
5451	40087.63	20919.30	5955.30	T614T616T617
5430	40203.65	20895.14	5964.93	T615T617
5456	40035.00	20942.67	5942.74	T616T618
5450	40090.79	20932.50	5955.21	T618T616T617
5449	40109.88	20927.85	5960.10	T618T619T617
5448	40112.86	20941.59	5959.66	T618T619T620
5457	40049.94	20953.47	5943.88	T618T620
5431	40205.65	20908.45	5964.52	T619T617
5432	40207.95	20921.11	5964.25	T619T621
7959	39286.53	19714.35	5993.13	T62/T64/T65
8022	39240.04	19713.89	5987.91	T62/T65
8346	39239.89	19713.69	5987.90	T62/T65
8347	39245.48	19716.58	5987.97	T62/T65
5441	40148.01	20932.82	5963.51	T620T621T619
5440	40150.73	20946.92	5963.15	T620T621T622
5458	40079.45	20961.70	5949.67	T620T622
5433	40209.78	20934.20	5963.96	T621T622

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
5434	40212.40	20947.25	5963.70	T622T623
5447	40120.16	20966.30	5958.94	T623T622
5435	40215.34	20959.65	5963.43	T623T624
5446	40147.74	20973.73	5961.60	T623T624
5436	40218.62	20972.72	5963.17	T624T625
5439	40179.28	20980.08	5962.59	T624T625
5437	40217.54	20986.83	5963.08	T625
5438	40181.69	20993.70	5962.23	T625
5459	39912.19	20899.68	5931.71	T626T551
5460	39899.93	20904.37	5931.30	T626T627
7961	39305.36	19715.33	5993.83	T63/T64/T65
7963	39410.14	19715.96	5997.27	T63/T65/T67
8023	39236.44	19726.35	5987.65	T65/T66
8348	39235.96	19726.63	5987.51	T65/T66
8349	39241.67	19729.04	5987.74	T65/T66
7973	39409.60	19729.13	5997.47	T66/T65/T67
7972	39430.83	19729.76	5996.76	T66/T67/T70
8350	39231.27	19739.77	5987.24	T66/T68
8351	39237.21	19742.47	5987.42	T66/T68
8087	39431.24	19742.19	5996.99	T66/T68/T70
7970	39607.61	19729.49	5989.97	T67/T69/T72
7971	39529.28	19729.71	5993.10	T67/T70/T72
8027	39231.46	19739.98	5987.29	T68/T66
8083	39449.14	19742.15	5996.48	T68/T70/T74
8028	39228.14	19752.94	5987.20	T68/T71
8352	39228.11	19752.60	5987.20	T68/T71
8353	39233.26	19754.19	5987.22	T68/T71
7976	39448.92	19754.92	5996.77	T68/T74/T77
8065	39712.26	19725.78	5983.06	T69/T72
8116	39712.42	19726.40	5983.13	T69/T72
8237	39712.77	19726.38	5983.12	T69/T72
8238	39708.13	19729.63	5983.45	T69/T72
7216	39565.76	19452.13	5987.19	T7/T9
8081	39528.40	19742.71	5993.17	T70/T72/T74
7974	39419.55	19755.06	5997.55	T71/T68/T77
8354	39223.46	19766.75	5986.79	T71/T73
8355	39228.83	19768.62	5987.02	T71/T73
7975	39418.45	19768.03	5997.75	T71/T77/T73/T80
8076	39654.21	19741.43	5988.65	T72/T74/T76
8066	39721.65	19739.51	5982.79	T72/T76
8239	39723.13	19739.14	5982.74	T72/T76
8240	39718.49	19742.21	5983.16	T72/T76
8029	39223.52	19766.51	5986.95	T73/T71
8024	39219.87	19780.15	5986.45	T73/T75
8356	39220.19	19779.82	5986.67	T73/T75
8357	39225.09	19781.56	5987.07	T73/T75
7995	39416.32	19781.87	5998.24	T73/T75/T82
7996	39417.88	19781.91	5998.16	T73/T80/T82
7981	39654.91	19754.63	5988.77	T74/T76/T79
7978	39541.30	19756.52	5993.09	T74/T77/T79
8025	39217.58	19792.92	5986.42	T75/T78
8358	39216.94	19792.97	5986.41	T75/T78
8359	39221.56	19794.30	5986.58	T75/T78
8067	39732.15	19753.21	5982.68	T76/T79
8241	39733.13	19752.88	5982.55	T76/T79
8242	39728.71	19756.21	5983.11	T76/T79
7977	39541.47	19768.99	5993.41	T77/T79/T80
7997	39409.74	19808.13	5998.46	T78/T85/T90
8115	39214.33	19806.61	5986.26	T78/T90
8360	39214.35	19806.11	5986.31	T78/T90
8361	39218.78	19806.93	5986.28	T78/T90
7980	39629.88	19768.55	5990.00	T79/T80/T81

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
7988	39741.11	19764.94	5982.45	T79/T81
8243	39741.27	19765.16	5982.53	T79/T81
8244	39737.82	19767.67	5982.84	T79/T81
7219	39376.24	19451.99	5993.21	T8/T9
7989	39629.14	19781.63	5990.37	T80/T81/T83
7992	39491.12	19782.41	5995.70	T80/T82/T83
7982	39680.90	19781.13	5988.47	T81/T83/T84
7987	39751.58	19778.33	5982.36	T81/T84
8068	39751.32	19778.31	5982.44	T81/T84
8245	39751.63	19778.34	5982.34	T81/T84
8246	39748.46	19781.52	5982.64	T81/T84
7994	39416.80	19794.67	5998.49	T82/T75/T85
7991	39490.82	19795.66	5995.81	T82/T83/T85
7983	39682.30	19793.81	5988.54	T83/T84/T86
7990	39527.38	19795.15	5994.36	T83/T85/T86
7984	39738.11	19791.70	5986.59	T84/T86/T87
7986	39762.61	19790.93	5982.09	T84/T87
8247	39762.85	19790.75	5982.04	T84/T87
8248	39758.58	19794.68	5982.21	T84/T87
7993	39409.73	19795.05	5998.35	T85/T78/T75
7998	39415.37	19808.15	5998.60	T85/T89/T90
7985	39738.51	19805.22	5986.80	T86/T87/T88
8018	39619.53	19808.73	5991.16	T86/T88/T89
8249	39771.97	19804.05	5981.81	T87/T88
8250	39768.12	19806.84	5981.92	T87/T88
8069	39771.78	19804.18	5981.83	T88/T87
8017	39619.94	19821.73	5991.38	T88/T89/T91
8070	39779.69	19817.02	5981.71	T88/T91
8251	39779.83	19816.71	5981.70	T88/T91
8252	39776.39	19818.97	5981.72	T88/T91
8011	39528.85	19808.78	5994.45	T89/T85/T86
7999	39415.70	19821.69	5998.61	T89/T90/T92
8013	39591.33	19821.59	5992.26	T89/T91/T96
8005	39461.60	19821.48	5997.59	T89/T92/T95
8010	39529.00	19821.55	5994.89	T89/T95/T96
7215	39558.18	19438.78	5987.53	T9/T10
8000	39387.10	19821.12	5997.43	T90/T92/T93
8030	39211.70	19819.63	5985.90	T90/T93
8362	39211.39	19819.41	5985.78	T90/T93
8363	39215.75	19820.05	5985.98	T90/T93
8071	39788.65	19829.90	5981.49	T91/T94
8253	39788.87	19829.71	5981.43	T91/T94
8254	39785.36	19832.29	5981.65	T91/T94
8014	39592.23	19834.16	5992.53	T91/T94/T96/T97
8001	39386.54	19834.53	5997.51	T92/T93/T98
8006	39461.79	19834.68	5997.87	T92/T95/T97
8007	39460.10	19834.76	5998.04	T92/T97/T98
8031	39209.19	19832.29	5985.59	T93/T100
8364	39208.78	19832.68	5985.53	T93/T100
8365	39213.03	19833.72	5985.73	T93/T100
8016	39608.12	19848.30	5992.10	T94/T101/T99
8015	39592.68	19846.93	5992.73	T94/T97/T101
8072	39798.97	19843.36	5981.36	T94/T99
8255	39799.01	19843.25	5981.24	T94/T99
8256	39795.62	19846.00	5981.52	T94/T99
8012	39529.11	19834.40	5994.98	T95/T96/T97
8009	39461.93	19848.00	5998.08	T97/T101/T102
8008	39459.91	19847.77	5998.20	T97/T98/T102
8003	39252.95	19845.35	5991.89	T98/T100/T102
8103	39253.05	19845.54	5991.90	T98/T100/T102
8107	39607.89	19860.56	5992.31	T99/T101/T113
8287	39607.83	19860.65	5992.31	T99/T101/T113

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

GDN Panel Locations

PT. NO.	NORTHING	EASTING	ELEVATION	DESC.
8104	39807.87	19855.75	5981.24	T99/T104
8257	39807.96	19855.72	5981.14	T99/T104
8258	39804.17	19858.41	5981.24	T99/T104
8106	39614.55	19861.26	5992.10	T99/T104/T113
8286	39614.48	19861.25	5992.03	T99/T104/T113
1	39502.60	19629.10		DS-2N,DP-17J,DT-6C
2	39419.30	19727.00		DS-2P,DP-17M,DT-6E
3	39379.10	19861.10		DS-2Q,DP-17K,DT-6D
4	39685.60	20011.80		DP-17N,DT-6F
5	39552.60	20061.10		DP-17P,DT-6G
6	39449.30	20109.00		DP-17Q,DT-6H
7	39850.30	20356.00		DP-17R,DT-6I
8	39711.30	20419.70		DP-17S,DT-6J
9	39575.40	20495.30		DP-17T,DT-6K

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
2341	39609.30	20913.53	5969.36	2341	5968.53	0.83
6525	39559.60	19452.85	5988.17	6525	5987.28	0.89
10001	39500.16	19450.09	5991.64	10001	5990.74	0.90
10002	39450.03	19449.83	5993.42	10002	5992.52	0.89
10003	39399.85	19499.90	5995.37	10003	5994.44	0.93
10004	39450.12	19499.88	5993.74	10004	5992.82	0.92
10005	39499.79	19499.80	5991.90	10005	5991.06	0.84
10006	39550.05	19500.03	5990.06	10006	5989.14	0.92
10007	39549.93	19549.93	5990.74	10007	5989.82	0.92
10008	39499.91	19549.89	5992.61	10008	5991.7	0.91
10009	39450.06	19550.12	5994.49	10009	5993.56	0.93
10010	39399.96	19549.84	5995.96	10010	5995.13	0.83
10011	39350.01	19550.09	5995.57	10011	5994.71	0.85
10012	39349.99	19599.87	5995.97	10012	5995.05	0.92
10013	39399.99	19599.96	5996.87	10013	5996.02	0.84
10014	39450.04	19600.10	5995.13	10014	5994.21	0.92
10015	39500.06	19600.08	5993.54	10015	5992.58	0.96
10016	39550.04	19600.04	5991.30	10016	5990.34	0.95
10017	39600.00	19600.00	5989.58	10017	5988.72	0.85
10018	39600.00	19650.00	5990.56	10018	5989.58	0.98
10019	39549.98	19649.98	5992.33	10019	5991.40	0.93
10020	39499.93	19649.86	5994.03	10020	5993.20	0.82
10021	39449.97	19649.91	5995.72	10021	5994.82	0.90
10022	39400.00	19650.00	5997.87	10022	5997.00	0.86
10023	39350.01	19650.06	5996.36	10023	5995.42	0.94
10024	39299.96	19650.08	5994.45	10024	5993.56	0.88
10025	39300.01	19699.95	5994.52	10025	5993.64	0.88
10026	39350.00	19700.19	5996.22	10026	5995.40	0.82
10027	39399.98	19699.83	5998.06	10027	5997.21	0.85
10028	39450.04	19700.15	5996.51	10028	5995.66	0.85
10029	39499.97	19699.92	5994.97	10029	5994.04	0.93
10030	39550.00	19700.01	5992.79	10030	5991.91	0.88
10031	39600.09	19700.14	5990.99	10031	5990.07	0.91
10032	39650.03	19700.02	5989.00	10032	5988.17	0.83
10033	39699.85	19749.83	5988.19	10033	5987.25	0.94
10034	39649.98	19749.98	5989.82	10034	5988.97	0.84
10035	39599.94	19749.91	5991.67	10035	5990.77	0.90
10036	39550.02	19750.03	5993.50	10036	5992.59	0.90
10037	39499.94	19749.88	5995.45	10037	5994.52	0.93
10038	39450.02	19750.04	5997.66	10038	5996.73	0.93
10039	39399.99	19749.90	5998.72	10039	5997.88	0.84
10040	39350.00	19750.01	5996.53	10040	5995.60	0.93
10041	39300.00	19749.99	5994.56	10041	5993.63	0.93
10042	39249.97	19800.12	5993.18	10042	5992.33	0.85
10043	39299.98	19800.13	5994.68	10043	5993.80	0.89
10044	39350.00	19799.90	5996.41	10044	5995.49	0.91
10045	39399.57	19800.10	5998.99	10045	5998.07	0.93
10046	39449.98	19799.88	5998.98	10046	5998.14	0.84
10047	39499.59	19800.30	5996.44	10047	5995.51	0.93
10048	39550.08	19800.18	5994.31	10048	5993.39	0.92
10049	39599.81	19799.91	5992.47	10049	5991.62	0.86
10050	39649.86	19799.81	5990.69	10050	5989.78	0.91
10051	39700.09	19800.10	5988.82	10051	5987.93	0.88
10052	39749.94	19849.95	5987.86	10052	5986.99	0.87
10053	39700.06	19850.09	5989.65	10053	5988.70	0.95
10054	39650.06	19850.11	5991.45	10054	5990.52	0.93
10055	39600.00	19850.00	5993.46	10055	5992.57	0.89
10056	39550.04	19850.07	5995.13	10056	5994.20	0.94
10057	39500.06	19850.15	5997.28	10057	5996.36	0.93

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
10058	39450.02	19850.13	5999.52	10058	5998.66	0.87
10059	39399.99	19849.88	5999.05	10059	5998.14	0.91
10060	39350.00	19849.95	5996.81	10060	5995.93	0.88
10061	39300.01	19849.87	5994.63	10061	5993.78	0.85
10062	39249.98	19850.02	5992.86	10062	5991.94	0.91
10063	39250.13	19899.80	5992.63	10063	5991.76	0.86
10064	39300.02	19899.78	5994.57	10064	5993.73	0.84
10065	39349.99	19899.94	5996.84	10065	5995.92	0.91
10066	39400.00	19900.09	5998.85	10066	5998.02	0.83
10067	39450.01	19900.04	6000.23	10067	5999.31	0.92
10068	39499.99	19899.96	5998.20	10068	5997.27	0.92
10069	39549.93	19899.81	5995.88	10069	5995.02	0.86
10070	39599.95	19899.87	5994.02	10070	5993.11	0.91
10071	39649.94	19899.90	5992.17	10071	5991.24	0.93
10072	39699.97	19899.96	5990.21	10072	5989.29	0.92
10073	39750.11	19900.15	5988.38	10073	5987.45	0.93
10074	39799.95	19899.94	5986.60	10074	5985.69	0.91
10075	39800.02	19950.04	5987.20	10075	5986.34	0.86
10076	39749.98	19949.96	5989.11	10076	5988.23	0.88
10077	39700.08	19950.12	5991.11	10077	5990.23	0.88
10078	39650.09	19950.18	5992.79	10078	5991.94	0.85
10079	39600.06	19950.15	5994.82	10079	5993.92	0.89
10080	39550.05	19950.14	5996.81	10080	5995.90	0.91
10081	39499.96	19949.84	5999.11	10081	5998.23	0.88
10082	39449.98	19949.85	6000.03	10082	5999.15	0.88
10083	39400.00	19949.92	5998.28	10083	5997.44	0.84
10084	39350.00	19950.11	5996.34	10084	5995.48	0.86
10085	39299.98	19950.09	5994.51	10085	5993.62	0.89
10086	39250.02	19949.88	5992.57	10086	5991.73	0.84
10087	39250.04	19999.76	5991.95	10087	5991.10	0.84
10088	39300.00	19999.92	5993.75	10088	5992.82	0.93
10089	39350.00	19999.96	5995.69	10089	5994.78	0.91
10090	39400.01	19999.98	5997.60	10090	5996.67	0.93
10091	39449.98	19999.84	5999.36	10091	5998.45	0.91
10092	39499.95	19999.83	5999.92	10092	5999.06	0.86
10093	39550.01	20000.02	5997.81	10093	5996.88	0.93
10094	39599.96	19999.88	5995.55	10094	5994.63	0.92
10095	39649.97	19999.95	5993.55	10095	5992.71	0.84
10096	39699.97	19999.93	5991.86	10096	5990.94	0.92
10097	39749.99	19999.98	5990.06	10097	5989.12	0.94
10098	39800.08	20000.11	5988.22	10098	5987.34	0.88
10099	39850.00	20000.01	5986.23	10099	5985.30	0.93
10100	39899.95	20050.01	5984.65	10100	5983.66	0.99
10101	39849.52	20049.35	5986.62	10101	5985.70	0.92
10102	39799.90	20050.00	5988.64	10102	5987.68	0.96
10103	39749.95	20049.90	5990.71	10103	5989.81	0.90
10104	39699.99	20049.95	5992.50	10104	5991.54	0.97
10105	39650.21	20050.28	5994.48	10105	5993.65	0.83
10106	39599.98	20049.93	5996.50	10106	5995.52	0.98
10107	39550.00	20050.03	5998.73	10107	5997.77	0.96
10108	39499.97	20049.86	6000.19	10108	5999.34	0.85
10109	39450.02	20050.09	5998.51	10109	5997.52	0.98
10110	39400.00	20049.95	5996.77	10110	5995.83	0.94
10111	39350.01	20050.00	5994.90	10111	5993.97	0.93
10112	39300.01	20049.79	5993.09	10112	5992.13	0.96
10113	39250.00	20050.15	5991.14	10113	5990.22	0.91
10114	39250.01	20099.94	5990.51	10114	5989.55	0.95
10115	39300.01	20099.94	5992.14	10115	5991.30	0.84
10116	39350.00	20100.02	5994.03	10116	5993.14	0.89

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
10117	39400.00	20099.89	5995.79	10117	5994.84	0.95
10118						*See Appendix A
10119	39499.96	20099.82	5999.22	10119	5998.30	0.92
10120	39550.04	20100.14	5999.59	10120	5998.71	0.89
10121	39599.98	20099.94	5997.21	10121	5996.27	0.94
10122	39649.91	20099.76	5995.05	10122	5994.10	0.95
10123	39700.00	20099.98	5992.83	10123	5991.95	0.88
10124	39750.01	20100.01	5991.15	10124	5990.27	0.88
10125	39799.92	20099.70	5989.01	10125	5988.08	0.93
10126	39849.97	20099.93	5987.09	10126	5986.17	0.91
10127	39900.14	20099.98	5985.03	10127	5984.20	0.83
10128	39950.00	20150.00	5983.36	10128	5982.45	0.91
10129	39899.95	20150.00	5985.37	10129	5984.52	0.84
10130	39849.90	20150.00	5987.42	10130	5986.49	0.93
10131	39800.16	20150.00	5989.34	10131	5988.50	0.84
10132	39749.93	20150.00	5991.39	10132	5990.55	0.84
10133	39699.87	20150.00	5993.37	10133	5992.49	0.88
10134	39650.03	20150.00	5995.38	10134	5994.47	0.90
10135	39600.01	20150.00	5997.62	10135	5996.74	0.88
10136	39549.81	20150.11	5999.31	10136	5998.48	0.83
10137	39499.93	20149.87	5997.53	10137	5996.62	0.90
10138	39449.97	20150.00	5996.01	10138	5995.16	0.85
10139	39399.97	20150.00	5994.58	10139	5993.75	0.83
10140	39349.91	20150.00	5992.95	10140	5992.11	0.84
10141	39300.01	20150.00	5991.49	10141	5990.56	0.92
10142	39250.10	20149.86	5989.71	10142	5988.82	0.89
10143	39250.03	20200.00	5988.88	10143	5988.02	0.86
10144	39300.00	20200.00	5990.23	10144	5989.31	0.92
10145	39350.16	20199.96	5991.77	10145	5990.93	0.84
10146	39400.19	20199.94	5993.34	10146	5992.43	0.90
10147	39449.93	20200.03	5994.71	10147	5993.78	0.93
10148	39499.99	20200.01	5996.06	10148	5995.16	0.90
10149	39550.23	20199.81	5997.74	10149	5996.82	0.91
10150	39599.99	20200.15	5998.38	10150	5997.46	0.92
10151	39649.97	20199.98	5995.92	10151	5995.09	0.83
10152	39700.21	20199.93	5993.82	10152	5992.98	0.84
10153	39749.96	20199.99	5991.82	10153	5990.90	0.92
10154	39800.12	20199.82	5989.86	10154	5989.02	0.83
10155	39849.91	20199.98	5987.74	10155	5986.81	0.92
10156	39900.21	20200.03	5985.72	10156	5984.82	0.90
10157	39949.85	20199.98	5983.95	10157	5983.03	0.92
10158	39999.83	20199.78	5981.85	10158	5980.94	0.91
10159	40000.00	20249.96	5982.43	10159	5981.52	0.90
10160	39949.98	20250.05	5984.44	10160	5983.51	0.93
10161	39900.00	20249.96	5986.29	10161	5985.37	0.92
10162	39850.04	20250.04	5988.25	10162	5987.34	0.91
10163	39800.11	20249.85	5990.26	10163	5989.33	0.93
10164	39750.05	20250.00	5992.20	10164	5991.37	0.83
10165	39699.71	20250.06	5994.31	10165	5993.48	0.83
10166	39649.92	20250.03	5996.41	10166	5995.55	0.85
10167	39599.89	20250.09	5997.38	10167	5996.46	0.92
10168	39549.99	20249.98	5996.39	10168	5995.56	0.83
10169	39499.83	20250.05	5994.90	10169	5994.03	0.87
10170	39449.78	20250.18	5993.52	10170	5992.68	0.84
10171	39399.93	20250.13	5991.96	10171	5991.05	0.90
10172	39349.98	20250.01	5990.50	10172	5989.62	0.88
10173	39300.18	20249.84	5989.06	10173	5988.23	0.83
10174	39300.00	20299.82	5987.87	10174	5986.94	0.93
10175	39349.94	20300.01	5989.33	10175	5988.40	0.93

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
10176	39400.03	20299.83	5990.70	10176	5989.77	0.93
10177	39449.95	20300.12	5992.06	10177	5991.18	0.88
10178	39500.08	20300.14	5993.65	10178	5992.72	0.93
10179	39550.11	20299.85	5994.96	10179	5994.05	0.90
10180	39599.94	20300.26	5994.99	10180	5994.06	0.92
10181	39650.04	20300.00	5994.67	10181	5993.74	0.93
10182	39700.51	20299.61	5994.07	10182	5993.23	0.84
10183	39750.23	20299.99	5992.56	10183	5991.73	0.83
10184	39800.11	20299.95	5990.70	10184	5989.86	0.84
10185	39849.75	20299.98	5988.57	10185	5987.73	0.84
10186	39900.31	20300.17	5986.63	10186	5985.74	0.89
10187	39949.92	20299.99	5984.86	10187	5983.95	0.91
10188	39999.95	20300.07	5982.81	10188	5981.97	0.84
10189	40049.96	20300.02	5980.80	10189	5979.88	0.92
10190	40050.08	20349.96	5981.25	10190	5980.32	0.93
10191	40000.10	20349.95	5983.23	10191	5982.31	0.92
10192	39949.86	20350.06	5985.11	10192	5984.26	0.84
10193	39900.17	20349.95	5987.12	10193	5986.20	0.91
10194	39849.80	20350.10	5989.11	10194	5988.23	0.88
10195	39799.98	20350.00	5991.03	10195	5990.11	0.92
10196	39750.05	20350.03	5991.43	10196	5990.58	0.85
10197	39699.95	20349.96	5991.94	10197	5991.09	0.85
10198	39650.01	20350.01	5992.20	10198	5991.27	0.92
10199	39599.86	20350.16	5992.60	10199	5991.72	0.88
10200	39549.82	20350.23	5992.77	10200	5991.90	0.87
10201	39500.02	20349.67	5992.23	10201	5991.32	0.91
10202	39449.98	20350.06	5990.82	10202	5989.89	0.93
10203	39399.97	20350.09	5989.34	10203	5988.41	0.93
10204	39350.00	20350.07	5987.87	10204	5986.95	0.91
10205	39299.99	20350.13	5986.38	10205	5985.46	0.92
10206	39300.02	20400.17	5985.04	10206	5984.15	0.89
10207	39349.94	20399.75	5986.47	10207	5985.62	0.85
10208	39400.00	20400.02	5987.90	10208	5987.05	0.85
10209	39450.13	20399.62	5989.30	10209	5988.45	0.85
10210	39500.06	20399.85	5990.80	10210	5989.90	0.90
10211	39549.88	20400.06	5990.30	10211	5989.42	0.88
10212	39600.07	20399.92	5990.03	10212	5989.12	0.91
10213	39650.03	20399.97	5989.63	10213	5988.78	0.85
10214	39699.92	20400.04	5989.21	10214	5988.34	0.87
10215	39749.86	20400.08	5989.02	10215	5988.16	0.86
10216	39799.79	20400.11	5988.74	10216	5987.90	0.84
10217	39849.99	20400.02	5988.29	10217	5987.43	0.86
10218	39899.89	20400.06	5987.40	10218	5986.52	0.88
10219	39949.86	20400.06	5985.57	10219	5984.68	0.89
10220	40000.32	20399.80	5983.45	10220	5982.60	0.85
10221	40050.12	20399.92	5981.60	10221	5980.67	0.94
10222	40099.77	20400.02	5979.56	10222	5978.72	0.84
10223	40100.02	20449.93	5980.13	10223	5979.22	0.91
10224	40050.20	20449.88	5982.10	10224	5981.17	0.94
10225	40000.05	20450.11	5983.84	10225	5982.91	0.93
10226	39950.12	20450.07	5985.30	10226	5984.38	0.93
10227	39899.94	20449.92	5985.56	10227	5984.65	0.91
10228	39850.08	20450.08	5985.99	10228	5985.11	0.88
10229	39800.08	20449.80	5986.20	10229	5985.30	0.90
10230	39749.74	20450.01	5986.56	10230	5985.71	0.85
10231	39699.89	20449.94	5986.84	10231	5985.95	0.89
10232	39649.95	20450.15	5987.28	10232	5986.35	0.93
10233	39599.76	20450.15	5987.63	10233	5986.73	0.90
10234	39549.93	20449.79	5988.06	10234	5987.16	0.90

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
10235	39499.88	20449.89	5988.81	10235	5987.96	0.85
10236	39449.82	20449.85	5987.92	10236	5987.02	0.90
10237	39399.98	20450.09	5986.47	10237	5985.58	0.89
10238	39349.98	20449.83	5985.19	10238	5984.34	0.85
10239	39350.12	20500.08	5983.66	10239	5982.79	0.87
10240	39399.97	20499.98	5985.15	10240	5984.23	0.92
10241	39450.18	20500.13	5986.63	10241	5985.78	0.85
10242	39500.14	20500.11	5986.66	10242	5985.73	0.93
10243	39550.18	20500.16	5985.63	10243	5984.72	0.91
10244	39600.09	20500.09	5985.23	10244	5984.31	0.91
10245	39650.27	20500.26	5984.71	10245	5983.85	0.86
10246	39700.05	20500.06	5984.59	10246	5983.68	0.92
10247	39750.14	20500.17	5984.27	10247	5983.37	0.90
10248	39800.02	20500.03	5983.84	10248	5983.00	0.84
10249	39849.94	20499.91	5983.69	10249	5982.76	0.93
10250	39900.08	20500.10	5983.39	10250	5982.46	0.94
10251	39950.08	20500.16	5983.06	10251	5982.14	0.93
10252	40000.04	20500.09	5982.65	10252	5981.79	0.86
10253	40049.98	20499.94	5982.46	10253	5981.56	0.90
10254	40100.00	20500.02	5980.51	10254	5979.59	0.93
10255						*See Appendix A
10256	40150.01	20550.08	5979.02	10256	5978.18	0.84
10257	40100.01	20550.02	5979.66	10257	5978.76	0.89
10258	40049.97	20549.91	5979.97	10258	5979.08	0.89
10259	40000.08	20550.19	5980.34	10259	5979.42	0.93
10260	39950.09	20550.16	5980.47	10260	5979.53	0.94
10261	39900.04	20550.06	5980.83	10261	5979.98	0.85
10262	39850.12	20550.16	5981.09	10262	5980.17	0.92
10263	39800.00	20550.00	5981.29	10263	5980.38	0.91
10264	39750.11	20550.12	5981.68	10264	5980.79	0.89
10265	39700.09	20550.09	5981.98	10265	5981.09	0.89
10266	39650.01	20550.00	5982.38	10266	5981.47	0.91
10267	39600.19	20550.15	5983.07	10267	5982.20	0.87
10268	39550.02	20550.02	5983.69	10268	5982.78	0.91
10269	39500.08	20550.06	5984.52	10269	5983.68	0.84
10270	39449.92	20549.95	5985.20	10270	5984.34	0.86
10271	39399.87	20549.92	5983.88	10271	5983.03	0.85
10272	39350.03	20550.02	5982.65	10272	5981.78	0.87
10273	39400.44	20600.25	5982.42	10273	5981.58	0.84
10274	39450.14	20600.10	5983.39	10274	5982.54	0.85
10275	39500.07	20600.04	5982.86	10275	5981.96	0.89
10276	39551.31	20600.90	5982.01	10276	5981.12	0.89
10277	39599.92	20599.94	5981.09	10277	5980.17	0.91
10278	39649.83	20599.87	5980.28	10278	5979.44	0.84
10279	39700.10	20600.09	5979.64	10279	5978.76	0.88
10280	39750.19	20600.19	5979.20	10280	5978.37	0.83
10281	39800.25	20600.27	5978.97	10281	5978.06	0.90
10282	39849.84	20599.80	5978.63	10282	5977.7	0.93
10283	39900.10	20600.15	5978.27	10283	5977.4	0.87
10284	39949.96	20599.93	5978.04	10284	5977.12	0.91
10285	40000.02	20600.05	5977.66	10285	5976.75	0.91
10286	40050.12	20600.31	5977.41	10286	5976.48	0.93
10287	40100.14	20600.50	5977.06	10287	5976.15	0.91
10288	40150.05	20600.27	5976.75	10288	5975.84	0.91
10289						*See Appendix A
10290	40149.99	20650.02	5974.17	10290	5973.32	0.85
10291	40099.99	20649.99	5974.38	10291	5973.49	0.89
10292	40049.93	20650.15	5974.78	10292	5973.88	0.90
10293	40000.08	20650.13	5975.22	10293	5974.29	0.93

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
10294	39950.09	20650.14	5975.49	10294	5974.64	0.84
10295	39900.04	20649.95	5975.58	10295	5974.75	0.83
10296	39849.98	20650.10	5976.02	10296	5975.18	0.84
10297	39799.98	20650.02	5976.39	10297	5975.46	0.93
10298	39750.00	20650.14	5976.89	10298	5976.05	0.84
10299	39699.99	20650.02	5977.67	10299	5976.83	0.84
10300	39649.98	20650.00	5978.46	10300	5977.54	0.91
10301	39600.10	20650.07	5979.27	10301	5978.41	0.86
10302	39549.85	20649.92	5979.98	10302	5979.07	0.91
10303	39500.05	20650.04	5980.83	10303	5979.95	0.88
10304	39449.79	20649.89	5981.68	10304	5980.82	0.86
10305	39400.35	20650.18	5980.79	10305	5979.93	0.85
10306	39450.00	20700.02	5979.73	10306	5978.87	0.86
10307	39500.02	20700.17	5978.79	10307	5977.96	0.84
10308	39550.04	20700.14	5977.99	10308	5977.14	0.85
10309	39600.01	20700.22	5977.45	10309	5976.59	0.85
10310	39650.01	20699.76	5976.61	10310	5975.69	0.91
10311	39699.98	20700.26	5975.67	10311	5974.80	0.87
10312	39750.03	20699.95	5975.11	10312	5974.27	0.84
10313	39800.01	20699.98	5974.46	10313	5973.61	0.85
10314						*See Appendix A
10315	39899.95	20700.12	5973.34	10315	5972.43	0.90
10316	39949.97	20699.93	5973.10	10316	5972.26	0.84
10317	40000.12	20699.94	5972.84	10317	5971.94	0.90
10318	40049.99	20699.99	5972.74	10318	5971.86	0.88
10319	40099.98	20699.97	5972.49	10319	5971.59	0.90
10320	40149.98	20700.07	5972.40	10320	5971.49	0.91
10321	40149.98	20750.10	5970.43	10321	5969.55	0.89
10322						*See Appendix A
10323	40050.07	20749.82	5966.55	10323	5965.67	0.89
10324	39999.96	20749.93	5967.50	10324	5966.65	0.85
10325	39949.98	20750.16	5968.59	10325	5967.72	0.87
10326	39899.91	20749.89	5969.47	10326	5968.63	0.85
10327	39850.03	20750.06	5971.91	10327	5971.04	0.87
10328	39799.95	20750.09	5972.63	10328	5971.80	0.84
10329	39750.14	20749.35	5973.38	10329	5972.45	0.93
10330	39700.07	20749.75	5974.20	10330	5973.36	0.84
10331	39650.00	20750.05	5974.80	10331	5973.91	0.90
10332	39600.07	20749.99	5975.61	10332	5974.77	0.84
10333	39550.01	20750.10	5976.36	10333	5975.47	0.89
10334	39500.01	20749.96	5977.02	10334	5976.12	0.91
10335	39449.88	20749.51	5977.88	10335	5976.95	0.93
10336	39499.98	20799.90	5975.25	10336	5974.36	0.89
10337	39549.99	20800.01	5974.43	10337	5973.50	0.93
10338	39599.99	20800.01	5973.73	10338	5972.89	0.84
10339	39650.03	20800.04	5973.11	10339	5972.20	0.91
10340	39699.96	20799.92	5972.25	10340	5971.41	0.84
10341	39749.98	20799.93	5970.50	10341	5969.67	0.84
10342	39800.01	20799.82	5965.67	10342	5964.83	0.84
10343	39850.02	20800.06	5961.21	10343	5960.35	0.85
10344	39899.95	20800.25	5956.95	10344	5956.10	0.84
10345	39950.01	20799.92	5956.28	10345	5955.40	0.88
10346	40000.03	20799.89	5955.02	10346	5954.17	0.86
10347	40049.93	20800.10	5956.24	10347	5955.40	0.84
10348	40099.98	20800.05	5967.94	10348	5967.11	0.83
10349	40150.00	20800.13	5968.57	10349	5967.68	0.89
10350	40150.03	20850.00	5967.29	10350	5966.40	0.89
10351	40099.96	20850.04	5964.25	10351	5963.39	0.86
10352	40049.92	20849.98	5952.06	10352	5951.22	0.85

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
10353						*See Appendix A
10354	39950.00	20850.23	5943.61	10354	5942.77	0.84
10355	39899.97	20850.01	5944.87	10355	5944.02	0.85
10356	39850.03	20850.07	5949.31	10356	5948.48	0.83
10357	39800.01	20850.07	5954.12	10357	5953.29	0.84
10358	39750.03	20850.07	5958.98	10358	5958.14	0.84
10359	39699.89	20849.98	5964.06	10359	5963.19	0.87
10360	39650.03	20850.02	5970.51	10360	5969.58	0.93
10361	39599.99	20849.92	5971.76	10361	5970.93	0.84
10362	39549.98	20849.93	5972.78	10362	5971.94	0.84
10363	39499.99	20850.01	5973.34	10363	5972.46	0.89
10364	39500.08	20900.23	5972.09	10364	5971.17	0.92
10365	39549.93	20899.99	5970.65	10365	5969.80	0.85
10366	39600.08	20900.06	5969.97	10366	5969.05	0.93
10367	39650.03	20899.96	5964.29	10367	5963.44	0.85
10368	39700.12	20900.08	5955.30	10368	5954.38	0.92
10369	39750.06	20900.14	5947.39	10369	5946.55	0.84
10370	39800.00	20900.00	5942.72	10370	5941.87	0.85
10371						*See Appendix A
10372						*See Appendix A
10373						*See Appendix A
10374						*See Appendix A
10375	40049.93	20899.89	5948.54	10375	5947.71	0.84
10376	40100.06	20900.07	5960.55	10376	5959.70	0.85
10377	40150.03	20900.04	5965.71	10377	5964.80	0.90
10378	40150.03	20949.94	5964.07	10378	5963.23	0.84
10379						*See Appendix A
10380						*See Appendix A
10381						*See Appendix A
10382						*See Appendix A
10383						*See Appendix A
10384						*See Appendix A
10385						*See Appendix A
10386						*See Appendix A
10387	39700.12	20950.10	5946.68	10387	5945.84	0.84
10388	39650.05	20949.94	5959.11	10388	5958.19	0.92
10389						*See Appendix A
10390	39550.15	20950.00	5969.49	10390	5968.56	0.92
10391	39549.96	20999.85	5969.15	10391	5968.23	0.92
10392	39600.18	21000.12	5967.26	10392	5966.35	0.91
10393	39649.83	20999.89	5958.81	10393	5957.98	0.83
10416	39650.21	21050.13	5958.71	10416	5957.79	0.91
10417	39600.07	21049.94	5966.77	10417	5965.85	0.92
10418	39550.10	21050.00	5968.88	10418	5967.99	0.89
10419	39550.08	21100.12	5968.47	10419	5967.61	0.87
10420	39599.91	21099.89	5966.57	10420	5965.65	0.92
11010	40182.76	20511.65	5971.57	11010	5970.56	1.00
11013	40175.96	20458.10	5973.51	11013	5972.61	0.90
11015	40167.47	20419.27	5975.19	11015	5974.34	0.85
11016	40118.10	20288.43	5973.48	11016	5972.56	0.91
11019	40035.17	20172.93	5975.30	11019	5974.38	0.91
11020	39989.52	20112.08	5977.07	11020	5976.15	0.92
11023	39923.50	20021.80	5979.06	11023	5978.23	0.83
11024	39858.72	19933.32	5981.13	11024	5980.27	0.85
11027	39766.27	19806.59	5983.55	11027	5982.69	0.86
11028	39671.02	19677.51	5984.81	11028	5983.94	0.87
11031	39599.22	19532.68	5987.20	11031	5986.32	0.88
11032	39521.60	19409.60	5989.04	11032	5988.18	0.85
11035	39458.26	19413.93	5991.26	11035	5990.38	0.88

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
11036	39407.74	19438.92	5993.07	11036	5992.18	0.89
11039	39349.83	19483.77	5995.19	11039	5994.27	0.92
11040						*See Appendix A
11043	39320.06	19529.38	5993.03	11043	5992.11	0.92
11044	39281.52	19621.44	5991.00	11044	5990.15	0.85
11047	39246.04	19715.33	5989.33	11047	5988.40	0.93
11048	39216.07	19806.72	5987.26	11048	5986.40	0.86
11051	39202.70	19903.70	5985.13	11051	5984.12	1.01
11052	39196.40	19998.06	5982.95	11052	5982.10	0.84
11055	39202.29	20095.44	5981.16	11055	5980.33	0.83
11056	39213.45	20194.47	5979.17	11056	5978.28	0.90
11059	39226.21	20297.14	5977.19	11059	5976.32	0.87
11060	39240.20	20390.81	5975.16	11060	5974.31	0.84
11063	39272.73	20480.42	5973.48	11063	5972.58	0.90
11064	39306.63	20568.07	5971.11	11064	5970.13	0.98
11067	39353.13	20661.11	5969.19	11067	5968.26	0.93
11068	39434.09	20846.20	5967.45	11068	5966.62	0.84
11071	39507.23	21035.92	5965.42	11071	5964.59	0.84
11072	39545.27	21148.94	5963.40	11072	5962.57	0.83
11136	39393.61	20753.95	5968.39	11136	5967.55	0.85
11138	39468.67	20942.35	5966.37	11138	5965.53	0.85
12000	39353.50	19500.06	5995.57	12000	5994.73	0.84
12001	39312.46	19599.93	5994.71	12001	5993.85	0.85
12002	39273.12	19699.96	5993.46	12002	5992.62	0.84
12003	39239.23	19799.99	5993.02	12003	5992.18	0.84
12004	39227.45	19900.00	5992.58	12004	5991.65	0.93
12005	39225.10	19999.89	5991.06	12005	5990.19	0.87
12006	39230.83	20100.10	5989.77	12006	5988.85	0.91
12007	39245.05	20200.02	5988.79	12007	5987.95	0.84
12008	39261.78	20300.19	5986.56	12008	5985.69	0.87
12009	39285.50	20400.12	5984.78	12009	5983.87	0.91
12010	39326.35	20500.70	5982.94	12010	5982.11	0.84
12011	39374.78	20600.08	5981.47	12011	5980.64	0.83
12012	39417.30	20700.00	5980.10	12012	5979.24	0.86
12013	39457.92	20800.05	5975.87	12013	5975.04	0.83
12014	39489.30	20899.99	5971.92	12014	5971.06	0.86
12015	39518.93	21000.17	5970.32	12015	5969.48	0.84
12016	39547.73	21100.01	5968.57	12016	5967.67	0.90
12017	39556.08	21129.45	5968.15	12017	5967.25	0.90
12018	39639.42	21077.09	5961.14	12018	5960.30	0.84
12019	39691.73	21009.59	5948.31	12019	5947.45	0.86
12020	39710.46	20955.25	5944.21	12020	5943.38	0.83
12021	39752.33	20924.60	5941.76	12021	5940.86	0.90
12022	39855.87	20905.36	5936.08	12022	5935.25	0.83
12023	39873.60	20895.45	5937.09	12023	5936.19	0.90
12024	39894.38	20889.30	5936.20	12024	5935.36	0.84
12025	39912.47	20879.68	5937.36	12025	5936.43	0.92
12026	40005.99	20853.64	5942.88	12026	5941.97	0.91
12027	40017.71	20864.19	5943.49	12027	5942.62	0.87
12028	40056.76	20935.89	5947.69	12028	5946.79	0.90
12029	39533.60	21048.00	5969.53	12029	5968.70	0.84
12030	39534.63	20915.97	5970.58	12030	5969.71	0.87
12031	39836.51	20689.70	5974.06	12031	5973.19	0.87
12032	39988.34	20709.84	5972.45	12032	5971.60	0.85
12033	40092.09	20720.96	5971.67	12033	5970.82	0.85
12034	40174.67	20770.50	5969.40	12034	5968.57	0.83
12038	40197.05	20971.13	5964.68	12038	5963.76	0.91
12041	40189.25	20899.92	5966.27	12041	5965.42	0.86
12042	40172.68	20750.12	5969.89	12042	5969.00	0.89

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

10" Cushion Soil

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	TOP OF GDN ELEVATION	THICKNESS OF LAYER
12043						*See Appendix A
12044	40155.52	20594.13	5976.79	12044	5975.92	0.87
12045	40132.95	20417.97	5978.38	12045	5977.45	0.93
12046	40123.44	20400.05	5978.57	12046	5977.73	0.84
12047	40100.12	20352.14	5979.40	12047	5978.48	0.92
12048	40073.39	20299.95	5979.96	12048	5979.06	0.89
12049	40011.00	20199.73	5981.38	12049	5980.47	0.90
12050	39945.42	20100.03	5983.07	12050	5982.23	0.84
12051	39876.83	20000.01	5985.22	12051	5984.30	0.91
12052	39800.17	19886.39	5986.33	12052	5985.49	0.84
12053	39741.54	19800.16	5987.45	12053	5986.62	0.83
12054	39700.08	19740.71	5987.91	12054	5987.08	0.83
12055	39670.17	19700.02	5988.05	12055	5987.11	0.94
12056	39648.70	19672.07	5988.57	12056	5987.70	0.86
12057	39612.81	19599.99	5988.94	12057	5987.95	0.99
12058	39600.42	19565.42	5988.88	12058	5988.03	0.85
12059	39570.50	19499.90	5989.20	12059	5988.22	0.97
12060	39549.84	19459.93	5989.75	12060	5988.91	0.84
12061	39529.12	19429.18	5990.52	12061	5989.68	0.84
12062	39499.92	19418.71	5991.62	12062	5990.79	0.83
12063	39449.61	19430.00	5993.44	12063	5992.59	0.85
12064	39400.02	19457.61	5995.49	12064	5994.66	0.83
12065	39382.25	19467.73	5995.58	12065	5994.74	0.84
12221	40123.54	20935.80	5963.39	12221	5962.53	0.86
12222	40113.32	20875.65	5965.45	12222	5964.61	0.84
12223	40106.48	20826.07	5967.55	12223	5966.66	0.89
12224	40099.64	20776.56	5969.45	12224	5968.60	0.84
12225	40089.52	20727.11	5971.60	12225	5970.77	0.84
12226	39879.80	20742.35	5971.41	12226	5970.58	0.83
12227	39686.29	20822.04	5971.44	12227	5970.61	0.83
12228	39616.40	20905.24	5969.41	12228	5968.56	0.85
12229	39617.10	20916.82	5967.50	12229	5966.61	0.89
12230	39630.38	21035.15	5963.55	12230	5962.65	0.90
12231						*See Appendix A
12232	40050.24	20944.73	5945.72	12232	5944.88	0.85
12233	40009.99	20870.53	5941.31	12233	5940.46	0.85
12234	40003.16	20864.48	5940.98	12234	5940.10	0.88
12235	39916.74	20888.98	5934.77	12235	5933.94	0.83
12236	39873.70	20912.14	5933.11	12236	5932.27	0.84
12237	39756.04	20934.40	5939.39	12237	5938.50	0.89
12238	39718.94	20961.27	5942.02	12238	5941.12	0.90
12239	39701.14	21014.21	5946.06	12239	5945.18	0.88
12240	39649.18	21081.36	5958.59	12240	5957.73	0.86

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
2341						*See Appendix A
6525	39560.03	19453.11	5989.35	6525	5988.17	1.19
10001	39499.93	19449.96	5993.02	10001	5991.64	1.39
10002	39450.05	19450.05	5994.50	10002	5993.42	1.09
10003	39400.00	19500.01	5996.38	10003	5995.37	1.01
10004	39450.03	19500.04	5995.09	10004	5993.74	1.35
10005	39500.00	19500.00	5993.04	10005	5991.90	1.14
10006	39549.93	19499.95	5991.13	10006	5990.06	1.07
10007	39549.98	19549.99	5991.84	10007	5990.74	1.10
10008	39500.10	19550.13	5993.65	10008	5992.61	1.04
10009	39450.13	19550.23	5995.50	10009	5994.49	1.01
10010	39399.99	19549.95	5996.97	10010	5995.96	1.01
10011	39350.00	19549.95	5996.95	10011	5995.57	1.39
10012	39350.00	19600.10	5997.07	10012	5995.97	1.10
10013	39400.01	19600.04	5997.88	10013	5996.87	1.02
10014	39450.07	19600.16	5996.16	10014	5995.13	1.03
10015	39499.96	19599.94	5994.79	10015	5993.54	1.25
10016	39549.99	19599.98	5992.33	10016	5991.30	1.03
10017	39599.94	19599.95	5990.87	10017	5989.58	1.30
10018	39599.96	19649.96	5991.63	10018	5990.56	1.07
10019	39549.87	19649.82	5993.36	10019	5992.33	1.03
10020	39499.97	19649.95	5995.39	10020	5994.03	1.37
10021	39450.02	19650.05	5996.75	10021	5995.72	1.03
10022	39400.02	19650.10	5998.88	10022	5997.87	1.02
10023	39350.00	19649.98	5997.37	10023	5996.36	1.01
10024	39300.00	19650.00	5995.84	10024	5994.45	1.40
10025	39300.02	19699.86	5995.68	10025	5994.52	1.16
10026	39350.00	19699.98	5997.26	10026	5996.22	1.04
10027	39400.25	19700.00	5999.07	10027	5998.06	1.01
10028	39450.07	19700.24	5997.89	10028	5996.51	1.38
10029	39500.06	19700.14	5996.04	10029	5994.97	1.07
10030	39549.97	19699.95	5993.83	10030	5992.79	1.04
10031	39599.97	19699.96	5992.04	10031	5990.99	1.06
10032	39650.02	19700.03	5990.30	10032	5988.99	1.31
10033						*See Appendix A
10034	39650.01	19750.01	5990.83	10034	5989.82	1.02
10035	39600.05	19750.09	5992.87	10035	5991.67	1.20
10036	39549.93	19749.86	5994.50	10036	5993.50	1.01
10037	39500.02	19750.06	5996.58	10037	5995.45	1.13
10038	39450.04	19750.15	5998.67	10038	5997.66	1.02
10039	39399.99	19749.93	5999.73	10039	5998.72	1.01
10040	39350.00	19750.18	5997.54	10040	5996.53	1.01
10041	39299.99	19750.09	5995.67	10041	5994.56	1.11
10042	39249.99	19800.05	5994.18	10042	5993.18	1.01
10043	39300.02	19799.80	5995.68	10043	5994.68	1.00
10044	39350.00	19799.87	5997.45	10044	5996.41	1.05
10045	39399.99	19799.87	6000.10	10045	5998.99	1.11
10046	39449.99	19799.93	6000.22	10046	5998.98	1.24
10047	39499.97	19799.92	5997.68	10047	5996.44	1.24
10048	39549.98	19799.95	5995.53	10048	5994.31	1.22
10049	39599.98	19799.98	5993.48	10049	5992.47	1.01
10050	39650.00	19800.00	5991.77	10050	5990.69	1.09
10051	39699.94	19799.93	5989.84	10051	5988.82	1.03
10052	39749.96	19849.95	5988.95	10052	5987.86	1.09
10053	39700.00	19850.00	5990.68	10053	5989.65	1.03
10054	39649.99	19849.99	5992.78	10054	5991.45	1.33

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
10055	39600.05	19850.09	5994.49	10055	5993.46	1.03
10056	39550.09	19850.23	5996.48	10056	5995.13	1.35
10057	39499.94	19849.81	5998.47	10057	5997.28	1.19
10058	39449.99	19849.96	6000.71	10058	5999.52	1.19
10059	39400.00	19849.98	6000.08	10059	5999.05	1.03
10060	39350.00	19849.93	5997.95	10060	5996.81	1.14
10061	39300.01	19849.86	5995.67	10061	5994.63	1.05
10062	39249.98	19850.11	5993.87	10062	5992.86	1.02
10063	39250.02	19899.85	5993.84	10063	5992.63	1.22
10064	39299.99	19900.17	5995.63	10064	5994.57	1.07
10065	39350.00	19900.07	5997.99	10065	5996.84	1.15
10066	39400.01	19900.01	6000.16	10066	5998.85	1.31
10067	39449.99	19899.97	6001.32	10067	6000.23	1.09
10068	39500.08	19900.28	5999.29	10068	5998.20	1.10
10069	39549.97	19899.93	5997.16	10069	5995.88	1.28
10070	39599.98	19899.96	5995.27	10070	5994.02	1.26
10071	39649.92	19899.86	5993.32	10071	5992.17	1.15
10072	39700.03	19900.04	5991.45	10072	5990.21	1.24
10073	39750.03	19900.04	5989.40	10073	5988.38	1.02
10074	39799.97	19899.96	5987.80	10074	5986.60	1.20
10075	39799.98	19949.97	5988.22	10075	5987.20	1.02
10076	39749.90	19949.85	5990.12	10076	5989.11	1.01
10077	39699.95	19949.93	5992.17	10077	5991.11	1.07
10078	39649.94	19949.90	5994.11	10078	5992.79	1.32
10079	39599.99	19949.98	5995.94	10079	5994.82	1.13
10080	39550.02	19950.09	5998.18	10080	5996.81	1.37
10081	39499.97	19949.89	6000.28	10081	5999.11	1.17
10082	39449.98	19949.89	6001.06	10082	6000.03	1.03
10083	39399.99	19949.93	5999.52	10083	5998.28	1.25
10084	39349.99	19949.99	5997.64	10084	5996.34	1.31
10085	39300.01	19949.94	5995.76	10085	5994.51	1.26
10086	39249.99	19950.01	5993.82	10086	5992.57	1.25
10087	39250.01	19999.95	5992.99	10087	5991.95	1.05
10088	39300.00	19999.95	5994.90	10088	5993.75	1.15
10089	39350.00	20000.12	5997.08	10089	5995.69	1.39
10090	39399.99	19999.93	5998.82	10090	5997.60	1.22
10091	39450.00	20000.01	6000.57	10091	5999.36	1.21
10092	39499.99	19999.96	6000.95	10092	5999.92	1.03
10093	39550.02	20000.07	5999.21	10093	5997.81	1.40
10094	39600.02	20000.04	5996.94	10094	5995.55	1.39
10095	39649.96	19999.92	5994.95	10095	5993.55	1.40
10096	39699.89	19999.80	5993.24	10096	5991.86	1.38
10097	39750.03	20000.05	5991.13	10097	5990.06	1.07
10098	39799.96	19999.93	5989.22	10098	5988.22	1.00
10099	39849.94	19999.93	5987.28	10099	5986.23	1.05
10100	39899.95	20049.93	5985.77	10100	5984.65	1.12
10101	39850.01	20049.02	5987.74	10101	5986.62	1.13
10102	39800.06	20050.07	5989.95	10102	5988.64	1.31
10103	39750.00	20049.98	5991.87	10103	5990.71	1.16
10104	39700.01	20050.01	5993.83	10104	5992.50	1.33
10105	39650.03	20050.06	5995.50	10105	5994.48	1.02
10106	39600.05	20050.12	5997.60	10106	5996.50	1.10
10107	39549.95	20049.84	5999.91	10107	5998.73	1.18
10108	39500.00	20050.03	6001.20	10108	6000.19	1.01
10109	39450.02	20050.11	5999.56	10109	5998.51	1.06
10110	39399.99	20049.92	5997.86	10110	5996.77	1.09
10111	39350.00	20049.92	5996.09	10111	5994.90	1.19
10112	39300.00	20050.03	5994.15	10112	5993.09	1.06
10113	39249.99	20050.12	5992.53	10113	5991.14	1.39

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
10114	39249.99	20100.06	5991.53	10114	5990.51	1.02
10115	39300.01	20099.86	5993.19	10115	5992.14	1.05
10116	39350.00	20100.00	5995.05	10116	5994.03	1.02
10117	39400.00	20099.93	5996.84	10117	5995.79	1.05
10118	39450.07	20100.04	5998.49	10118		*See Appendix A
10119	39500.00	20099.98	6000.24	10119	5999.22	1.02
10120	39550.01	20100.04	6000.64	10120	5999.59	1.05
10121	39599.96	20099.92	5998.51	10121	5997.21	1.31
10122	39649.96	20099.89	5996.29	10122	5995.05	1.24
10123	39699.99	20099.99	5993.98	10123	5992.83	1.15
10124	39749.99	20099.97	5992.21	10124	5991.15	1.06
10125	39800.07	20100.11	5990.03	10125	5989.01	1.02
10126	39849.97	20099.95	5988.25	10126	5987.09	1.16
10127	39899.99	20099.98	5986.03	10127	5985.03	1.00
10128	39949.93	20149.84	5984.44	10128	5983.36	1.08
10129	39900.01	20150.04	5986.55	10129	5985.37	1.19
10130	39850.00	20150.01	5988.51	10130	5987.42	1.10
10131	39800.02	20150.13	5990.36	10131	5989.34	1.02
10132	39750.01	20150.09	5992.69	10132	5991.39	1.30
10133	39700.00	20149.98	5994.37	10133	5993.37	1.00
10134	39650.01	20150.00	5996.43	10134	5995.38	1.06
10135	39599.80	20149.90	5998.66	10135	5997.62	1.05
10136	39550.18	20150.10	6000.32	10136	5999.31	1.01
10137	39499.87	20149.91	5998.74	10137	5997.53	1.22
10138	39450.05	20150.04	5997.06	10138	5996.01	1.06
10139	39399.82	20149.85	5995.59	10139	5994.58	1.01
10140	39350.00	20150.00	5993.99	10140	5992.95	1.04
10141	39300.09	20150.11	5992.49	10141	5991.49	1.01
10142	39250.07	20150.10	5991.10	10142	5989.71	1.40
10143	39250.11	20200.22	5989.90	10143	5988.88	1.02
10144	39300.10	20200.16	5991.31	10144	5990.23	1.08
10145	39350.06	20200.07	5992.78	10145	5991.77	1.01
10146	39399.88	20199.88	5994.39	10146	5993.34	1.06
10147	39449.85	20199.87	5995.77	10147	5994.71	1.06
10148	39500.02	20200.01	5997.06	10148	5996.06	1.00
10149	39550.14	20200.10	5998.79	10149	5997.74	1.06
10150	39600.02	20199.86	5999.40	10150	5998.38	1.02
10151	39650.12	20200.06	5996.96	10151	5995.92	1.04
10152	39700.00	20200.16	5994.85	10152	5993.82	1.04
10153	39750.01	20200.03	5992.87	10153	5991.82	1.05
10154	39799.98	20199.87	5990.99	10154	5989.86	1.14
10155	39850.02	20200.07	5988.76	10155	5987.74	1.03
10156	39899.97	20199.89	5986.90	10156	5985.72	1.18
10157	39950.05	20200.11	5985.14	10157	5983.95	1.19
10158	40000.07	20200.16	5983.01	10158	5981.85	1.16
10159	40000.02	20250.00	5983.47	10159	5982.43	1.05
10160	39949.96	20250.02	5985.52	10160	5984.44	1.08
10161	39899.99	20250.00	5987.29	10161	5986.29	1.00
10162	39850.03	20249.99	5989.33	10162	5988.25	1.07
10163	39799.82	20250.05	5991.27	10163	5990.26	1.01
10164	39749.96	20250.01	5993.22	10164	5992.20	1.02
10165	39700.08	20249.99	5995.34	10165	5994.31	1.02
10166	39649.84	20249.89	5997.43	10166	5996.41	1.03
10167	39599.96	20249.96	5998.39	10167	5997.38	1.01
10168	39549.98	20249.98	5997.39	10168	5996.39	1.00
10169	39500.09	20250.08	5996.03	10169	5994.90	1.13
10170	39450.13	20250.14	5994.52	10170	5993.52	1.01
10171	39400.00	20250.00	5993.01	10171	5991.96	1.06
10172	39349.89	20249.85	5991.55	10172	5990.50	1.06

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
10173	39300.02	20250.04	5990.24	10173	5989.06	1.17
10174	39299.94	20299.89	5988.92	10174	5987.87	1.05
10175	39349.99	20299.99	5990.33	10175	5989.33	1.01
10176	39400.06	20300.07	5991.70	10176	5990.70	1.00
10177	39449.91	20299.90	5993.11	10177	5992.06	1.05
10178	39499.89	20299.89	5994.65	10178	5993.65	1.00
10179	39549.89	20299.89	5996.00	10179	5994.96	1.05
10180	39600.10	20300.10	5995.99	10180	5994.99	1.01
10181	39649.92	20299.94	5995.69	10181	5994.67	1.02
10182	39700.93	20300.02	5995.07	10182	5994.07	1.01
10183	39750.05	20299.98	5993.58	10183	5992.56	1.02
10184	39800.00	20300.00	5991.72	10184	5990.70	1.02
10185	39850.09	20299.98	5989.57	10185	5988.57	1.00
10186	39899.95	20300.02	5987.77	10186	5986.63	1.14
10187	39949.99	20300.00	5986.00	10187	5984.86	1.14
10188	40000.04	20299.98	5983.83	10188	5982.81	1.01
10189						*See Appendix A
10190	40050.08	20349.89	5982.28	10190	5981.25	1.03
10191	39999.82	20350.28	5984.27	10191	5983.23	1.04
10192	39950.03	20349.94	5986.15	10192	5985.11	1.04
10193	39900.01	20349.98	5988.16	10193	5987.12	1.04
10194	39850.01	20349.95	5990.11	10194	5989.11	1.00
10195	39799.98	20350.06	5992.09	10195	5991.03	1.06
10196	39750.02	20349.91	5992.45	10196	5991.43	1.01
10197	39700.01	20349.96	5993.00	10197	5991.94	1.06
10198	39650.01	20349.92	5993.36	10198	5992.20	1.16
10199	39599.99	20350.07	5993.80	10199	5992.60	1.20
10200	39550.00	20349.92	5993.80	10200	5992.77	1.03
10201	39499.99	20349.94	5993.25	10201	5992.23	1.02
10202	39449.98	20349.93	5992.10	10202	5990.82	1.28
10203	39399.93	20349.74	5990.45	10203	5989.34	1.11
10204	39349.90	20349.67	5988.89	10204	5987.87	1.03
10205	39300.05	20350.12	5987.40	10205	5986.38	1.02
10206	39299.99	20399.98	5986.09	10206	5985.04	1.05
10207	39349.98	20399.96	5987.56	10207	5986.47	1.09
10208	39400.02	20400.05	5989.04	10208	5987.90	1.14
10209	39449.98	20399.89	5990.41	10209	5989.30	1.11
10210	39500.01	20399.95	5991.84	10210	5990.80	1.04
10211	39550.01	20400.18	5991.39	10211	5990.30	1.09
10212	39600.00	20400.06	5991.12	10212	5990.03	1.09
10213	39650.00	20399.99	5991.03	10213	5989.63	1.40
10214	39699.99	20400.01	5990.31	10214	5989.21	1.10
10215	39749.98	20400.06	5990.09	10215	5989.02	1.07
10216	39800.04	20399.87	5989.84	10216	5988.74	1.10
10217	39850.00	20400.00	5989.39	10217	5988.29	1.10
10218	39900.03	20399.94	5988.43	10218	5987.40	1.03
10219	39949.91	20400.14	5986.60	10219	5985.57	1.03
10220	40000.07	20399.89	5984.58	10220	5983.45	1.14
10221	40049.91	20400.10	5982.66	10221	5981.60	1.05
10222	40100.05	20400.06	5980.76	10222	5979.56	1.20
10223	40099.91	20450.09	5981.22	10223	5980.13	1.09
10224	40049.97	20450.04	5983.32	10224	5982.10	1.22
10225	39999.93	20450.11	5984.97	10225	5983.84	1.13
10226	39949.92	20450.12	5986.34	10226	5985.30	1.04
10227	39899.97	20450.06	5986.66	10227	5985.56	1.10
10228	39850.03	20449.94	5987.12	10228	5985.99	1.14
10229	39799.95	20450.12	5987.22	10229	5986.20	1.03
10230	39749.99	20450.00	5987.63	10230	5986.56	1.07
10231	39699.97	20450.11	5988.01	10231	5986.84	1.17

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
10232	39650.02	20449.82	5988.45	10232	5987.28	1.17
10233	39599.99	20449.99	5988.87	10233	5987.63	1.24
10234	39550.00	20449.99	5989.45	10234	5988.06	1.39
10235	39499.98	20449.82	5989.94	10235	5988.81	1.13
10236	39449.98	20449.87	5989.14	10236	5987.92	1.22
10237	39399.96	20449.83	5987.61	10237	5986.47	1.14
10238	39349.99	20449.97	5986.24	10238	5985.19	1.05
10239	39350.14	20500.14	5984.77	10239	5983.66	1.11
10240	39399.98	20500.03	5986.25	10240	5985.15	1.10
10241	39450.19	20500.17	5987.66	10241	5986.63	1.03
10242	39500.12	20499.97	5987.76	10242	5986.66	1.11
10243	39550.18	20500.17	5986.99	10243	5985.63	1.36
10244	39600.08	20500.19	5986.42	10244	5985.23	1.19
10245	39650.27	20500.25	5986.09	10245	5984.71	1.38
10246	39700.05	20500.04	5985.60	10246	5984.59	1.01
10247	39750.13	20500.18	5985.27	10247	5984.27	1.01
10248	39800.05	20499.96	5984.92	10248	5983.84	1.08
10249	39849.95	20499.88	5984.69	10249	5983.69	1.00
10250	39900.17	20499.95	5984.48	10250	5983.39	1.09
10251	39950.16	20500.05	5984.22	10251	5983.06	1.16
10252	40000.12	20499.99	5983.69	10252	5982.65	1.04
10253	40050.04	20499.87	5983.48	10253	5982.46	1.02
10254	40100.03	20500.00	5981.53	10254	5980.51	1.02
10255						*See Appendix A
10256	40150.22	20549.90	5980.04	10256	5979.02	1.01
10257	40100.00	20550.04	5980.67	10257	5979.66	1.01
10258	40050.13	20549.74	5981.15	10258	5979.97	1.18
10259	40000.13	20550.13	5981.39	10259	5980.34	1.05
10260	39950.07	20550.18	5981.81	10260	5980.47	1.34
10261	39900.00	20550.11	5981.97	10261	5980.83	1.14
10262	39850.14	20550.12	5982.18	10262	5981.09	1.09
10263	39800.07	20549.84	5982.49	10263	5981.29	1.20
10264	39750.06	20550.25	5982.95	10264	5981.68	1.27
10265	39700.16	20549.85	5983.13	10265	5981.98	1.15
10266	39650.02	20549.91	5983.67	10266	5982.38	1.28
10267	39600.19	20550.19	5984.36	10267	5983.07	1.29
10268	39550.02	20549.98	5985.09	10268	5983.69	1.40
10269	39500.11	20550.37	5985.85	10269	5984.52	1.34
10270	39449.95	20550.09	5986.29	10270	5985.20	1.09
10271	39399.90	20550.01	5985.20	10271	5983.88	1.32
10272	39349.97	20549.88	5983.90	10272	5982.65	1.25
10273	39400.04	20600.14	5983.56	10273	5982.42	1.14
10274	39449.96	20599.79	5984.47	10274	5983.39	1.09
10275	39500.01	20600.09	5984.13	10275	5982.86	1.27
10276	39550.99	20599.90	5983.21	10276	5982.01	1.19
10277	39600.00	20600.02	5982.39	10277	5981.09	1.31
10278	39650.00	20599.98	5981.40	10278	5980.28	1.12
10279	39700.02	20599.85	5980.74	10279	5979.64	1.09
10280	39749.97	20600.10	5980.25	10280	5979.20	1.05
10281	39800.01	20599.95	5980.27	10281	5978.97	1.30
10282	39849.97	20600.10	5979.64	10282	5978.63	1.01
10283	39900.08	20599.78	5979.33	10283	5978.27	1.06
10284	39949.97	20600.08	5979.13	10284	5978.04	1.09
10285	40000.01	20599.97	5978.96	10285	5977.66	1.30
10286	40050.04	20599.94	5978.46	10286	5977.41	1.05
10287	40099.96	20600.07	5978.33	10287	5977.06	1.27
10288	40150.01	20599.98	5978.00	10288	5976.75	1.24
10289						*See Appendix A
10290	40149.98	20650.04	5975.18	10290	5974.17	1.01

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
10291	40099.97	20649.93	5975.43	10291	5974.38	1.05
10292	40049.89	20650.08	5975.81	10292	5974.78	1.03
10293	39999.99	20649.99	5976.24	10293	5975.22	1.01
10294	39950.06	20650.10	5976.65	10294	5975.49	1.16
10295	39900.07	20650.00	5976.61	10295	5975.58	1.02
10296	39849.99	20650.11	5977.06	10296	5976.02	1.03
10297	39799.91	20649.96	5977.55	10297	5976.39	1.16
10298	39749.99	20650.14	5977.90	10298	5976.89	1.01
10299	39700.00	20649.98	5978.73	10299	5977.67	1.06
10300	39649.99	20650.07	5979.50	10300	5978.46	1.04
10301	39600.01	20649.96	5980.42	10301	5979.27	1.15
10302	39549.99	20649.87	5981.34	10302	5979.98	1.36
10303	39500.01	20650.10	5981.86	10303	5980.83	1.03
10304	39449.99	20649.89	5982.69	10304	5981.68	1.01
10305	39400.01	20650.02	5982.03	10305	5980.79	1.24
10306	39450.00	20700.04	5980.76	10306	5979.73	1.03
10307	39500.00	20699.97	5979.81	10307	5978.79	1.02
10308	39550.00	20700.04	5979.18	10308	5977.99	1.19
10309	39600.00	20700.07	5978.47	10309	5977.45	1.03
10310	39649.99	20700.11	5977.73	10310	5976.61	1.13
10311	39700.04	20700.30	5977.03	10311	5975.67	1.36
10312	39750.05	20699.96	5976.12	10312	5975.11	1.01
10313	39800.06	20700.02	5975.70	10313	5974.46	1.24
10314						*See Appendix A
10315	39899.88	20700.06	5974.57	10315	5973.34	1.23
10316	39950.06	20700.04	5974.10	10316	5973.10	1.01
10317	40000.13	20699.97	5973.89	10317	5972.84	1.06
10318	40050.01	20700.03	5973.74	10318	5972.74	1.01
10319	40099.98	20699.98	5973.78	10319	5972.49	1.28
10320	40149.98	20700.09	5973.45	10320	5972.40	1.05
10321	40149.94	20749.95	5971.64	10321	5970.43	1.21
10322						*See Appendix A
10323	40050.07	20749.82	5967.93	10323	5966.55	1.38
10324	39999.91	20750.03	5968.77	10324	5967.50	1.27
10325	39950.04	20750.03	5969.77	10325	5968.59	1.18
10326	39899.96	20749.79	5970.71	10326	5969.47	1.23
10327	39850.10	20750.12	5972.93	10327	5971.91	1.02
10328	39799.93	20750.08	5973.80	10328	5972.58	1.22
10329	39750.07	20749.31	5974.40	10329	5973.38	1.02
10330	39700.04	20749.74	5975.46	10330	5974.20	1.26
10331						*See Appendix A
10332	39600.06	20749.94	5976.66	10332	5975.61	1.05
10333	39549.99	20749.96	5977.48	10333	5976.36	1.12
10334	39499.98	20749.88	5978.07	10334	5977.02	1.04
10335	39449.97	20749.90	5978.93	10335	5977.88	1.05
10336	39499.99	20799.97	5976.26	10336	5975.25	1.01
10337	39549.99	20799.93	5975.57	10337	5974.43	1.13
10338	39599.99	20800.08	5974.88	10338	5973.73	1.15
10339	39650.08	20800.06	5974.16	10339	5973.11	1.05
10340	39700.05	20799.97	5973.25	10340	5972.25	1.00
10341	39749.94	20799.82	5971.52	10341	5970.50	1.02
10342	39800.04	20799.93	5966.95	10342	5965.67	1.28
10343	39850.05	20800.08	5962.21	10343	5961.21	1.01
10344	39899.95	20800.25	5958.29	10344	5956.95	1.34
10345	39950.07	20799.83	5957.29	10345	5956.28	1.02
10346	40000.01	20799.91	5956.32	10346	5955.02	1.30
10347	40049.85	20800.21	5957.49	10347	5956.24	1.25
10348	40099.93	20799.95	5969.03	10348	5967.94	1.09
10349	40150.00	20800.13	5969.79	10349	5968.57	1.22

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
10350	40150.04	20850.02	5968.68	10350	5967.29	1.39
10351	40100.00	20850.11	5965.65	10351	5964.25	1.40
10352	40049.94	20849.94	5953.45	10352	5952.06	1.39
10353						*See Appendix A
10354	39949.92	20850.36	5944.69	10354	5943.61	1.08
10355	39900.01	20850.03	5946.27	10355	5944.87	1.40
10356	39849.96	20850.03	5950.41	10356	5949.31	1.09
10357	39800.00	20850.03	5955.14	10357	5954.12	1.02
10358	39749.99	20849.96	5959.99	10358	5958.98	1.01
10359	39700.04	20850.06	5965.40	10359	5964.06	1.34
10360	39650.07	20850.12	5971.81	10360	5970.51	1.31
10361	39600.00	20850.01	5973.04	10361	5971.76	1.28
10362	39549.97	20849.91	5973.80	10362	5972.78	1.03
10363	39499.97	20849.89	5974.54	10363	5973.34	1.19
10364	39499.98	20899.93	5973.12	10364	5972.09	1.03
10365	39549.93	20899.99	5972.02	10365	5970.65	1.37
10366	39599.94	20899.98	5971.02	10366	5969.97	1.05
10367	39650.04	20900.07	5965.52	10367	5964.29	1.23
10368	39699.98	20899.96	5956.30	10368	5955.30	1.00
10369	39749.99	20899.99	5948.42	10369	5947.39	1.02
10370	39799.97	20899.90	5943.73	10370	5942.72	1.01
10371						*See Appendix A
10372						*See Appendix A
10373						*See Appendix A
10374						*See Appendix A
10375	40049.93	20899.89	5949.86	10375	5948.54	1.32
10376	40100.05	20900.06	5961.82	10376	5960.55	1.27
10377	40150.06	20900.09	5966.98	10377	5965.71	1.27
10378	40149.93	20949.81	5965.45	10378	5964.07	1.39
10379						*See Appendix A
10380						*See Appendix A
10381						*See Appendix A
10382						*See Appendix A
10383						*See Appendix A
10384						*See Appendix A
10385						*See Appendix A
10386						*See Appendix A
10387	39700.01	20950.02	5947.96	10387	5946.68	1.28
10388	39650.05	20950.08	5960.46	10388	5959.11	1.35
10389						*See Appendix A
10390	39550.29	20950.02	5970.89	10390	5969.49	1.40
10391	39549.85	20999.84	5970.46	10391	5969.15	1.31
10392	39600.09	21000.02	5968.52	10392	5967.26	1.26
10393	39649.91	20999.86	5960.00	10393	5958.81	1.19
10416	39650.02	21050.05	5960.07	10416	5958.71	1.36
10417	39600.08	21050.01	5968.17	10417	5966.77	1.40
10418	39550.03	21050.00	5970.13	10418	5968.88	1.25
10419	39550.11	21100.12	5969.66	10419	5968.47	1.18
10420	39599.93	21100.00	5967.96	10420	5966.57	1.39
11010	40182.72	20511.69	5972.75	11010	5971.57	1.19
11013	40176.03	20457.77	5974.61	11013	5973.51	1.10
11015	40167.59	20419.17	5976.20	11015	5975.19	1.01
11016				11016	5973.48	*See Appendix A
11019	40035.22	20173.01	5976.32	11019	5975.30	1.02
11020	39989.39	20111.93	5978.22	11020	5977.07	1.15
11023				11023	5979.06	*See Appendix A
11024	39858.50	19933.07	5982.49	11024	5981.13	1.36
11027	39766.24	19806.55	5984.78	11027	5983.55	1.23
11028	39671.18	19677.66	5985.98	11028	5984.81	1.17

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
11031	39599.05	19532.57	5988.43	11031	5987.20	1.24
11032	39521.80	19409.73	5990.14	11032	5989.04	1.11
11035	39458.16	19413.88	5992.27	11035	5991.26	1.01
11036	39407.71	19438.88	5994.12	11036	5993.07	1.05
11039	39349.82	19483.61	5996.22	11039	5995.19	1.03
11040						*See Appendix A
11043	39320.07	19529.33	5994.04	11043	5993.03	1.01
11044	39281.56	19621.27	5992.39	11044	5991.00	1.40
11047	39246.11	19715.11	5990.59	11047	5989.33	1.27
11048	39216.31	19806.85	5988.29	11048	5987.26	1.03
11051	39202.72	19903.70	5986.52	11051	5985.13	1.39
11052	39196.46	19998.14	5983.94	11052	5982.94	1.00
11055	39202.33	20095.27	5982.56	11055	5981.16	1.40
11056	39213.47	20194.52	5980.40	11056	5979.17	1.23
11059	39226.21	20297.14	5978.58	11059	5977.19	1.39
11060	39240.13	20390.69	5976.18	11060	5975.16	1.02
11063	39272.66	20480.31	5974.49	11063	5973.48	1.01
11064	39307.38	20570.03	5972.26	11064	5971.11	1.15
11067	39353.10	20661.10	5970.92	11067	5969.19	1.73
11068	39434.11	20846.26	5968.59	11068	5967.23	1.36
11071	39507.29	21035.80	5966.56	11071	5965.20	1.36
11072	39545.27	21149.01	5964.59	11072	5963.20	1.39
11136	39393.60	20753.72	5969.56	11136	5968.22	1.34
11138	39468.60	20941.72	5967.36	11138	5966.21	1.15
12000	39353.50	19499.98	5996.57	12000	5995.57	1.00
12001	39312.45	19599.99	5995.80	12001	5994.71	1.10
12002	39273.11	19700.00	5994.54	12002	5993.46	1.09
12003	39239.26	19799.83	5994.20	12003	5993.02	1.18
12004	39227.47	19899.89	5993.58	12004	5992.58	1.00
12005	39225.09	19999.94	5992.38	12005	5991.06	1.32
12006	39230.83	20100.07	5991.15	12006	5989.77	1.38
12007	39245.13	20200.20	5989.84	12007	5988.79	1.06
12008	39261.77	20300.18	5987.76	12008	5986.56	1.20
12009	39285.51	20400.15	5985.90	12009	5984.78	1.12
12010	39326.36	20500.72	5984.14	12010	5982.94	1.20
12011	39374.83	20600.25	5982.84	12011	5981.47	1.36
12012	39417.14	20699.79	5981.10	12012	5980.10	1.00
12013	39457.88	20800.00	5976.96	12013	5975.87	1.09
12014	39489.30	20899.98	5972.97	12014	5971.92	1.05
12015	39518.85	21000.00	5971.33	12015	5970.32	1.01
12016	39547.64	21100.01	5969.59	12016	5968.57	1.02
12017	39555.92	21129.40	5969.17	12017	5968.15	1.02
12018	39639.48	21077.19	5962.51	12018	5961.14	1.36
12019	39691.58	21009.46	5949.37	12019	5948.31	1.06
12020	39710.36	20955.11	5945.54	12020	5944.21	1.34
12021	39752.29	20924.52	5942.87	12021	5941.76	1.11
12022	39855.72	20905.29	5937.09	12022	5936.08	1.01
12023				12023	5937.09	*See Appendix A
12024	39894.32	20889.27	5937.20	12024	5936.20	1.00
12025	39912.47	20879.68	5938.49	12025	5937.36	1.13
12026	40005.93	20853.72	5944.08	12026	5942.88	1.20
12027	40017.83	20864.02	5944.87	12027	5943.49	1.38
12028	40056.75	20935.89	5949.07	12028	5947.69	1.38
12029	39533.67	21048.01	5970.55	12029	5969.53	1.02
12030	39534.62	20915.93	5971.93	12030	5970.58	1.36
12031	39836.50	20689.70	5975.06	12031	5974.06	1.00
12032	39988.32	20709.81	5973.53	12032	5972.45	1.07
12033	40092.05	20720.86	5972.72	12033	5971.67	1.06
12034	40174.67	20770.50	5970.44	12034	5969.40	1.04

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

12" Rock Layer

PT. NO.	NORTHING	EASTING	ELEVATION	PT. NO.	10" CUSHION ELEVATION	THICKNESS OF LAYER
12038	40197.06	20971.15	5965.83	12038	5964.68	1.15
12041	40189.27	20899.98	5967.31	12041	5966.27	1.03
12042	40172.69	20750.15	5971.20	12042	5969.89	1.31
12043						*See Appendix A
12044	40155.51	20594.13	5978.07	12044	5976.79	1.28
12045	40132.62	20418.22	5979.46	12045	5978.38	1.09
12046	40123.44	20400.04	5979.58	12046	5978.57	1.01
12047	40100.18	20352.16	5980.53	12047	5979.40	1.13
12048	40073.41	20299.94	5981.19	12048	5979.96	1.23
12049	40010.99	20199.72	5982.42	12049	5981.38	1.05
12050	39945.47	20100.10	5984.18	12050	5983.07	1.11
12051	39876.93	20000.13	5986.60	12051	5985.22	1.39
12052	39800.20	19886.42	5987.45	12052	5986.33	1.13
12053	39741.43	19800.05	5988.47	12053	5987.45	1.02
12054	39700.22	19740.86	5989.01	12054	5987.91	1.11
12055	39670.04	19699.89	5989.07	12055	5988.05	1.02
12056	39648.62	19671.99	5989.93	12056	5988.57	1.37
12057	39612.89	19600.06	5990.31	12057	5988.94	1.37
12058	39600.50	19565.49	5989.89	12058	5988.88	1.02
12059	39570.34	19499.80	5990.23	12059	5989.20	1.03
12060	39549.64	19459.83	5990.78	12060	5989.75	1.03
12061	39529.17	19429.20	5991.65	12061	5990.52	1.13
12062	39499.73	19418.63	5992.63	12062	5991.62	1.01
12063	39449.70	19429.86	5994.44	12063	5993.44	1.00
12064	39400.05	19457.66	5996.51	12064	5995.49	1.02
12065	39382.21	19467.60	5996.60	12065	5995.58	1.02
12221	40123.51	20935.76	5964.54	12221	5963.39	1.15
12222	40113.30	20875.62	5966.55	12222	5965.45	1.10
12223	40106.53	20826.16	5968.56	12223	5967.55	1.01
12224	40099.69	20776.67	5970.47	12224	5969.45	1.03
12225	40089.49	20727.05	5972.63	12225	5971.60	1.02
12226	39879.80	20742.35	5972.43	12226	5971.41	1.03
12227	39686.33	20822.12	5972.55	12227	5971.44	1.11
12228	39616.40	20905.20	5970.47	12228	5969.41	1.06
12229	39617.14	20916.91	5968.81	12229	5967.50	1.32
12230	39630.74	21035.44	5964.81	12230	5963.55	1.26
12231						*See Appendix A
12232	40050.25	20944.73	5947.03	12232	5945.72	1.30
12233	40009.93	20870.48	5942.45	12233	5941.31	1.14
12234	40003.22	20864.53	5942.19	12234	5940.98	1.21
12235	39916.61	20888.91	5935.92	12235	5934.77	1.14
12236	39873.58	20912.08	5934.11	12236	5933.11	1.00
12237	39756.07	20934.65	5940.73	12237	5939.39	1.34
12238	39719.05	20961.47	5943.30	12238	5942.02	1.28
12239	39701.06	21014.23	5947.24	12239	5946.06	1.17
12240	39648.91	21081.10	5959.79	12240	5958.59	1.20

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
2341	39609.20	20913.45	752590.89	2084010.97	5972.73	2341	5972.39	0.34	1.83	2.17
6525	39560.00	19452.90	752537.08	2082550.96	5991.36	6525	5990.75	0.61	1.40	2.01
10001	39500.00	19450.00	752477.09	2082548.26	5995.03	10001	5994.47	0.56	1.45	2.01
10002	39450.00	19449.95	752427.10	2082548.37	5996.67	10002	5996.31	0.36	1.81	2.17
10003	39399.96	19499.84	752377.28	2082598.42	5998.40	10003	5998.00	0.40	1.62	2.02
10004	39449.99	19499.90	752427.27	2082598.31	5997.25	10004	5996.61	0.64	1.52	2.16
10005	39500.00	19500.06	752477.26	2082598.31	5995.23	10005	5994.40	0.83	1.36	2.19
10006	39549.99	19499.66	752527.25	2082597.74	5993.32	10006	5992.68	0.64	1.55	2.19
10007	39549.99	19549.96	752527.41	2082648.03	5993.85	10007	5993.13	0.72	1.29	2.01
10008	39500.00	19550.01	752477.42	2082648.24	5995.71	10008	5995.06	0.65	1.41	2.06
10009	39450.01	19550.09	752427.43	2082648.48	5997.61	10009	5996.90	0.71	1.40	2.11
10010	39399.99	19549.97	752377.44	2082648.53	5999.02	10010	5998.06	0.96	1.09	2.05
10011	39349.96	19549.88	752327.46	2082648.60	5999.01	10011	5998.37	0.64	1.42	2.06
10012	39350.00	19599.99	752327.63	2082698.70	5999.10	10012	5998.38	0.72	1.31	2.03
10013	39400.01	19600.04	752377.61	2082698.59	5999.89	10013	5998.90	0.99	1.02	2.01
10014	39449.97	19599.86	752427.60	2082698.24	5998.22	10014	5997.75	0.47	1.59	2.06
10015	39500.01	19600.13	752477.59	2082698.35	5996.79	10015	5996.09	0.70	1.30	2.00
10016	39549.99	19599.94	752527.58	2082697.99	5994.52	10016	5993.93	0.59	1.60	2.19
10017	39600.00	19599.88	752577.56	2082697.77	5992.90	10017	5992.37	0.53	1.50	2.03
10018	39599.99	19650.06	752577.72	2082747.94	5993.65	10018	5993.30	0.35	1.67	2.02
10019	39550.00	19649.91	752527.74	2082747.95	5995.37	10019	5995.00	0.37	1.64	2.01
10020	39500.00	19649.99	752477.75	2082748.20	5997.39	10020	5996.95	0.44	1.56	2.00
10021	39450.00	19650.02	752427.76	2082748.39	5998.78	10021	5998.47	0.31	1.72	2.03
10022	39399.97	19649.93	752377.77	2082748.47	6000.90	10022	6000.05	0.85	1.17	2.02
10023	39350.07	19650.16	752327.79	2082748.86	5999.40	10023	5998.65	0.75	1.28	2.03
10024	39299.94	19649.90	752277.80	2082748.77	5997.87	10024	5997.36	0.51	1.52	2.03
10025	39299.92	19699.86	752277.97	2082798.72	5997.76	10025	5997.24	0.52	1.56	2.08
10026	39349.96	19699.90	752327.96	2082798.59	5999.40	10026	5998.86	0.54	1.60	2.14
10027	39400.03	19700.12	752377.94	2082798.65	6001.09	10027	6000.44	0.65	1.37	2.02
10028	39449.97	19699.84	752427.93	2082798.20	5999.95	10028	5999.60	0.35	1.71	2.06

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10029	39500.01	19700.11	752477.92	2082798.31	5998.08	10029	5997.70	0.38	1.66	2.04
10030	39550.00	19699.87	752527.91	2082797.90	5995.87	10030	5995.37	0.50	1.54	2.04
10031	39600.03	19699.72	752577.89	2082797.59	5994.07	10031	5993.70	0.37	1.66	2.03
10032	39650.01	19699.97	752627.88	2082797.67	5992.47	10032	5991.93	0.54	1.63	2.17
10033							*See Appendix A		*See Appendix A	
10034	39649.99	19750.02	752628.04	2082847.70	5993.02	10034	5992.17	0.85	1.34	2.19
10035	39599.99	19750.11	752578.05	2082847.96	5994.88	10035	5994.16	0.72	1.29	2.01
10036	39550.00	19750.08	752528.07	2082848.09	5996.50	10036	5996.13	0.37	1.63	2.00
10037	39500.00	19750.01	752478.08	2082848.19	5998.76	10037	5998.04	0.72	1.46	2.18
10038	39450.00	19750.02	752428.09	2082848.36	6000.80	10038	5999.91	0.89	1.24	2.13
10039	39399.98	19749.95	752378.10	2082848.46	6001.74	10039	6001.05	0.69	1.32	2.01
10040	39350.00	19750.00	752328.12	2082848.67	5999.61	10040	5999.02	0.59	1.48	2.07
10041	39299.92	19749.88	752278.13	2082848.72	5997.80	10041	5997.02	0.78	1.35	2.13
10042	39249.96	19799.95	752228.31	2082898.94	5996.33	10042	5995.82	0.51	1.64	2.15
10043	39300.02	19800.03	752278.30	2082898.86	5997.69	10043	5997.25	0.44	1.57	2.01
10044	39349.95	19799.92	752328.29	2082898.58	5999.58	10044	5999.00	0.58	1.55	2.13
10045	39399.99	19799.97	752378.27	2082898.47	6002.22	10045	6001.06	1.16	0.96	2.12
10046	39449.98	19799.93	752428.26	2082898.26	6002.23	10046	6001.28	0.95	1.06	2.01
10047	39499.99	19799.89	752478.25	2082898.06	5999.85	10047	5999.40	0.45	1.72	2.17
10048	39550.00	19799.99	752528.24	2082897.99	5997.63	10048	5997.35	0.28	1.82	2.10
10049	39599.99	19800.02	752578.22	2082897.86	5995.54	10049	5994.90	0.64	1.42	2.06
10050	39650.01	19799.94	752628.21	2082897.61	5993.90	10050	5992.77	1.13	1.00	2.13
10051	39700.13	19799.69	752678.20	2082897.20	5992.00	10051	5991.38	0.62	1.54	2.16
10052	39749.96	19850.06	752728.34	2082947.39	5991.08	10052	5990.60	0.48	1.65	2.13
10053	39700.00	19850.00	752678.36	2082947.50	5992.85	10053	5992.30	0.55	1.62	2.17
10054	39650.00	19849.99	752628.37	2082947.65	5994.92	10054	5994.21	0.71	1.43	2.14
10055	39599.99	19850.04	752578.38	2082947.87	5996.51	10055	5996.12	0.39	1.63	2.02
10056	39550.00	19849.99	752528.39	2082947.98	5998.58	10056	5998.23	0.35	1.75	2.10
10057	39500.01	19850.03	752478.41	2082948.19	6000.60	10057	6000.26	0.34	1.79	2.13
10058	39450.00	19850.00	752428.42	2082948.32	6002.89	10058	6001.71	1.18	1.00	2.18

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10059	39400.00	19849.99	752378.43	2082948.48	6002.13	10059	6001.35	0.78	1.27	2.05
10060	39349.99	19850.00	752328.45	2082948.65	6000.10	10060	5999.64	0.46	1.69	2.15
10061	39300.01	19850.00	752278.46	2082948.82	5997.68	10061	5997.28	0.40	1.61	2.01
10062	39250.03	19850.03	752228.47	2082949.01	5996.05	10062	5995.56	0.49	1.69	2.18
10063	39249.96	19899.97	752228.64	2082998.94	5995.94	10063	5995.42	0.52	1.58	2.10
10064	39300.04	19900.04	752278.63	2082998.85	5997.71	10064	5997.31	0.40	1.68	2.08
10065	39350.03	19900.04	752328.62	2082998.68	6000.01	10065	5999.63	0.38	1.64	2.02
10066	39400.06	19900.10	752378.60	2082998.58	6002.20	10066	6001.59	0.61	1.43	2.04
10067	39450.00	19900.00	752428.59	2082998.31	6003.34	10067	6002.48	0.86	1.16	2.02
10068	39499.99	19899.97	752478.58	2082998.12	6001.46	10068	6000.84	0.62	1.55	2.17
10069	39550.00	19900.04	752528.56	2082998.02	5999.26	10069	5998.99	0.27	1.83	2.10
10070	39600.01	19899.96	752578.55	2082997.77	5997.29	10070	5997.01	0.28	1.74	2.02
10071	39649.94	19900.15	752628.54	2082997.80	5995.37	10071	5994.92	0.45	1.60	2.05
10072	39699.99	19900.02	752678.53	2082997.50	5993.48	10072	5993.08	0.40	1.63	2.03
10073	39750.00	19900.00	752728.51	2082997.32	5991.57	10073	5991.01	0.56	1.61	2.17
10074	39799.94	19900.06	752778.50	2082997.21	5989.92	10074	5988.97	0.95	1.17	2.12
10075	39799.99	19950.01	752778.66	2083047.14	5990.26	10075	5989.61	0.65	1.39	2.04
10076	39750.11	19949.89	752728.67	2083047.19	5992.18	10076	5991.50	0.68	1.38	2.06
10077	39700.01	19949.99	752678.69	2083047.45	5994.20	10077	5994.00	0.20	1.83	2.03
10078	39649.96	19950.08	752628.70	2083047.71	5996.11	10078	5995.83	0.28	1.72	2.00
10079	39599.98	19950.06	752578.71	2083047.85	5998.11	10079	5997.77	0.34	1.83	2.17
10080	39550.00	19950.00	752528.72	2083047.96	6000.20	10080	5999.69	0.51	1.51	2.02
10081	39500.00	19949.99	752478.74	2083048.11	6002.28	10081	6001.80	0.48	1.52	2.00
10082	39449.95	19949.91	752428.75	2083048.20	6003.23	10082	6002.66	0.57	1.60	2.17
10083	39400.02	19950.03	752378.76	2083048.48	6001.55	10083	6001.33	0.22	1.81	2.03
10084	39349.99	19949.98	752328.78	2083048.60	5999.67	10084	5999.42	0.25	1.78	2.03
10085	39300.10	19950.09	752278.79	2083048.88	5997.81	10085	5997.40	0.41	1.64	2.05
10086	39249.95	19949.96	752228.80	2083048.91	5995.98	10086	5995.50	0.48	1.68	2.16
10087	39249.99	20000.00	752228.97	2083098.94	5995.10	10087	5994.82	0.28	1.83	2.11
10088	39300.03	20000.02	752278.96	2083098.79	5996.95	10088	5996.47	0.48	1.57	2.05

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10089	39349.97	19999.98	752328.95	2083098.59	5999.27	10089	5998.83	0.44	1.75	2.19
10090	39400.02	20000.02	752378.93	2083098.46	6000.95	10090	6000.47	0.48	1.65	2.13
10091	39450.00	20000.01	752428.92	2083098.29	6002.75	10091	6002.22	0.53	1.65	2.18
10092	39499.99	19999.97	752478.91	2083098.08	6003.01	10092	6002.43	0.58	1.48	2.06
10093	39550.00	19999.99	752528.89	2083097.94	6001.22	10093	6000.82	0.40	1.61	2.01
10094	39600.03	19999.89	752578.88	2083097.67	5999.09	10094	5998.77	0.32	1.83	2.15
10095	39650.02	19999.97	752628.87	2083097.59	5996.95	10095	5996.74	0.21	1.79	2.00
10096	39699.96	20000.03	752678.86	2083097.48	5995.26	10096	5994.51	0.75	1.27	2.02
10097	39749.94	20000.04	752728.84	2083097.33	5993.18	10097	5992.14	1.04	1.01	2.05
10098	39799.97	20000.02	752778.83	2083097.14	5991.23	10098	5990.11	1.12	0.89	2.01
10099	39849.97	20000.01	752828.82	2083096.97	5989.36	10099	5988.47	0.89	1.19	2.08
10100	39900.00	20049.99	752878.97	2083146.77	5987.85	10100	5987.01	0.84	1.24	2.08
10101	39849.74	20049.08	752828.98	2083146.03	5989.81	10101	5988.82	0.99	1.08	2.07
10102	39799.91	20050.03	752778.99	2083147.14	5992.02	10102	5991.01	1.01	1.06	2.07
10103	39749.97	20050.01	752729.00	2083147.29	5993.94	10103	5993.18	0.76	1.31	2.07
10104	39699.87	20050.08	752679.02	2083147.52	5995.97	10104	5995.21	0.76	1.38	2.14
10105	39649.91	20050.10	752629.03	2083147.71	5997.70	10105	5997.13	0.57	1.63	2.20
10106	39600.07	20049.87	752579.04	2083147.64	5999.80	10106	5999.43	0.37	1.83	2.20
10107	39550.00	20050.00	752529.05	2083147.94	6001.96	10107	6001.19	0.77	1.28	2.05
10108	39500.03	20050.07	752479.07	2083148.17	6003.27	10108	6002.70	0.57	1.50	2.07
10109	39450.07	20050.07	752429.08	2083148.34	6001.59	10109	6001.00	0.59	1.44	2.03
10110	39400.09	20050.06	752379.09	2083148.49	6000.05	10110	5999.35	0.70	1.49	2.19
10111	39349.99	20050.00	752329.11	2083148.60	5998.13	10111	5997.42	0.71	1.33	2.04
10112	39299.95	20049.98	752279.12	2083148.74	5996.23	10112	5995.68	0.55	1.53	2.08
10113	39250.06	20050.02	752229.13	2083148.95	5994.68	10113	5993.97	0.71	1.44	2.15
10114	39249.95	20100.00	752229.30	2083198.91	5993.71	10114	5993.35	0.36	1.82	2.18
10115	39300.08	20100.02	752279.29	2083198.76	5995.37	10115	5995.00	0.37	1.81	2.18
10116	39349.96	20099.99	752329.28	2083198.57	5997.20	10116	5996.87	0.33	1.82	2.15
10117	39400.06	20100.02	752379.26	2083198.43	5999.02	10117	5998.67	0.35	1.83	2.18
10118	39449.96	20099.98	752429.25	2083198.23	6000.62	10118	6000.06	0.56	1.57	2.13

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10119	39500.07	20100.07	752479.24	2083198.15	6002.24	10119	6001.58	0.66	1.34	2.00
10120	39550.00	20100.06	752529.22	2083197.98	6002.67	10120	6002.18	0.49	1.54	2.03
10121	39599.87	20100.13	752579.21	2083197.88	6000.57	10121	5999.88	0.69	1.37	2.06
10122	39650.14	20099.93	752629.20	2083197.52	5998.47	10122	5997.51	0.96	1.22	2.18
10123	39699.93	20100.03	752679.19	2083197.45	5996.21	10123	5995.33	0.88	1.35	2.23
10124	39749.99	20100.00	752729.17	2083197.26	5994.41	10124	5993.27	1.14	1.06	2.20
10125	39799.92	20100.01	752779.16	2083197.10	5992.12	10125	5991.10	1.02	1.07	2.09
10126	39849.94	20100.00	752829.15	2083196.93	5990.28	10126	5989.42	0.86	1.17	2.03
10127	39899.98	20100.00	752879.14	2083196.76	5988.10	10127	5987.29	0.81	1.26	2.07
10128	39950.21	20150.00	752929.28	2083246.59	5986.62	10128	5985.61	1.01	1.17	2.18
10129	39899.96	20149.99	752879.30	2083246.74	5988.57	10129	5987.64	0.93	1.09	2.02
10130	39849.81	20150.00	752829.31	2083246.92	5990.56	10130	5989.56	1.00	1.05	2.05
10131	39800.05	20150.00	752779.32	2083247.08	5992.53	10131	5991.68	0.85	1.32	2.17
10132	39750.11	20150.00	752729.33	2083247.25	5994.78	10132	5993.97	0.81	1.28	2.09
10133	39700.05	20150.00	752679.35	2083247.41	5996.51	10133	5996.02	0.49	1.65	2.14
10134	39650.00	20150.00	752629.36	2083247.58	5998.53	10134	5998.23	0.30	1.80	2.10
10135	39599.97	20150.00	752579.37	2083247.74	6000.80	10135	6000.42	0.38	1.76	2.14
10136	39549.97	20150.00	752529.38	2083247.91	6001.80	10136	6001.61	0.19	1.29	1.48
10137	39499.96	20150.00	752479.40	2083248.07	6000.79	10137	6000.30	0.49	1.56	2.05
10138	39449.95	20150.00	752429.41	2083248.24	5999.17	10138	5998.83	0.34	1.77	2.11
10139	39399.99	20150.00	752379.42	2083248.40	5997.78	10139	5997.27	0.51	1.68	2.19
10140	39350.02	20150.00	752329.44	2083248.57	5996.01	10140	5995.78	0.23	1.79	2.02
10141	39299.96	20150.00	752279.45	2083248.73	5994.52	10141	5994.25	0.27	1.76	2.03
10142	39249.95	20150.00	752229.46	2083248.90	5993.21	10142	5992.85	0.36	1.75	2.11
10143							*See Appendix A			
10144	39299.98	20200.00	752279.62	2083298.72	5993.58	10144	5993.04	0.53	1.73	2.26
10145	39350.16	20199.96	752329.61	2083298.52	5994.87	10145	5994.41	0.45	1.63	2.09
10146	39399.90	20200.04	752379.59	2083298.43	5996.70	10146	5996.22	0.48	1.83	2.31
10147	39449.86	20200.07	752429.58	2083298.30	5997.91	10147	5997.60	0.31	1.83	2.14
10148	39499.87	20200.13	752479.57	2083298.19	5999.18	10148	5998.85	0.32	1.79	2.11

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10149	39550.00	20199.94	752529.55	2083297.84	6000.99	10149	6000.38	0.60	1.59	2.19
10150	39599.96	20199.97	752579.54	2083297.70	6001.44	10150	6000.67	0.77	1.27	2.04
10151	39650.02	20200.01	752629.53	2083297.58	5999.15	10151	5998.79	0.36	1.83	2.19
10152	39700.15	20200.05	752679.52	2083297.45	5997.00	10152	5996.58	0.42	1.73	2.15
10153	39750.11	20200.03	752729.50	2083297.27	5995.07	10153	5994.52	0.54	1.65	2.19
10154	39799.83	20199.96	752779.49	2083297.03	5993.19	10154	5992.24	0.95	1.25	2.20
10155	39849.98	20200.00	752829.48	2083296.91	5990.98	10155	5990.23	0.75	1.47	2.22
10156	39899.74	20199.95	752879.47	2083296.69	5989.13	10156	5988.28	0.85	1.38	2.23
10157	39949.95	20199.99	752929.45	2083296.57	5987.36	10157	5986.27	1.09	1.13	2.22
10158							*See Appendix A			
10159	40000.10	20250.02	752979.60	2083346.42	5985.52	10159	5984.70	0.82	1.23	2.05
10160	39949.82	20249.96	752929.61	2083346.53	5987.56	10160	5986.64	0.92	1.13	2.05
10161	39899.88	20249.97	752879.63	2083346.70	5989.55	10161	5988.73	0.82	1.44	2.26
10162	39849.86	20249.95	752829.64	2083346.85	5991.49	10162	5990.78	0.70	1.45	2.16
10163	39799.87	20249.95	752779.65	2083347.01	5993.41	10163	5993.07	0.34	1.80	2.14
10164	39749.94	20249.97	752729.66	2083347.20	5995.32	10164	5994.83	0.49	1.61	2.10
10165	39699.89	20249.92	752679.68	2083347.31	5997.50	10165	5995.77	1.73	0.44	2.16
10166	39649.98	20249.98	752629.69	2083347.54	5999.61	10166	5998.84	0.76	1.41	2.17
10167	39600.02	20250.04	752579.70	2083347.76	6000.44	10167	5999.82	0.62	1.43	2.05
10168	39550.00	20250.20	752529.71	2083348.09	5999.67	10168	5998.94	0.73	1.55	2.28
10169	39500.07	20249.88	752479.73	2083347.93	5998.23	10169	5997.46	0.77	1.44	2.20
10170	39449.93	20250.08	752429.74	2083348.30	5996.65	10170	5996.44	0.21	1.91	2.13
10171	39400.04	20249.96	752379.75	2083348.34	5995.12	10171	5994.53	0.59	1.52	2.10
10172	39349.96	20250.02	752329.77	2083348.57	5993.83	10172	5992.85	0.98	1.30	2.28
10173	39300.10	20249.95	752279.78	2083348.66	5992.44	10173	5991.36	1.08	1.13	2.20
10174	39300.07	20299.96	752279.95	2083398.65	5991.19	10174	5990.09	1.10	1.18	2.27
10175	39350.02	20299.99	752329.94	2083398.52	5992.53	10175	5991.64	0.88	1.31	2.19
10176	39399.92	20300.08	752379.92	2083398.44	5993.95	10176	5993.39	0.56	1.69	2.25
10177	39449.99	20300.01	752429.91	2083398.21	5995.39	10177	5994.62	0.77	1.51	2.28
10178	39500.04	20299.87	752479.90	2083397.90	5996.82	10178	5996.07	0.74	1.42	2.16

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10179	39550.00	20299.80	752529.88	2083397.67	5998.19	10179	5996.96	1.23	0.96	2.19
10180	39600.03	20300.09	752579.87	2083397.79	5998.34	10180	5997.52	0.82	1.53	2.35
10181	39649.99	20299.98	752629.86	2083397.52	5997.94	10181	5997.30	0.64	1.61	2.25
10182	39701.08	20300.06	752680.85	2083397.43	5997.16	10182	5996.03	1.13	0.96	2.09
10183	39750.00	20300.00	752729.83	2083397.21	5995.77	10183	5994.81	0.96	1.23	2.19
10184	39800.14	20300.08	752779.82	2083397.12	5993.92	10184	5993.21	0.71	1.49	2.20
10185	39850.02	20300.01	752829.81	2083396.89	5991.84	10185	5991.17	0.67	1.60	2.27
10186	39900.11	20300.04	752879.80	2083396.75	5989.89	10186	5989.21	0.68	1.44	2.12
10187	39949.92	20299.97	752929.78	2083396.52	5988.21	10187	5986.88	1.32	0.89	2.21
10188	39999.99	20299.99	752979.77	2083396.37	5986.01	10188	5984.92	1.09	1.10	2.19
10189							*See Appendix A		*See Appendix A	
10190	40050.03	20350.01	753029.92	2083446.22	5984.36	10190	5984.09	0.27	1.81	2.08
10191	39999.96	20349.99	752979.93	2083446.36	5986.44	10191	5985.72	0.72	1.45	2.17
10192	39950.08	20350.03	752929.94	2083446.57	5988.33	10192	5987.54	0.78	1.39	2.18
10193	39899.88	20349.93	752879.96	2083446.63	5990.33	10193	5989.61	0.72	1.45	2.18
10194	39849.91	20349.94	752829.97	2083446.81	5992.36	10194	5991.62	0.73	1.51	2.24
10195	39799.90	20349.93	752779.98	2083446.96	5994.15	10195	5992.98	1.17	0.89	2.06
10196	39750.13	20350.13	752729.99	2083447.33	5994.75	10196	5993.87	0.88	1.43	2.31
10197	39700.01	20350.02	752680.01	2083447.38	5995.34	10197	5994.82	0.52	1.82	2.34
10198	39650.06	20350.12	752630.02	2083447.65	5995.51	10198	5995.04	0.47	1.68	2.15
10199	39600.01	20350.02	752580.03	2083447.71	5996.01	10199	5995.36	0.65	1.56	2.21
10200	39550.00	20349.99	752530.04	2083447.85	5995.89	10200	5995.27	0.62	1.48	2.10
10201	39500.00	20350.00	752480.06	2083448.02	5995.46	10201	5994.48	0.98	1.23	2.21
10202	39450.04	20349.91	752430.07	2083448.10	5994.41	10202	5993.57	0.84	1.47	2.31
10203	39400.06	20349.93	752380.08	2083448.28	5992.61	10203	5992.13	0.48	1.68	2.16
10204	39350.14	20349.87	752330.10	2083448.39	5990.99	10204	5990.22	0.76	1.33	2.09
10205	39300.08	20349.94	752280.11	2083448.62	5989.70	10205	5988.87	0.83	1.47	2.30
10206	39299.96	20400.04	752280.28	2083498.71	5988.45	10206	5987.62	0.82	1.53	2.35
10207	39349.98	20400.03	752330.27	2083498.54	5989.64	10207	5988.88	0.76	1.32	2.08
10208	39400.05	20399.93	752380.25	2083498.27	5991.09	10208	5990.82	0.27	1.78	2.05

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10209	39450.03	20399.95	752430.24	2083498.13	5992.76	10209	5991.99	0.77	1.58	2.35
10210	39500.03	20399.84	752480.23	2083497.85	5993.92	10210	5992.77	1.14	0.94	2.08
10211	39550.00	20399.95	752530.21	2083497.80	5993.70	10211	5993.02	0.67	1.63	2.30
10212	39599.99	20399.93	752580.20	2083497.61	5993.47	10212	5993.14	0.33	2.03	2.36
10213	39649.98	20399.94	752630.19	2083497.46	5993.23	10213	5993.03	0.20	2.00	2.20
10214	39700.01	20400.02	752680.18	2083497.37	5992.76	10214	5992.55	0.20	2.24	2.45
10215	39749.97	20399.96	752730.16	2083497.15	5992.31	10215	5992.12	0.20	2.03	2.23
10216	39800.04	20400.04	752780.15	2083497.06	5992.17	10216	5991.83	0.34	1.99	2.33
10217	39850.00	20399.98	752830.14	2083496.84	5991.69	10217	5991.19	0.50	1.80	2.30
10218	39900.10	20400.07	752880.12	2083496.76	5990.51	10218	5989.75	0.76	1.32	2.08
10219	39949.92	20399.96	752930.11	2083496.49	5988.88	10219	5988.18	0.69	1.59	2.28
10220	40000.06	20400.02	752980.10	2083496.38	5986.79	10220	5986.59	0.20	2.02	2.22
10221	40049.89	20399.93	753030.09	2083496.13	5984.87	10221	5984.67	0.20	2.02	2.22
10222	40099.90	20399.96	753080.07	2083495.99	5982.90	10222	5982.61	0.29	1.84	2.14
10223	40100.00	20449.99	753080.23	2083546.01	5983.53	10223	5983.18	0.35	1.95	2.31
10224	40050.13	20450.07	753030.25	2083546.26	5985.46	10224	5985.26	0.20	1.95	2.15
10225	39999.97	20449.98	752980.26	2083546.33	5987.11	10225	5986.91	0.20	1.93	2.14
10226	39949.93	20449.95	752930.27	2083546.47	5988.40	10226	5988.20	0.20	1.87	2.07
10227	39899.89	20449.92	752880.28	2083546.60	5988.87	10227	5988.67	0.20	2.02	2.22
10228	39850.00	20450.00	752830.30	2083546.85	5989.33	10228	5989.09	0.24	1.97	2.20
10229	39799.98	20449.98	752780.31	2083546.99	5989.60	10229	5989.24	0.37	2.01	2.38
10230	39749.91	20449.87	752730.32	2083547.05	5989.97	10230	5989.65	0.32	2.02	2.34
10231	39700.10	20450.20	752680.34	2083547.53	5990.29	10231	5989.93	0.36	1.92	2.28
10232	39650.02	20450.05	752630.35	2083547.55	5990.71	10232	5990.34	0.36	1.89	2.26
10233	39600.01	20450.04	752580.36	2083547.70	5991.24	10233	5990.87	0.37	2.00	2.37
10234	39550.00	20450.01	752530.37	2083547.84	5991.67	10234	5991.43	0.24	1.98	2.22
10235	39499.97	20450.18	752480.39	2083548.17	5992.21	10235	5991.95	0.27	2.01	2.27
10236	39449.96	20450.16	752430.40	2083548.32	5991.43	10236	5991.13	0.30	1.99	2.28
10237	39400.06	20449.89	752380.41	2083548.21	5989.87	10237	5989.54	0.34	1.93	2.26
10238	39350.00	20450.00	752330.43	2083548.49	5988.34	10238	5988.10	0.24	1.86	2.10

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10239	39350.12	20500.09	752330.60	2083598.57	5986.96	10239	5986.63	0.33	1.86	2.19
10240	39399.94	20500.01	752380.58	2083598.32	5988.32	10240	5988.12	0.20	1.86	2.07
10241	39450.08	20500.07	752430.57	2083598.22	5989.71	10241	5989.51	0.20	1.85	2.05
10242	39500.05	20500.07	752480.56	2083598.05	5989.81	10242	5989.61	0.20	1.85	2.05
10243	39550.03	20500.03	752530.54	2083597.85	5989.25	10243	5988.90	0.35	1.91	2.26
10244	39600.00	20500.02	752580.53	2083597.67	5988.60	10244	5988.28	0.32	1.85	2.18
10245	39650.04	20500.05	752630.52	2083597.54	5988.14	10245	5987.94	0.20	1.85	2.05
10246	39699.96	20499.96	752680.51	2083597.28	5987.68	10246	5987.46	0.22	1.85	2.07
10247	39750.07	20500.08	752730.49	2083597.24	5987.31	10247	5987.11	0.20	1.84	2.04
10248	39800.07	20500.10	752780.48	2083597.09	5986.98	10248	5986.76	0.22	1.84	2.06
10249	39849.98	20499.98	752830.47	2083596.81	5986.98	10249	5986.71	0.27	2.02	2.29
10250	39899.99	20499.98	752880.45	2083596.64	5986.63	10250	5986.43	0.20	1.95	2.15
10251	39949.93	20499.87	752930.44	2083596.37	5986.30	10251	5986.11	0.20	1.88	2.08
10252	40000.02	20500.10	752980.43	2083596.43	5985.95	10252	5985.70	0.25	2.01	2.26
10253	40049.99	20499.95	753030.42	2083596.12	5985.60	10253	5985.32	0.29	1.84	2.12
10254	40100.01	20500.04	753080.40	2083596.04	5983.63	10254	5983.43	0.20	1.90	2.10
10255							*See Appendix A		*See Appendix A	
10256	40149.92	20550.16	753130.55	2083645.99	5982.18	10256	5981.88	0.30	1.85	2.15
10257	40099.96	20550.15	753080.56	2083646.14	5982.72	10257	5982.52	0.20	1.85	2.06
10258	40050.05	20550.00	753030.58	2083646.16	5983.37	10258	5983.07	0.30	1.92	2.22
10259	39999.98	20550.04	752980.59	2083646.36	5983.52	10259	5983.29	0.23	1.89	2.13
10260	39949.95	20550.03	752930.60	2083646.52	5983.92	10260	5983.72	0.20	1.91	2.11
10261	39899.99	20550.01	752880.61	2083646.66	5984.02	10261	5983.80	0.22	1.83	2.05
10262	39850.04	20550.22	752830.63	2083647.04	5984.43	10262	5984.07	0.36	1.89	2.25
10263	39800.03	20550.29	752780.64	2083647.27	5984.70	10263	5984.46	0.24	1.97	2.20
10264	39749.95	20549.94	752730.65	2083647.09	5985.15	10264	5984.83	0.32	1.88	2.20
10265	39700.09	20549.98	752680.67	2083647.29	5985.16	10265	5984.90	0.26	1.77	2.03
10266	39650.06	20550.08	752630.68	2083647.56	5985.70	10266	5985.44	0.26	1.83	2.09
10267	39600.10	20550.20	752580.69	2083647.84	5986.50	10267	5986.27	0.23	1.91	2.14
10268	39550.00	20550.05	752530.70	2083647.86	5987.20	10268	5987.00	0.20	1.91	2.11

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10269	39499.85	20549.82	752480.72	2083647.79	5987.92	10269	5987.72	0.20	1.86	2.07
10270	39449.93	20550.06	752430.73	2083648.20	5988.34	10270	5988.12	0.22	1.83	2.05
10271	39399.92	20550.04	752380.74	2083648.34	5987.33	10271	5987.13	0.20	1.93	2.13
10272	39350.08	20550.01	752330.76	2083648.48	5985.97	10272	5985.76	0.20	1.86	2.07
10273	39399.94	20599.85	752380.91	2083698.14	5985.71	10273	5985.49	0.22	1.93	2.15
10274	39450.02	20600.15	752430.90	2083698.28	5986.61	10274	5986.34	0.27	1.87	2.14
10275	39499.97	20600.16	752480.89	2083698.12	5986.25	10275	5986.05	0.20	1.93	2.13
10276	39550.11	20599.97	752530.87	2083697.77	5985.27	10276	5985.07	0.21	1.86	2.07
10277	39600.05	20600.01	752580.86	2083697.64	5984.44	10277	5984.24	0.20	1.84	2.05
10278	39649.90	20599.96	752630.85	2083697.43	5983.61	10278	5983.39	0.22	1.99	2.21
10279	39699.94	20599.81	752680.84	2083697.11	5982.96	10279	5982.69	0.27	1.95	2.23
10280	39749.92	20599.89	752730.82	2083697.03	5982.49	10280	5982.13	0.35	1.89	2.24
10281	39799.99	20600.10	752780.81	2083697.07	5982.37	10281	5982.14	0.22	1.88	2.10
10282	39849.87	20600.51	752830.80	2083697.32	5981.83	10282	5981.51	0.32	1.87	2.19
10283	39899.94	20600.11	752880.78	2083696.75	5981.43	10283	5981.24	0.20	1.91	2.11
10284	39949.96	20599.97	752930.77	2083696.45	5981.17	10284	5980.97	0.20	1.84	2.04
10285	39999.92	20600.12	752980.76	2083696.43	5981.09	10285	5980.80	0.29	1.84	2.13
10286	40049.97	20600.15	753030.75	2083696.30	5980.79	10286	5980.43	0.36	1.97	2.34
10287	40099.90	20600.20	753080.73	2083696.18	5980.55	10287	5980.24	0.31	1.91	2.22
10288	40150.06	20599.80	753130.72	2083695.62	5980.25	10288	5979.94	0.31	1.94	2.25
10289							*See Appendix A		*See Appendix A	
10290	40150.02	20649.93	753130.88	2083745.72	5977.38	10290	5977.02	0.35	1.84	2.19
10291	40100.07	20649.85	753080.89	2083745.81	5977.75	10291	5977.40	0.35	1.97	2.32
10292	40050.11	20649.79	753030.91	2083745.92	5978.07	10292	5977.79	0.27	1.98	2.26
10293	39999.94	20650.15	752980.92	2083746.44	5978.41	10293	5978.19	0.22	1.95	2.17
10294	39949.92	20650.07	752930.93	2083746.53	5978.84	10294	5978.49	0.35	1.84	2.19
10295	39900.07	20650.01	752880.94	2083746.63	5978.77	10295	5978.57	0.20	1.97	2.16
10296	39850.15	20649.86	752830.96	2083746.65	5979.27	10296	5978.92	0.35	1.86	2.21
10297	39800.09	20649.85	752780.97	2083746.80	5979.86	10297	5979.50	0.36	1.95	2.31
10298	39750.12	20650.32	752730.98	2083747.44	5980.09	10298	5979.89	0.20	1.99	2.19

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10299	39700.14	20649.95	752681.00	2083747.23	5981.08	10299	5980.75	0.32	2.02	2.35
10300	39649.95	20649.98	752631.01	2083747.43	5981.70	10300	5981.45	0.24	1.95	2.20
10301	39599.92	20650.05	752581.02	2083747.66	5982.55	10301	5982.30	0.24	1.88	2.13
10302	39550.11	20650.10	752531.03	2083747.88	5983.43	10302	5983.18	0.26	1.84	2.10
10303	39500.02	20650.13	752481.05	2083748.07	5984.16	10303	5983.83	0.33	1.97	2.30
10304	39450.03	20650.15	752431.07	2083748.26	5984.79	10304	5984.59	0.20	1.90	2.10
10305	39399.96	20649.84	752381.07	2083748.11	5984.10	10305	5983.87	0.23	1.84	2.07
10306	39450.04	20700.04	752431.23	2083798.14	5982.90	10306	5982.69	0.21	1.93	2.14
10307	39500.12	20700.10	752481.22	2083798.03	5982.14	10307	5981.84	0.31	2.03	2.34
10308	39550.04	20700.11	752531.20	2083797.88	5981.57	10308	5981.21	0.36	2.03	2.39
10309	39600.03	20700.11	752581.19	2083797.71	5980.83	10309	5980.48	0.35	2.01	2.35
10310	39650.12	20700.08	752631.18	2083797.52	5980.08	10310	5979.71	0.36	1.98	2.35
10311	39699.93	20699.97	752681.17	2083797.24	5979.14	10311	5978.88	0.26	1.85	2.11
10312	39750.03	20700.09	752731.15	2083797.20	5978.35	10312	5978.06	0.28	1.95	2.23
10313	39799.88	20699.89	752781.14	2083796.83	5977.75	10313	5977.55	0.20	1.85	2.05
10314							*See Appendix A		*See Appendix A	
10315	39900.05	20699.87	752881.11	2083796.48	5976.65	10315	5976.45	0.20	1.89	2.08
10316	39949.98	20700.02	752931.10	2083796.46	5976.28	10316	5976.07	0.21	1.97	2.18
10317	40000.00	20699.98	752981.09	2083796.26	5976.04	10317	5975.83	0.21	1.94	2.15
10318	40049.97	20700.02	753031.08	2083796.13	5975.80	10318	5975.61	0.20	1.89	2.08
10319	40099.95	20700.20	753081.06	2083796.15	5975.81	10319	5975.61	0.20	1.85	2.05
10320	40149.93	20700.08	753131.05	2083795.86	5975.48	10320	5975.27	0.21	1.85	2.05
10321	40150.04	20749.81	753131.21	2083845.58	5973.68	10321	5973.48	0.20	1.85	2.06
10322							*See Appendix A		*See Appendix A	
10323	40050.08	20749.88	753031.24	2083845.98	5970.00	10323	5969.79	0.21	1.86	2.07
10324	39999.83	20750.13	752981.25	2083846.40	5970.82	10324	5970.62	0.20	1.86	2.07
10325	39950.06	20749.88	752931.26	2083846.31	5971.82	10325	5971.62	0.20	1.85	2.05
10326	39900.00	20749.99	752881.27	2083846.59	5972.80	10326	5972.61	0.20	1.90	2.10
10327	39849.99	20750.01	752831.29	2083846.77	5975.04	10327	5974.77	0.27	1.84	2.11
10328	39799.98	20750.05	752781.30	2083846.98	5975.84	10328	5975.64	0.20	1.84	2.04

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10329	39749.93	20749.92	752731.31	2083847.02	5976.57	10329	5976.37	0.20	1.98	2.18
10330	39700.07	20750.11	752681.33	2083847.37	5977.64	10330	5977.29	0.35	1.84	2.18
10331	39650.03	20750.05	752631.34	2083847.48	5978.50	10331	5978.30	0.20	1.83	2.03
10332	39600.01	20750.01	752581.35	2083847.60	5979.03	10332	5978.68	0.35	2.02	2.38
10333	39550.04	20750.09	752531.36	2083847.85	5979.69	10333	5979.38	0.31	1.90	2.21
10334	39500.03	20750.03	752481.38	2083847.95	5980.25	10334	5980.04	0.21	1.98	2.19
10335	39450.03	20749.96	752431.39	2083848.05	5981.01	10335	5980.80	0.20	1.87	2.07
10336	39499.92	20799.85	752481.55	2083897.76	5978.47	10336	5978.27	0.20	2.02	2.22
10337	39550.00	20799.97	752531.53	2083897.72	5977.73	10337	5977.46	0.27	1.90	2.16
10338	39600.07	20800.17	752581.52	2083897.75	5976.95	10338	5976.75	0.20	1.88	2.07
10339	39650.08	20799.91	752631.51	2083897.32	5976.21	10339	5976.01	0.20	1.85	2.05
10340	39700.00	20799.94	752681.50	2083897.19	5975.61	10340	5975.27	0.34	2.02	2.36
10341	39750.09	20800.05	752731.48	2083897.13	5973.57	10341	5973.37	0.20	1.85	2.05
10342	39799.98	20800.09	752781.47	2083897.01	5969.01	10342	5968.81	0.20	1.86	2.06
10343	39850.03	20799.93	752831.46	2083896.68	5964.32	10343	5964.12	0.20	1.91	2.11
10344	39899.96	20800.07	752881.44	2083896.66	5960.63	10344	5960.31	0.32	2.02	2.35
10345	39950.01	20799.97	752931.43	2083896.39	5959.41	10345	5959.14	0.26	1.85	2.11
10346	40000.06	20799.88	752981.42	2083896.14	5958.45	10346	5958.17	0.28	1.85	2.13
10347	40049.95	20800.08	753031.41	2083896.17	5959.55	10347	5959.35	0.20	1.86	2.06
10348	40100.05	20799.98	753081.39	2083895.91	5971.07	10348	5970.88	0.19	1.86	2.05
10349	40149.99	20800.10	753131.38	2083895.86	5971.86	10349	5971.64	0.21	1.85	2.06
10350	40150.04	20849.88	753131.54	2083945.62	5970.72	10350	5970.53	0.19	1.85	2.05
10351	40100.00	20849.98	753081.55	2083945.89	5967.72	10351	5967.52	0.20	1.87	2.07
10352	40050.02	20849.95	753031.57	2083946.02	5955.50	10352	5955.29	0.21	1.84	2.05
10353							*See Appendix A		*See Appendix A	
10354	39950.09	20849.84	752931.59	2083946.24	5946.74	10354	5946.54	0.20	1.85	2.05
10355	39899.97	20850.06	752881.60	2083946.63	5948.46	10355	5948.11	0.35	1.84	2.18
10356	39850.12	20849.70	752831.62	2083946.43	5952.46	10356	5952.27	0.20	1.86	2.06
10357	39799.97	20850.08	752781.63	2083946.98	5957.23	10357	5957.04	0.19	1.90	2.10
10358	39749.94	20849.89	752731.64	2083946.95	5962.18	10358	5961.85	0.34	1.86	2.19

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10359	39700.11	20850.02	752681.66	2083947.25	5967.69	10359	5967.33	0.36	1.93	2.29
10360	39650.08	20850.14	752631.67	2083947.53	5974.00	10360	5973.65	0.35	1.84	2.19
10361	39600.12	20850.11	752581.68	2083947.67	5975.08	10361	5974.88	0.19	1.84	2.03
10362	39549.98	20849.99	752531.69	2083947.71	5975.95	10362	5975.74	0.21	1.93	2.14
10363	39500.00	20850.09	752481.71	2083947.98	5976.82	10363	5976.45	0.37	1.91	2.28
10364	39500.05	20900.09	752481.88	2083997.97	5975.17	10364	5974.97	0.19	1.86	2.06
10365	39550.07	20900.09	752531.86	2083997.80	5974.32	10365	5973.97	0.35	1.94	2.29
10366	39600.04	20900.12	752581.85	2083997.67	5973.39	10366	5973.03	0.37	2.01	2.38
10367	39649.90	20900.00	752631.84	2083997.38	5967.55	10367	5967.36	0.19	1.85	2.04
10368	39699.97	20899.90	752681.83	2083997.12	5958.43	10368	5958.24	0.19	1.93	2.13
10369	39750.03	20900.10	752731.81	2083997.15	5950.56	10369	5950.32	0.24	1.90	2.14
10370	39800.01	20899.96	752781.80	2083996.85	5945.87	10370	5945.68	0.19	1.95	2.15
10371							*See Appendix A		*See Appendix A	
10372							*See Appendix A		*See Appendix A	
10373							*See Appendix A		*See Appendix A	
10374							*See Appendix A		*See Appendix A	
10375	40049.91	20900.09	753031.74	2083996.15	5951.90	10375	5951.71	0.19	1.85	2.04
10376	40100.04	20900.17	753081.72	2083996.07	5963.85	10376	5963.66	0.19	1.84	2.03
10377	40150.03	20900.12	753131.71	2083995.85	5969.03	10377	5968.83	0.19	1.86	2.05
10378	40150.04	20950.07	753131.87	2084045.79	5967.60	10378	5967.29	0.31	1.84	2.15
10379							*See Appendix A		*See Appendix A	
10380							*See Appendix A		*See Appendix A	
10381							*See Appendix A		*See Appendix A	
10382							*See Appendix A		*See Appendix A	
10383							*See Appendix A		*See Appendix A	
10384							*See Appendix A		*See Appendix A	
10385							*See Appendix A		*See Appendix A	
10386							*See Appendix A		*See Appendix A	
10387	39700.07	20950.16	752681.99	2084047.37	5950.35	10387	5949.99	0.36	2.02	2.39
10388	39650.01	20950.00	752632.00	2084047.37	5962.85	10388	5962.49	0.36	2.03	2.39

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
10389							*See Appendix A		*See Appendix A	
10390	39549.91	20950.09	752532.02	2084047.79	5973.16	10390	5972.80	0.35	1.91	2.27
10391	39550.03	21000.05	752532.19	2084097.73	5972.66	10391	5972.36	0.30	1.89	2.19
10392	39600.01	21000.02	752582.18	2084097.54	5970.91	10392	5970.55	0.36	2.03	2.39
10393	39649.83	21000.02	752632.17	2084097.37	5962.25	10393	5961.90	0.35	1.90	2.24
10416	39650.01	21050.10	752632.33	2084147.44	5962.23	10416	5962.00	0.23	1.94	2.16
10417	39600.00	21049.99	752582.34	2084147.50	5970.57	10417	5970.20	0.37	2.03	2.40
10418	39550.04	21049.97	752532.35	2084147.64	5972.16	10418	5971.97	0.19	1.85	2.04
10419	39550.00	21100.10	752532.52	2084197.76	5971.79	10419	5971.59	0.20	1.93	2.14
10420	39599.99	21099.96	752582.51	2084197.46	5970.01	10420	5969.81	0.19	1.86	2.05
11010	40182.82	20511.78	753163.41	2083607.51	5975.03	11010	5974.68	0.35	1.93	2.28
11013	40175.99	20457.74	753156.24	2083553.50	5976.64	11013	5976.45	0.19	1.84	2.03
11015	40167.58	20419.16	753148.12	2083514.96	5978.38	11015	5978.18	0.19	1.99	2.18
11016	40117.92	20288.37	753097.70	2083384.37	5976.69	11016	5975.45	1.24	*See Appendix A	
11019	40035.12	20173.01	753014.34	2083269.32	5978.51	11019	5977.22	1.29	0.90	2.19
11020	39989.49	20111.92	752968.15	2083208.39	5979.59	11020	5979.32	0.27	1.10	1.37
11023							*See Appendix A		*See Appendix A	
11024	39858.45	19933.10	752836.60	2083030.05	5984.69	11024	5983.80	0.89	1.31	2.20
11027	39766.30	19806.45	752744.20	2082903.74	5986.97	11027	5985.49	1.48	0.71	2.19
11028	39671.19	19677.62	752648.79	2082775.25	5988.05	11028	5987.57	0.48	1.59	2.07
11031	39599.03	19532.73	752576.34	2082630.64	5990.43	11031	5990.01	0.42	1.58	2.00
11032	39521.80	19409.76	752498.95	2082507.96	5992.14	11032	5991.55	0.59	1.41	2.00
11035	39458.18	19414.05	752434.98	2082512.46	5994.30	11035	5993.90	0.40	1.63	2.03
11036	39407.71	19438.88	752385.08	2082537.44	5996.18	11036	5995.93	0.25	1.81	2.06
11039	39349.78	19483.51	752327.24	2082582.25	5998.24	11039	5997.26	0.98	1.04	2.02
11040							*See Appendix A		*See Appendix A	
11043	39320.12	19529.46	752297.40	2082628.29	5996.22	11043	5995.41	0.81	1.37	2.18
11044	39281.54	19621.23	752259.71	2082720.17	5994.39	11044	5993.74	0.65	1.35	2.00
11047	39246.05	19715.04	752224.03	2082814.06	5992.79	11047	5992.16	0.63	1.57	2.20
11048	39216.38	19806.92	752194.34	2082906.02	5990.30	11048	5989.66	0.64	1.37	2.01

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
11051	39202.68	19903.67	752181.66	2083002.79	5988.64	11051	5987.74	0.90	1.22	2.13
11052	39196.50	19998.16	752175.98	2083097.27	5986.00	11052	5984.90	1.10	0.96	2.06
11055	39202.43	20095.29	752181.29	2083194.37	5984.75	11055	5983.96	0.79	1.40	2.19
11056	39213.56	20194.51	752193.62	2083293.52	5982.42	11056	5982.23	0.19	1.83	2.02
11059	39226.28	20297.11	752205.96	2083396.05	5980.62	11059	5980.17	0.45	1.60	2.05
11060	39240.25	20390.60	752220.26	2083489.47	5978.30	11060	5977.64	0.65	1.47	2.12
11063	39272.64	20480.34	752253.56	2083579.08	5976.66	11063	5976.29	0.36	1.80	2.16
11064	39307.88	20570.41	752288.84	2083669.01	5974.56	11064	5974.20	0.36	1.94	2.30
11067	39353.05	20660.97	752334.12	2083759.40	5972.96	11067	5972.77	0.19	1.85	2.04
11068	39434.28	20846.31	752415.71	2083944.42	5970.65	11068	5970.44	0.21	1.85	2.06
11071	39507.32	21035.87	752489.32	2084133.69	5968.76	11071	5968.57	0.19	2.01	2.20
11072	39545.26	21148.98	752527.69	2084246.65	5966.76	11072	5966.56	0.19	1.98	2.17
11136	39393.53	20753.74	752375.42	2083852.01	5971.59	11136	5971.40	0.19	1.84	2.03
11138	39468.54	20941.67	752451.02	2084039.64	5969.57	11138	5969.37	0.20	2.01	2.21
12000	39353.45	19499.82	752330.30	2082598.55	5998.58	12000	5998.11	0.47	1.54	2.01
12001	39312.43	19599.96	752289.64	2082698.80	5997.85	12001	5997.16	0.69	1.36	2.05
12002	39273.16	19700.08	752250.98	2082799.03	5996.70	12002	5996.20	0.50	1.66	2.16
12003	39239.29	19799.86	752217.31	2082898.89	5996.24	12003	5995.00	1.24	0.80	2.04
12004	39227.53	19899.94	752206.65	2082998.98	5995.63	12004	5994.58	1.05	1.00	2.05
12005	39224.99	19999.89	752203.98	2083098.91	5994.50	12005	5993.59	0.91	1.21	2.12
12006	39230.97	20100.10	752210.31	2083199.07	5993.31	12006	5992.41	0.90	1.26	2.16
12007	39245.05	20200.22	752224.63	2083299.13	5991.89	12007	5991.23	0.66	1.39	2.05
12008	39261.82	20300.16	752241.96	2083398.98	5989.88	12008	5989.67	0.21	1.91	2.13
12009	39285.39	20400.26	752265.28	2083498.98	5988.07	12009	5987.10	0.96	1.20	2.17
12010	39326.40	20500.75	752306.60	2083599.31	5986.23	12010	5986.04	0.19	1.89	2.09
12011	39374.84	20600.30	752355.92	2083698.67	5984.88	12011	5984.69	0.19	1.86	2.05
12012	39417.04	20699.74	752398.24	2083797.94	5983.14	12012	5982.94	0.20	1.84	2.03
12013	39457.83	20799.95	752439.56	2083898.00	5979.15	12013	5978.95	0.20	1.99	2.19
12014	39489.35	20900.06	752470.88	2083997.98	5975.14	12014	5974.88	0.26	1.91	2.17
12015	39518.70	21000.03	752501.20	2084097.82	5973.37	12015	5973.17	0.20	1.84	2.04

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
12016	39547.63	21100.05	752530.52	2084197.72	5971.83	12016	5971.47	0.36	1.89	2.24
12017	39555.92	21129.38	752538.62	2084227.01	5971.20	12017	5971.00	0.19	1.85	2.04
12018	39639.44	21077.18	752621.42	2084174.55	5964.83	12018	5964.47	0.36	1.96	2.32
12019	39691.56	21009.56	752674.19	2084106.78	5951.61	12019	5951.28	0.34	1.90	2.24
12020	39710.34	20954.93	752692.00	2084052.11	5947.82	12020	5947.57	0.25	2.02	2.27
12021	39752.23	20924.54	752733.89	2084021.58	5945.07	12021	5944.71	0.36	1.85	2.20
12022	39855.73	20905.28	752837.81	2084001.98	5939.13	12022	5938.93	0.20	1.84	2.04
12023							*See Appendix A		*See Appendix A	
12024	39894.30	20889.31	752875.74	2083985.89	5939.41	12024	5939.05	0.36	1.85	2.22
12025	39912.54	20879.57	752894.70	2083976.10	5940.70	12025	5940.33	0.36	1.85	2.21
12026	40005.99	20853.63	752987.59	2083949.85	5946.18	12026	5945.98	0.20	1.90	2.10
12027	40017.86	20863.95	752999.62	2083960.13	5947.02	12027	5946.82	0.20	1.94	2.15
12028	40056.71	20935.92	753038.85	2084031.95	5951.11	12028	5950.91	0.20	1.84	2.03
12029	39533.72	21047.96	752516.36	2084145.69	5972.66	12029	5972.40	0.26	1.85	2.11
12030	39534.72	20915.88	752516.92	2084013.64	5974.29	12030	5973.96	0.33	2.03	2.36
12031	39836.51	20689.69	752818.09	2083786.51	5977.43	12031	5977.09	0.34	2.03	2.37
12032						12032	5975.44	*See Appendix A		
12033	40091.99	20720.91	753073.14	2083816.89	5974.92	12033	5974.57	0.35	1.85	2.19
12034	40174.65	20770.58	753156.27	2083866.26	5972.64	12034	5972.29	0.36	1.85	2.20
12038	40197.08	20971.28	753178.93	2084066.84	5967.90	12038	5967.67	0.23	1.84	2.07
12041	40189.30	20899.93	753170.70	2083995.53	5969.50	12041	5969.14	0.36	1.84	2.19
12042	40172.64	20750.07	753154.20	2083845.77	5973.37	12042	5973.04	0.33	1.84	2.16
12043							*See Appendix A		*See Appendix A	
12044	40155.59	20594.05	753136.70	2083689.85	5980.36	12044	5980.02	0.34	1.95	2.29
12045	40132.65	20418.22	753113.13	2083514.13	5981.72	12045	5981.49	0.23	1.84	2.07
12046	40123.43	20400.03	753103.07	2083495.99	5981.66	12046	5981.14	0.51	1.56	2.07
12047	40100.20	20352.17	753079.91	2083448.21	5982.55	12047	5982.08	0.47	1.56	2.03
12048	40073.26	20299.89	753052.75	2083396.03	5983.41	12048	5982.66	0.75	1.47	2.22
12049	40011.14	20199.74	752990.43	2083296.12	5984.62	12049	5983.82	0.80	1.40	2.19
12050	39945.56	20100.08	752925.12	2083196.69	5985.67	12050	5985.39	0.28	1.21	1.49

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
12051	39877.01	20000.09	752855.81	2083096.96	5988.62	12051	5987.45	1.17	0.85	2.02
12052	39800.26	19886.35	752778.45	2082983.50	5989.64	12052	5988.87	0.77	1.42	2.19
12053	39741.35	19800.19	752719.19	2082897.56	5990.66	12053	5989.91	0.75	1.44	2.19
12054	39700.24	19740.79	752678.00	2082838.32	5991.11	12054	5990.77	0.34	1.76	2.10
12055	39670.00	19700.05	752647.87	2082797.68	5991.17	12055	5990.87	0.30	1.80	2.10
12056	39648.63	19671.89	752626.78	2082769.59	5991.97	12056	5991.52	0.45	1.59	2.04
12057	39612.88	19600.19	752590.56	2082698.03	5992.32	12057	5991.81	0.51	1.50	2.01
12058	39600.51	19565.34	752578.44	2082663.23	5991.98	12058	5991.68	0.30	1.79	2.09
12059	39570.34	19499.74	752547.24	2082597.76	5992.32	12059	5991.97	0.35	1.74	2.09
12060	39549.64	19459.68	752527.11	2082557.77	5992.79	12060	5992.43	0.36	1.65	2.01
12061	39529.17	19429.34	752506.01	2082527.51	5993.66	12061	5993.07	0.59	1.42	2.01
12062	39499.74	19418.80	752476.99	2082517.07	5994.65	12062	5993.94	0.71	1.31	2.02
12063	39449.71	19429.90	752427.04	2082528.33	5996.46	12063	5995.96	0.50	1.52	2.02
12064	39400.06	19457.72	752377.14	2082556.31	5998.55	12064	5997.88	0.67	1.37	2.04
12065	39382.22	19467.60	752359.18	2082566.25	5998.62	12065	5998.19	0.43	1.59	2.02
12221	40123.63	20935.86	753105.83	2084031.67	5966.59	12221	5966.39	0.20	1.85	2.05
12222	40113.51	20875.66	753095.64	2083971.52	5968.72	12222	5968.39	0.32	1.85	2.17
12223	40106.50	20826.09	753088.47	2083921.99	5970.80	12223	5970.50	0.30	1.94	2.24
12224	40099.75	20776.82	753081.31	2083872.75	5972.53	12224	5972.33	0.20	1.86	2.06
12225	40089.43	20727.03	753070.16	2083823.01	5974.73	12225	5974.53	0.20	1.90	2.10
12226	39879.78	20742.35	752861.26	2083839.02	5974.67	12226	5974.33	0.34	1.89	2.23
12227	39686.38	20822.07	752667.57	2083919.36	5974.60	12227	5974.40	0.20	1.86	2.06
12228	39616.39	20905.17	752597.87	2084002.67	5972.66	12228	5972.30	0.36	1.83	2.19
12029	39533.72	21047.96			5972.66	12029	5972.40	0.26	*See Appendix A	
12230	39630.78	21035.56	752613.29	2084132.98	5967.13	12230	5966.79	0.34	1.98	2.32
12231							*See Appendix A		*See Appendix A	
12232	40050.33	20944.64	753031.88	2084040.69	5949.08	12232	5948.87	0.21	1.84	2.05
12233	40009.86	20870.69	752991.65	2083966.90	5944.75	12233	5944.54	0.20	2.09	2.30
12234	40003.07	20864.59	752984.63	2083960.82	5944.43	12234	5944.22	0.20	2.03	2.24
12235	39916.55	20888.90	752898.73	2083985.40	5938.10	12235	5937.90	0.20	1.99	2.19

Rocky Flats Environmental Technology Site
Accelerated Action Design for the Present Landfill
Coordinate Geometry
Final Submittal

Final Cover Layer

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	PT. NO.	22" LAYER ELEVATION	THICKNESS OF LAYER	THICKNESS OF 22" LAYER	THICKNESS OF SOIL COVER
12236	39873.70	20911.95	752855.82	2084008.59	5936.14	12236	5935.93	0.20	1.84	2.04
12237	39755.98	20934.53	752737.92	2084031.55	5942.87	12237	5942.67	0.20	1.94	2.14
12238	39719.13	20961.49	752701.02	2084058.63	5945.47	12238	5945.27	0.20	1.98	2.18
12239	39701.05	21014.14	752683.21	2084111.33	5949.45	12239	5949.24	0.21	2.02	2.23
12240									1.84	1.84

Rocky Flats Environmental Technology Site

Accelerated Action Design for the Present Landfill

Coordinate Geometry

Final Submittal

South/East Perimeter Channel

PT. NO.	RFETS NORTHING	RFETS EASTING	STATE PLANE NORTHING	STATE PLANE EASTING	ELEVATION	Desc.
11075	39543.09	21235.86	752525.98	2084333.51	5958.68	Over Excavation
11076	39553.90	21335.26	752537.3	2084432.83	5956.67	Over Excavation
11079	39556.79	21382.40	752540.45	2084479.93	5954.77	Over Excavation
11083	39561.29	21436.26	752544.63	2084533.81	5950.68	Over Excavation
11087	39574.50	21493.57	752558.82	2084591.01	5946.67	Over Excavation
11091	39595.39	21535.38	752578.95	2084632.65	5942.70	Over Excavation
11095	39617.89	21560.75	752602.03	2084657.96	5938.68	Over Excavation
11099	39620.58	21574.27	752605.08	2084671.57	5934.69	Over Excavation
11103	39646.34	21595.89	752630.14	2084693.01	5930.68	Over Excavation
11104	39683.21	21615.37	752667.19	2084712.53	5928.75	Over Excavation
11108	39716.60	21652.40	752700.3	2084749.08	5924.70	Over Excavation
11112	39739.30	21682.30	752723.4	2084779.16	5920.71	Over Excavation
11116	39768.19	21700.30	752752.45	2084797.12	5916.76	Over Excavation
11120	39799.87	21717.70	752784.5	2084814.29	5912.68	Over Excavation
11124	39830.36	21734.49	752814.54	2084830.96	5908.69	Over Excavation
11128	39864.02	21753.43	752848.6	2084849.82	5904.65	Over Excavation
11075	39543.09	21235.86	752525.98	2084333.51	5959.02	Wash Rock
11076	39553.90	21335.26	752537.3	2084432.83	5957.14	Wash Rock
11079	39556.79	21382.40	752540.45	2084479.93	5955.29	Wash Rock
11083	39561.29	21436.26	752544.63	2084533.81	5951.20	Wash Rock
11087	39574.50	21493.57	752558.82	2084591.01	5947.20	Wash Rock
11091	39595.39	21535.38	752578.95	2084632.65	5943.03	Wash Rock
11095	39617.89	21560.75	752602.03	2084657.96	5939.07	Wash Rock
11099	39620.58	21574.27	752605.08	2084671.57	5935.03	Wash Rock
11103	39646.34	21595.89	752630.14	2084693.01	5931.21	Wash Rock
11104	39683.21	21615.37	752667.19	2084712.53	5929.11	Wash Rock
11108	39716.60	21652.40	752700.3	2084749.08	5925.23	Wash Rock
11112	39739.30	21682.30	752723.4	2084779.16	5921.20	Wash Rock
11116	39768.19	21700.30	752752.45	2084797.12	5917.22	Wash Rock
11120	39799.87	21717.70	752784.5	2084814.29	5913.10	Wash Rock
11124	39830.36	21734.49	752814.54	2084830.96	5909.18	Wash Rock
11128	39864.02	21753.43	752848.6	2084849.82	5905.16	Wash Rock
11075	39543.09	21235.86	752525.98	2084333.51	5960.25	Rip Rap
11076	39553.90	21335.26	752537.3	2084432.83	5958.41	Rip Rap
11079	39556.79	21382.40	752540.45	2084479.93	5956.44	Rip Rap
11083	39561.29	21436.26	752544.63	2084533.81	5952.41	Rip Rap
11087	39574.50	21493.57	752558.82	2084591.01	5948.28	Rip Rap
11091	39595.39	21535.38	752578.95	2084632.65	5944.24	Rip Rap
11095	39617.89	21560.75	752602.03	2084657.96	5940.27	Rip Rap
11099	39620.58	21574.27	752605.08	2084671.57	5936.42	Rip Rap
11103	39646.34	21595.89	752630.14	2084693.01	5932.34	Rip Rap
11108	39716.60	21652.40	752700.3	2084749.08	5926.39	Rip Rap
11112	39739.30	21682.30	752723.4	2084779.16	5922.31	Rip Rap
11116	39768.19	21700.30	752752.45	2084797.12	5918.46	Rip Rap
11120	39799.87	21717.70	752784.5	2084814.29	5914.39	Rip Rap
11124	39830.36	21734.49	752814.54	2084830.96	5910.42	Rip Rap
11128	39864.02	21753.43	752848.6	2084849.82	5906.36	Rip Rap

Appendix A
Superseded or Incomplete Survey Control Points

Point	Explanation
10143	so close to Atrench we built straight to Atrench control point
10158	so close to Atrench we built straight to Atrench control point
10189	so close to Atrench we built straight to Atrench control point
11023	lost under ramp during biota cert
11040	only 4' away from 11039, caused repeated confusion so held 11039 for staking
10255	result of redisign of alignment for pchannel from one reach to two reachs and culvert 11-22-04
10256	result of redisign of alignment for pchannel from one reach to two reachs and culvert 11-22-04
10288	result of redisign of alignment for pchannel from one reach to two reachs and culvert 11-22-04
12044	result of redisign of alignment for pchannel from one reach to two reachs and culvert 11-22-04
12043	result of redisign of alignment for pchannel from one reach to two reachs and culvert 11-22-04
10289	result of redisign of alignment for pchannel from one reach to two reachs and culvert 11-22-04
11131	removed at a field fit for culvert with bob davis, dan the dirt man 3-23-05
11135	removed at a field fit for culvert with bob davis, dan the dirt man 3-23-05
13000's	not certed but lifted up with all layers until we reached the 22" amd 2" which when ripped gb disappeared
10389	removed by ET to resolve the gradebreak confusion at A9(#12229)
13048	removed by ET to resolve the gradebreak confusion at A9(#12229)
12241	"c" line points on north/east became "b" line points
	"d" line catch points were not working cuz existing ground was not matching ET's design top, scott powell
12251 to 12271	agreed to give grade line on box and blend into natural grade fromk there
10314	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10353	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10353	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10355	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10371	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10372	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10373	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10374	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10379	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10380	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10381	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10382	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10383	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10384	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10385	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10386	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
11141	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
11142	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
11142	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
11143	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
13059	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
13062	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
13063	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
13064	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
13065	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
13066	superceded by "A, B, C and ANCHOR TRENCH LINES BY ET at bottom of East Face
10322	too close to A5 eliminated by Jack Woo 3-16-05
12023	Paragon missed shot for Rock Layer, 22" and Final Cover Layer
12231	Paragon missed shot for Regrade Surface, 10" Layer, Rock Layer, Subgrade, Final Cover Layer
12032	Paragon missed shot for Regrade Surface
10360	Paragon missed shot for 6" Cushion Layer
10419	Paragon missed shot for 6" Cushion Layer
10118	Paragon missed shot for 10" Cushion Layer
10033	Paragon missed shot for 22" Layer
11016	Paragon missed shot for Rock Layer
12229	Paragon missed shot for 22" Layer

APPENDIX M

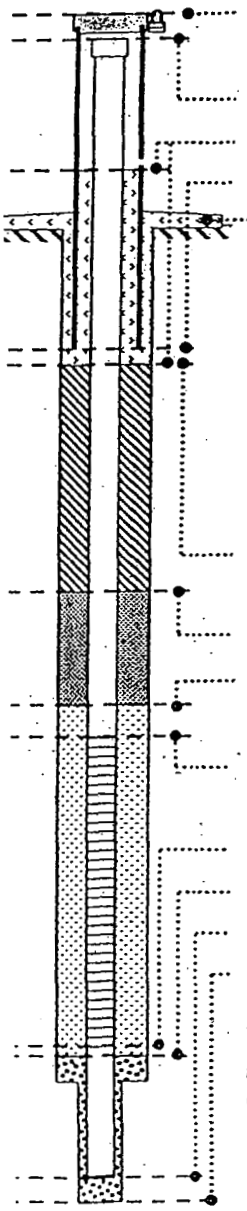
NEW GROUNDWATER MONITORING WELL LOGS

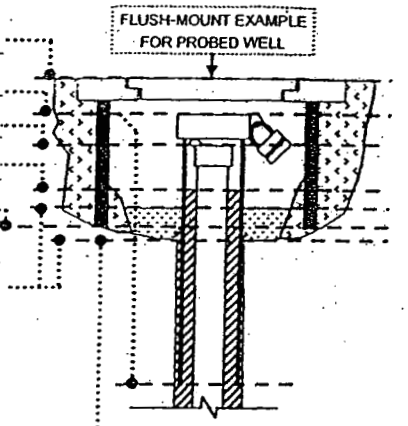
MONITORING WELL INSTALLATION REPORT: Form PRO.118

LOCATION CODE: 73005 PROJECT NAME: CY05 WELL INSTALLATION PROGRAM: PRESENT LANDFILL
SCREENED FORMATION: Bdrk. DRILLING CONTRACTOR: Layne BORING METHOD: Hollow Stem Auger
DATE DRILLED: 6/22/05 DATE COMPLETED: 6/27/05 TOTAL DEPTH: 28.0' COMPLETED DEPTH: 25.0'
ESTIMATED DEPTH TO BEDROCK: 0.0' RIG GEOLOGIST: E. Warp LOGGING GEOLOGIST: E. WARP
BOREHOLE DIAMETER IN SCREENED INTERVAL: 8" QUANTITY OF FLUIDS LOST DURING DRILLING: N/A
INITIAL WATER LEVEL (FT, DATE): Dry, 6/22/05 COMPLETED WATER LEVEL (FT, DATE): Dry, 6/27/05
DIAMETER & TYPE OF INSTALLATION (WELL/PIEZOMETER/WELL POINT/ETC.): 2" PVC WELL
TYPE OF PROTECTION (FLUSH-MOUNT VS. ABOVE GROUND, ASEPTIC, ETC.): ABOVE GROUND STEEL PROTECTIVE CASING

ALL MEASUREMENTS WILL BE MADE IN FEET FROM GROUND SURFACE

* DENOTES ITEMS THAT MAY NOT BE APPLICABLE, DEPENDING ON BORING METHOD, WELL PROTECTION & PURPOSE





PROTECTIVE CASING TOP (STICKUP OR FLUSH-MOUNT): 3.1' a.g.s.
*SECONDARY CASING TOP: N/A BOTTOM: N/A TYPE: N/A
SURFACE CASING TOP: 2.7' ags ID (IN): 2.0
SURFACE SEAL TOP: 1.35' ags BOTTOM: 0.2' bgs TYPE: CONCRETE
PROTECTIVE CASING BOTTOM, ID (IN), TYPE: 1.9', 5"x5" SQUARE STEEL
*WELL PAD DIMENSIONS, TYPE: 3'x3' square, Concrete
*ADD'L CASING FILL TOP: N/A BOTTOM: N/A TYPE: N/A
*SURFACE ISOLATION CASING TOP: N/A BOTTOM: N/A
*SURFACE ISOLATION CASING ID (IN): N/A TYPE: N/A
*OTHER (E.G., ASEPTIC) CASING TOP: N/A BOTTOM: N/A
*OTHER CASING ID (IN): N/A TYPE, PURPOSE: N/A
*CENTRALIZER(S) OD (IN): N/A NUMBER USED: N/A TYPE: N/A
*CENTRALIZER(S) DEPTH(S): N/A
*GROUT TOP: N/A MEASURED DENSITY (LBS/GAL): N/A TYPE: N/A
*GRANULAR BENTONITE TOP: N/A TYPE: N/A
*BENTONITE SEAL TOP: 0.2' TYPE: 1/4" Bentonite pellets - BAROID AND Pel-Plug } HYDRATED w/ 5 gall. of Distilled H_2O
BENTONITE SEAL OR GRANULAR BENTONITE BOTTOM (= FILTER PACK TOP): 4.0'
FILTER PACK TYPE: 16/40 Silica Sand BRAND: C.S.S.I.
SURFACE CASING BOTTOM (=SCREEN TOP): 4.6' TYPE: Sch. 40-PVC
SCREEN ID (IN): 2.0" SLOT SIZE (IN): 0.01 TYPE: Sch. 40-PVC
SCREEN BOTTOM (= SUMP, TOP): 24.65' SUMP TYPE: Threaded End Cap - Sch. 40 PVC
FILTER PACK BOTTOM (= *BACKFILL TOP): 25.0' *BACKFILL TYPE: 1/4" bentonite pellets - Pel-plug
SUMP BOTTOM (= WELL COMPLETED DEPTH): 25.0' *PILOT HOLE TOP, DIAMETER: 26.0', 2.5"
TOTAL BOREHOLE DEPTH (= *PILOT HOLE AND *BACKFILL BOTTOM): 28.0'

REMARKS: Routine well installation on 6/22/05. Top 2' of bentonite seal and protective casing installed on 6/23/05. Concrete well pad installed on 6/27/05

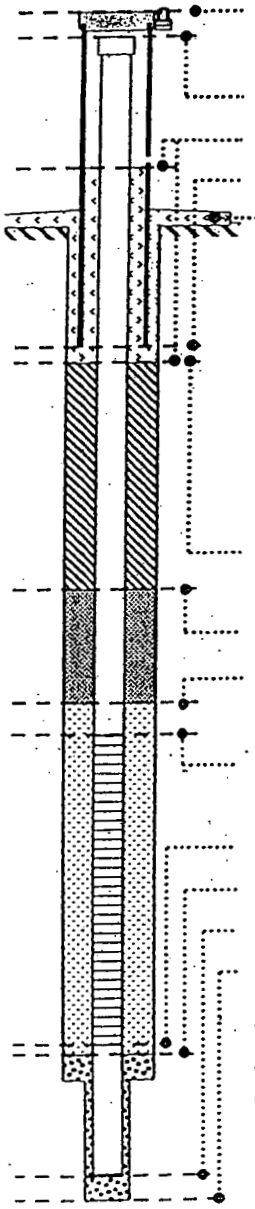
COMPLETED BY: Ellen S. Warp Ellen S. Warp DATE: 6/27/05
CHECKED BY: J. Boylan DATE: 6/30/05

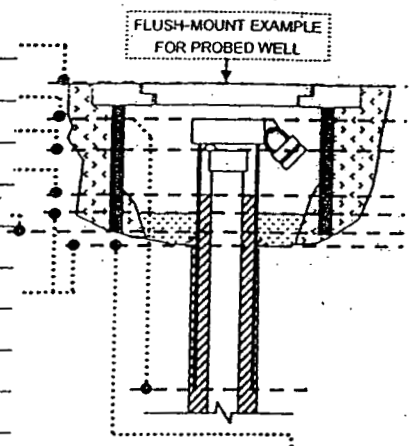
MONITORING WELL INSTALLATION REPORT: Form PRO.118

LOCATION CODE: 73105 PROJECT NAME: CY05 Well Installation PROGRAM: Present Landfill
SCREENED FORMATION: Al/Blrk. DRILLING CONTRACTOR: Layne BORING METHOD: Hollow Stem Auger
DATE DRILLED: 6/23/05 DATE COMPLETED: 6/27/05 TOTAL DEPTH: 27.7' COMPLETED DEPTH: 26.0
ESTIMATED DEPTH TO BEDROCK: 12.5' RIG GEOLOGIST: E. Warp LOGGING GEOLOGIST: E. Warp
BOREHOLE DIAMETER IN SCREENED INTERVAL: 8" QUANTITY OF FLUIDS LOST DURING DRILLING: N/A
INITIAL WATER LEVEL (FT, DATE): Dry, 6/23/05 COMPLETED WATER LEVEL (FT, DATE): 25.33', 6/27/05 - Possibly H_2O used to hydrate seal.
DIAMETER & TYPE OF INSTALLATION (WELL/PIEZOMETER/WELL POINT/ETC.): 2.0" PVC Well
TYPE OF PROTECTION (FLUSH-MOUNT VS. ABOVE GROUND, ASEPTIC, ETC.): Above Ground Steel Protective Casing

ALL MEASUREMENTS WILL BE MADE IN FEET FROM GROUND SURFACE

* DENOTES ITEMS THAT MAY NOT BE APPLICABLE, DEPENDING ON BORING METHOD, WELL PROTECTION & PURPOSE





PROTECTIVE CASING TOP (STICKUP OR FLUSH-MOUNT): 3.35' ags
*SECONDARY CASING TOP: N/A BOTTOM: N/A TYPE: N/A
SURFACE CASING TOP: 2.7' ags ID (IN): 2.0
SURFACE SEAL TOP: 0.4' ags BOTTOM: 0.1' bgs TYPE: concrete
PROTECTIVE CASING BOTTOM, ID (IN), TYPE: 1.65', 5"x5" square steel
*WELL PAD DIMENSIONS, TYPE: 3'x3', Concrete
*ADD'L CASING FILL TOP: N/A BOTTOM: N/A TYPE: N/A
*SURFACE ISOLATION CASING TOP: N/A BOTTOM: N/A
*SURFACE ISOLATION CASING ID (IN): N/A TYPE: N/A
*OTHER (E.G., ASEPTIC) CASING TOP: N/A BOTTOM: N/A
*OTHER CASING ID (IN): N/A TYPE, PURPOSE: N/A
*CENTRALIZER(S) OD (IN): N/A NUMBER USED: N/A TYPE: N/A
*CENTRALIZER(S) DEPTH(S): N/A
*GROUT TOP: N/A MEASURED DENSITY (LBS/GAL): N/A TYPE: N/A
*GRANULAR BENTONITE TOP: N/A TYPE: N/A
*BENTONITE SEAL TOP: 0.1' TYPE: 1/4" bentonite pellets-BAROID - Hydrated with 5 gall. of distilled H_2O.
BENTONITE SEAL OR GRANULAR BENTONITE BOTTOM (= FILTER PACK TOP): 4.5'
FILTER PACK TYPE: 16/40 Silica Sand BRAND: C.S.S.I.
SURFACE CASING BOTTOM (=SCREEN TOP): 5.65' TYPE: Sch. 40 PVC
SCREEN ID (IN): 2.0 SLOT SIZE (IN): 0.01 TYPE: Sch. 40 PVC
SCREEN BOTTOM (= SUMP, TOP): 25.65' SUMP TYPE: Threaded End Cap-Sch. 40 PVC
FILTER PACK BOTTOM (= *BACKFILL TOP): 26.0' *BACKFILL TYPE: 1/4" bentonite pellets-BAROID
SUMP BOTTOM (= WELL COMPLETED DEPTH): 26.0' *PILOT HOLE TOP, DIAMETER: 26.0', 2.5"
TOTAL BOREHOLE DEPTH (= *PILOT HOLE AND *BACKFILL BOTTOM): 27.7'

REMARKS: Routine well installation on 6/23/05. Concrete well pad installed on 6/27/05.

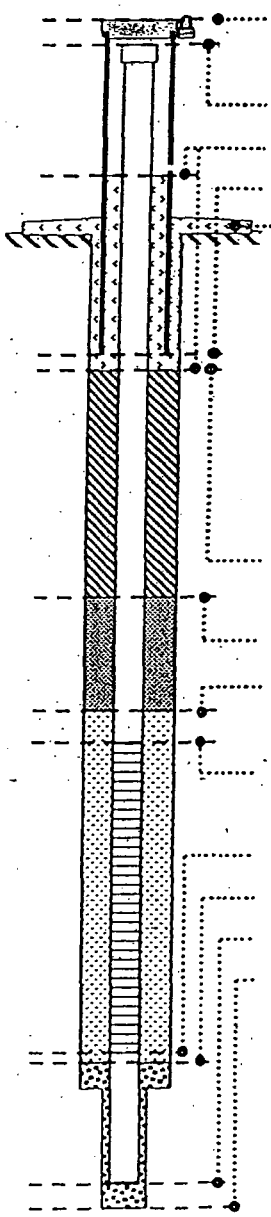
COMPLETED BY: Ellen S. Warp *Ellen S. Warp* DATE: 6/27/05
CHECKED BY: J. Baylor *J. Baylor* DATE: 6/30/05

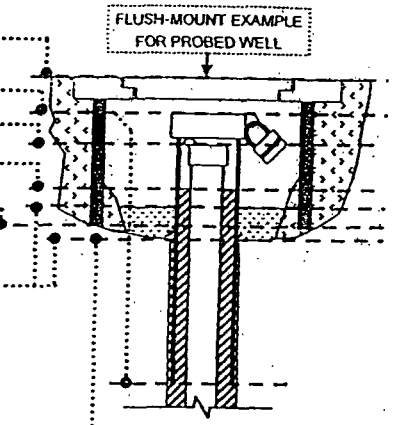
MONITORING WELL INSTALLATION REPORT: Form PRO.118

LOCATION CODE: 73205 PROJECT NAME: CY05 WELL INSTALLATION PROGRAM: PRESENT LANDFILL
SCREENED FORMATION: Cl/Bdrk. DRILLING CONTRACTOR: Layne BORING METHOD: Hollow Stem Auger
DATE DRILLED: 6/21/05 DATE COMPLETED: 6/27/05 TOTAL DEPTH: 32.0' COMPLETED DEPTH: 30.0'
ESTIMATED DEPTH TO BEDROCK: 4.2' RIG GEOLOGIST: E. WARP LOGGING GEOLOGIST: E. WARP
BOREHOLE DIAMETER IN SCREENED INTERVAL: 8" QUANTITY OF FLUIDS LOST DURING DRILLING: N/A
INITIAL WATER LEVEL (FT, DATE): Dry, 6/21/05 COMPLETED WATER LEVEL (FT, DATE): Dry, 6/27/05
DIAMETER & TYPE OF INSTALLATION (WELL/PIEZOMETER/WELL POINT/ETC.): 2.0" PVC WELL
TYPE OF PROTECTION (FLUSH-MOUNT VS. ABOVE GROUND, ASEPTIC, ETC.): ABOVE GROUND STEEL PROTECTIVE CASING

ALL MEASUREMENTS WILL BE MADE IN FEET FROM GROUND SURFACE

* DENOTES ITEMS THAT MAY NOT BE APPLICABLE, DEPENDING ON BORING METHOD, WELL PROTECTION & PURPOSE





PROTECTIVE CASING TOP (STICKUP OR FLUSH-MOUNT): 3.1' ags.
*SECONDARY CASING TOP: N/A BOTTOM: N/A TYPE: N/A
SURFACE CASING TOP: 2.3' a.g.s. ID (IN): 2.0
SURFACE SEAL TOP: 0.3' ags BOTTOM: 0.2' bgs TYPE: CONCRETE
PROTECTIVE CASING BOTTOM, ID (IN), TYPE: 1.9', 5"x5" square steel
*WELL PAD DIMENSIONS, TYPE: 3'x3' square, concrete
*ADD'L CASING FILL TOP: N/A BOTTOM: N/A TYPE: N/A
*SURFACE ISOLATION CASING TOP: N/A BOTTOM: N/A
*SURFACE ISOLATION CASING ID (IN): N/A TYPE: N/A
*OTHER (E.G., ASEPTIC) CASING TOP: N/A BOTTOM: N/A
*OTHER CASING ID (IN): N/A TYPE, PURPOSE: N/A
*CENTRALIZER(S) OD (IN): N/A NUMBER USED: N/A TYPE: N/A
*CENTRALIZER(S) DEPTH(S): N/A
*GROUT TOP: N/A MEASURED DENSITY (LBS/GAL): N/A TYPE: N/A
*GRANULAR BENTONITE TOP: N/A TYPE: N/A
*BENTONITE SEAL TOP: ~~0.5~~ 0.2' TYPE: Med. bentonite chips - Enviroplug } Hydrated with 5 gall. of dist. H_2O
BENTONITE SEAL OR GRANULAR BENTONITE BOTTOM (= FILTER PACK TOP): 4.0'
FILTER PACK TYPE: 16/40 Silica Sand BRAND: C.S.S.I.
SURFACE CASING BOTTOM (=SCREEN TOP): 4.55 TYPE: SCH. 40 - PVC
SCREEN ID (IN): 2.0 SLOT SIZE (IN): 0.01 TYPE: SCH. 40 - PVC
SCREEN BOTTOM (= SUMP, TOP): 29.65 SUMP TYPE: THREADED END CAP - SCH. 40 - PVC
FILTER PACK BOTTOM (= *BACKFILL TOP): 30.0 *BACKFILL TYPE: Med. bentonite pellets
SUMP BOTTOM (= WELL COMPLETED DEPTH): 30.0' *PILOT HOLE TOP, DIAMETER: 30.0', 2.5"
TOTAL BOREHOLE DEPTH (= *PILOT HOLE AND *BACKFILL BOTTOM): 32.0'
REMARKS: Routine well installation (6/21/05). Concrete pad installed on 6/27/05.

COMPLETED BY: Ellen S. Warp [signature] DATE: 6/27/05
CHECKED BY: J. Boylan [signature] DATE: 6/30/05

U.S. DEPARTMENT OF ENERGY ROCKY FLATS PLANT

FORM PRO.101A

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

PAGE 1 OF 3

Borehole Number: 73005
Location - North: _____ East: _____
Date: 6/22/05
Geologist: E. WARP
Drilling Equip.: CME-750 Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 28.0'
Company: URS/Layne
Project No.: ~~HAD51300~~ GR201400 SDW 6/22/05
Sample Type: Continuous Core - Split Spoon

RMRS LOGGING SUPERVISOR APPROVAL _____ DATE _____

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
0.0	0.0	0.0						0.0		0.0-0.1' - Clayey SILTSTONE - Lt. yell'sh Brn (10YR6/4) massive texture. Tr roots. DRY 6/29/05 w/ tr-some sand in pockets (rip-up?)
Box #1 (0.0→10.0')	Run #1	Rec.=0.8'						0.1		0.1-0.7 - Clayey SILTSTONE - Brn'sh Yellow (10YR6/6) w/some Lt. gry (10YR7/1) mottling. Wk to mod. perv. FeOx'n. w/some un-ox'd mottling. massive texture. Wk. to moderately friable. Tr roots. Sl. MOIST. Tr-some sand (vfg). 6/29/05
	2.0'							0.7		
								0.8'		
								1		
								2		0.7-0.8 - Silty CLAYSTONE - Lt. Brn'sh Gry (10YR6/2). Decr. FeOx'n to Tr. Strongly friable; Crumbly. Tr roots. Sl. MOIST.
	Run #2	Rec.=1.8'						2.5		0.8-2.0 = No recovery
								2.8'		2.0-2.5' - Clayey SILTSTONE. Lt. yell'sh brn. (10YR6/4) to Lt. brn'sh gry. (10YR6/2). Wk. perv. FeOx'n fm. 2.0-2.1'. massive texture. Increasing clay @ base of interval. Moderately friable. Sl. MOIST.
							6/29/05 (continue lithology to 3.8)	3		
	4.0'			Misc. high angle				3.8		2.5-3.8 - CLAYSTONE w/some silt. Lt. Brn'sh Gry (10YR6/2). Tr wk. FeOx'n predominately along bedding planes (sub-horizontal) & fracture surfaces. Tr wht. caliche stringers and blebs. Massive texture. Moderately friable. Sl. MOIST. 6/29/05
	Run #3	Rec.=1.9'						4		
								4.8'		3.8 6/29/05
								5		4.0 = No recovery
	6.0'							5.9'		4.0-4.8' - CLAYSTONE w/some silt. Pale Brn. (10YR6/3) w/some Gry (10YR5/1) mottling. Wk. perv. FeOx'n fm. 4.0-4.4'. Gry mottling fm. 4.4-4.8' w/FeOx'n on internal fracture surfaces. Massive texture. Sl. moist fm. 4.0-4.4' increase to moist fm. 4.4 to 4.8'. Friable.
	Run #4	Rec.=1.9'						6		
								6.7		
								7		
	8.0'							7.9'		4.8-5.9' - CLAYSTONE w/some silt. Gry (10YR5/1) to Gry'sh brn. (10YR5/2). Wk. FeOx'n along bedding planes. Massive texture. Wk. to moderately friable. Sl. MOIST.
								8		
	Run #5	Rec.=1.9'								5.9-6.0' - No recovery
										6.0-6.7 - CLAYSTONE w/ Tr silt. Same as above fm. 4.8-5.9'. Sl. moist.
								9		6.7-7.9' - CLAYSTONE - Gry (10YR6/1) (Predominately un-ox'd). Faint undulating bedding planes. Visible Tr blk. organic stringers throughout. Wk. to mod. friable. Tr FeOx'n stringers fm. 10.3-10.5'.
	10.0'							9.9		
								10.0		

NOTES: General: USCS is modified for this log as follows: No recovery 9.9-10.0' Sl. MOIST 6/29/05
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98
Page 27 of 28

7.9-8.0' = No recovery
8.0-9.0' = CLAYSTONE (same as 6.7-7.9').

14011-930-0134-930 (Form GT.1A)(03/01/97)

U.S. DEPARTMENT OF ENERGY ROCKY FLATS PLANT

FORM PRO.101A

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

PAGE 2 OF 3

Borehole Number: 73005
Location - North: _____ East: _____
Date: 6/22/05
Geologist: E. WARP
Drilling Equip.: CME-750-Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 28.0'
Company: URS/Layne
Project No.: ~~HAD51300~~ GR201400
Sample Type: Continuous Core-Split Spoon ESW 6/22/05

RMRS LOGGING SUPERVISOR APPROVAL: [signature]

DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
Box #2 (10.0 →)	Run #6	Rec. = 2.0'						10.0'		10.0-10.5-CLAYSTONE - Same as fm. 8.0-9.9'.
								10.5		10.5-11.6' CLAYSTONE - Brn. (10YR5/3). Sl. color change. Faint laminations (bedding planes) visible w/ Tr to some blk organic stringers on planes. Tr to some FeOxn stringers along bedding planes and fracture surfaces. Wk. to moderately friable. Sl. MOIST.
					~20°, ~80°			11.6		
	Run #7	Rec. = 2.0'			subhoriz. to ~70°	4/29/05		12		6/29/05
								13		11.6-13.6-CLAYSTONE-Gry (10YR5/1 to 6/1). Wk. FeOxn along bedding planes @ 11.6' and fm. 12.2 to 13.0'. Fissile and moderately friable. Sl. MOIST. Fe-ox along fracture surfaces, especially @ 11.6-11.8, 12.2-13.0'. 6/29/05
								13.6'		
	Run #8	Rec. = 2.0'			~20-30° 6/29/05			14		6/30/05 13.6-22.0-Clayey SILTSTONE to silty claystone - Pale Brn. (10YR6/3) to Lt. brnish gry. (10YR6/2). Wk. FeOxn on subhorizontal bedding planes (approximately 4 to 6 FeOxd bedding planes per ft.) & frac. surfaces. Tr blk organic stringers. Noteable FeOxn coating 80° fracture fm. 18.9' to 19.2'. Color of FeOxn is strong brn. (7.5YR5/6). FeOxn on 20° fracture fm. 19.5 to 19.6'. Moisture decreasing to Tr. Occ. Fe-Ox-replaced organic debris fragments. Some intervals to silty claystone, but predominantly clayey siltstone. 6/29/05 6/30/05
								15		
	Run #9	Rec. = 2.0'						16		
								17		
								18		
	Run #10	Rec. = 2.0'		80° 20°				19		
								20.0		

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98

(4011-930-0134-930)(Form GT.1A)(03/01/92)

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

Borehole Number: 73005
Location - North: _____ East: _____
Date: 6/22/05
Geologist: E. Warp
Drilling Equip.: CME-750-Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 28.0'
Company: URS/Layne
Project No.: ~~HAD51300~~ GR201400
Sample Type: Continuous Core - Split Spoon

RMRS LOGGING SUPERVISOR
APPROVAL _____ DATE _____

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
	20.0' Run #11	Rec.= 2.0'						20.0		20.0-22.0- Clayey SILTSTONE - silty claystone (described on pg. 2). 6/30/05
								21		
	22.0' Run #12	Rec.= 2.0'		~80				22		6/30/05 to silty claystone
								22.7'		22.0-22.7- Clayey SILTSTONE Gry (10YR 5/1) No table color change. Decrease Fe Ox'n to Tr as minor fracture coating. Massive texture. Moderately friable. Increase moisture to SL. MOIST.
								23		22.7-24.0- CLAYSTONE w/ some silt. Yellowish brn. (10YR 5/6) and gry (10YR 5/1) Wk. Fe Ox'n mottled throughout. Fe Oxide coating ~80° fracture @ 22.9'. Moderate perv. Fe Ox'n fm. 23.7 to 23.8. Moderately friable fm. 23.1 to 24.0, corresponding with increased moisture zone. Sl. moist fm. 22.7 to 23.1', MOIST fm. 23.1 → 24.0'
	24.0' Run #13	Rec.= 2.0'		~80 0-30°	6/30/05			24		
								25		24.0-26.0' - CLAYSTONE w/ Tr silt. Gry (10YR 5/1) to Lt. brn'sh gry (10YR 6/2). Decr. Fe Ox'n to Tr along bedding planes and frac. surfaces. Massive textured, moderately friable. Clay-rich fm. 24.0-24.2 and slightly darker color (dark gry - 10YR 4/1). SL MOIST. Decr. moisture to V. slightly moist fm. 24.2 to 26.0'. Fissile between 24.5 to 25.7'. Tr blk organic material.
	26.0' Run #14	Rec.= 1.8'						26		
								27 27.1		26.0-27.1' - CLAYSTONE - Gry'sh brn. (10YR 5/2). Massive texture. Wkly friable. Fe Ox'n along internal fractures @ 26.3 and 27.0'. V. Sl. moist.
								27.8'		27.1-27.8- CLAYSTONE - Dk Gry (10YR 4/1). Noteable color change. Fissile and friable. Tr moisture.
	28.0'							28		27.8-28.0' = No recovery
								29		T.D. @ 28.0'
								30.0		

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98
Page 27 of 28

(1011-930-0134-930)(Form GT.1A)(03/01/92)

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

Borehole Number: 73105
Location - North: _____ East: _____
Date: 6/23/05
Geologist: E. WARP
Drilling Equip.: CME-750-Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 27.7'
Company: URS/Layne
Project No.: ~~HAD51300~~ GR201400 6/23/05
Sample Type: Continuous Core - Split Spoon

RMRS LOGGING SUPERVISOR APPROVAL _____ DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
0.0	0.0	0.0					GP	0.0		0.0-0.2' - GRAVEL (FILL) - Pea gravel (1/4" dia. sub-rounded to sub-ang) composed of granite and gtzite. Poorly graded. DRY.
							CL	0.2		
							CL/SC	0.4'		0.2-0.4' - CLAY w/R sand and gravel. Grysh brn. (10YR 6/2 to Gry (10YR 5/1). Reworked claystone. Thin, blk. organic stringers common. MOIST.
								0.8'		0.4-0.8' - Gravelly, sandy CLAY (1) - Strong brn. (7.5YR 5/6). Imported fill (Qal_rf). 60% clay - med. plasticity. 30% sand (m.g. to c.g., sub-rounded to sub-ang.). 10% gravel (1/4" dia., sub-rounded to sub-ang.) V. MOIST
	0.0-2.0'	Rec. = 0.8'						2		0.8-2.0' = No recovery
							CL/SC	2.9'		2.0-2.9' - Gravelly, sandy CLAY (1) - Strong brn. (7.5YR 4/6). Imported fill (Qal_rf). V. similar to above fm. 0.4' to 0.8'; 65% clay (med. + plasticity). 20-25% sand (m.g. to c.g., sub-ang. to sub-rounded). 10-15% gravel (1/8" to 1/4" dia., sub-rounded, predominately granite and gtzite.). SATURATED but not flowing.
								3		
	2.0-4.0'	Rec. = 0.9'								2.9-4.0' = No recovery
								4		4.0-5.2' - Gravelly, sandy CLAY (1) - Strong brn. (7.5YR 4/6). Imported fill (Qal_rf). V. similar to above fm. 2.0' to 2.9'; 60% clay (med. + plasticity). 25% sand (m.g. to c.g., sub-ang. to sub-rounded). 15% gravel (1/4" to 1/2" dia., sub-ang., composed of granite, gtzite and schist). SATURATED
							CL/SC	5		
								5.2'		5.2-6.0' = No recovery
	4.0-6.0'	Rec. = 1.2'						6		6.0-6.35' - GRAVEL w/R sandy clay. Strong brn. (7.5YR 4/6) clay. Appears to be pea-gravel (possible slough?) Gravel (1/4-3/4" dia., sub-rounded to sub-ang.). Poorly graded. Decrease moisture fm. Saturated to MOIST.
							GP	6.35		
							CL GC	6.9		6.35-6.9' - Gravelly, sandy CLAY and shattered gtzite cobble mixture. 45% gravelly, sandy CLAY (Lt. brn. 7.5YR 6/4) w/ 65% shattered cobbles (1/2" to 1 1/2" dia., ang.). MOIST.
								7		
	6.0-8.0'	Rec. = 0.9'								6.9-8.0' = No recovery
								8		8.0-9.6' - Sandy CLAY/GRAVEL mixture. Strong brn. (7.5YR 5/6) clay. 60-70% gravel and cobbles. 20-30% clay (med. plasticity). 5-10% sand (c.g., sub-ang.) Shattered gtzite. Cobble fm. 8.4-8.6' (2" dia.) and fm. 9.2-9.5' (2-3" dia). MOIST.
							CL GC	9		
								9.6'		
	8.0-10.0'	Rec. = 1.6'						10.0'		

Box #1 (0.0 → 15.1')

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98

(4011-930-0134-930) Form GT.1A (09/01/92)

U.S. DEPARTMENT OF ENERGY ROCKY FLATS PLANT FORM PRO.101A

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

PAGE 2 OF 3

Borehole Number: 73105
Location - North: _____ East: _____
Date: 6/23/05
Geologist: E. WARP
Drilling Equip.: CME-750 - Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 27.7'
Company: URS/Layne
Project No.: ~~HA051300~~ GR201400
Sample Type: Continuous Core - Split Spoon

RMRS LOGGING SUPERVISOR APPROVAL: [signature]

DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL LITHOLOGIC LOG	SAMPLE DESCRIPTION
	10.0 – 12.0	Run #6	Rec = 1.9'				CL / GC	10.0' – 11.9'		10.0-11.9' - Sandy CLAY/GRAVEL mixture. Strong brn. (7.5YR5/6). 50% clay (med. plasticity). 30% gravel (1/8-3/4" dia., Sub-ang.). ~20% sand (c.g.). Cobbles of qtzite (1-2" dia.) @ 11.2' and 11.7'. MOIST.
								11.9' – 12.0		11.9-12.0' = No recovery
	12.0 – 14.0'	Run #7	Rec = 0.3'				CL / GC / CL	12.0 – 12.15'		12.0-12.15' - Sandy CLAY/GRAVEL mixture. Same as above fm. 10.0-11.9'.
				Bdrk Contact @ 12.5' (estimated)				12.15' – 12.3'		12.15-12.3' - Silty CLAY. Gry. (10YR 6/1). Reworked silty claystone. Poor recovery due to clogged split spoon sampler producing "ribbons" of claystone. MOIST. Probable cobble lodged in sampler.
								12.3' – 12.5		12.3-14.0' = No recovery. Bedrock contact (estimated) @ 12.5' (Bdrk. contact estimated by drilling conditions/changes in penetration)
	14.0' – 16.0'	Run #8	Rec = 1.3'					14.0 – 15.3'		14.0-15.3' - Silty CLAYSTONE (Weathered Bedrock). Gry'sh brn. (10YR5/2) w/some yellowish brn (10YR5/6) mottling. Massive texture. Firm and cohesive. Wk. to moderately friable. Wk. FeOxn mottled throughout. Tr blk. organic material. MOIST.
								15.3' – 16.0		15.3-16.0' = No recovery
	16.0' – 18.0	Run #9	Rec = 1.8'					16.0 – 16.2		16.0-16.6' - Silty CLAYSTONE - FeOxd - Yell'sh brn. (10YR5/4) grading to Gry (10YR5/1) @ base of interval. Mod. perv. FeOxn fm. 16.0-16.3' then decrsing @ base. Massive texture. Wk. to moderately friable. SATURATED fm. 16.0-16.2' decreasing to moist fm. 16.2-16.3'.
								16.2 – 16.3		
								16.6' – 17.8'		16.6-17.0' - CLAYSTONE w/silt (10/29/05) FeOxd - Yell'sh brn. (10YR5/8). Strong perv. FeOxn. Firm and dense. Blk. organic material commen as stringers and along undulating bedding planes. MOIST.
	18.0 – 20.0'	Run #10	Rec = 1.7'					17.8' – 19.7'		17.0-17.8 - CLAYSTONE w/silt (10/29/05) Gry'sh brn. (10YR5/2) w/some yell'sh brn. (10YR5/6) mottling. Decr. overall FeOxn to wk.-mottled. Firm. Wkly. friable. Blk. organic stringers commen. Faint bedding visible. MOIST.
								19.7' – 20.0		

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98

17.8-18.0' = No recovery
18.0 → 20.0 logged on page 3.

(4011-930-0134-930)(Form CT.1A)(03/01/97)

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

Borehole Number: 73105
Location - North: _____ East: _____
Date: 6/23/05
Geologist: E. Warp
Drilling Equip.: CME-750 - Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 27.7'
Company: URS/Layne
Project No.: 6R201400 HMS1300 Bar 6/29/05
Sample Type: Continuous Core - Split Spoon

RMRS LOGGING SUPERVISOR APPROVAL _____ DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE INSTEAD OF FIELD MEASUREMENTS	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC UNIT	SAMPLE DESCRIPTION w/tr-sand/silt
	20.0							20.0		18.0-19.7' - CLAYSTONE, Gry (10YR 5/1) with Yellish brn. (10YR 5/4) mottling. Wk. FeOxn mottled throughout. Firm/dense. Wkly. friable. Blk. organic stringers common. Blk. carbonaceous material coating bedding planes @ 18.9' and 19.0'. MOIST.
		Run #11 Rec = 2.0'						21		19.7-20.0' = No recovery
	22.0'							22		20.0-22.3' - CLAYSTONE, Lt. brn'sh gry. (10YR 6/2) to gry (10YR 6/1). Massive texture. Firm/dense. Tr overall FeOxn. Wk. FeOxn fm. 21.7-22.0'. Tr blk organic stringers. Decrease moisture to SL. MOIST.
		Run #12 Rec = 2.0'						22.3'		
								23		22.3-24.0' - CLAYSTONE. Gry (10YR 5/1) to Dk. Gry (10YR 4/1). Un-oxidized bedrock. Massive texture. Firm/dense. Tr blk. organic material. Decrease moisture to V. slightly MOIST. Abrupt color change. Note color change.
	24.0'							24		
		Run #13 Rec = 1.7'								24.0 → 27.7' - CLAYSTONE. Dk. Gry (10YR 4/1) to V. dk. gry (10YR 3/1). Un-oxidized, un-weathered bedrock. Fissile/friable. Blk. carbonaceous material common. Abundant blk. carbonaceous material fm. 27.0' to 27.7'. Decr. moisture to Tr.
								25		
	24.0'							25.7'		
		Run #14 Rec = 1.7'						26		No recovery fm. 25.7 - 26.0'.
								27		REFUSAL @ 27.7'
	27.7'							27.7'		T.D. @ 27.7'
								28		
								29		
								30.0		

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98

(401-930-01 34-9309) Form GT.1A (03/01 V2)

U.S. DEPARTMENT OF ENERGY ROCKY FLATS PLANT

FORM PRO.101A

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

PAGE 1 OF 4

Borehole Number: 73205
Location - North: East:
Date: 6/21/05
Geologist: E. WARP
Drilling Equip.: CME-750-Hollow Stem Auger

Surface Elevation:
Area: Present Landfill
Total Depth: 32.0'
Company: URS/Layne
Project No.: ~~HAD51300~~ GR201400 ESW 6/21/05
Sample Type: Cont. core - Split spoon

RMRS LOGGING SUPERVISOR APPROVAL

DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
0.0	0.0	0.0						0.0		0.0-1.5' - CLAY w/ fr gravel and fr sand. Brn. (7.5YR 4/3). Med. plasticity and firm. fr-3% diss. caliche. fr roots. Cobble of schist (3/4" dia., sub-ang) @ 0.3'. Sl. moist to moist.
	Run #1	Rec.=1.5'					CL	1		1.5-2.0'=No recovery silt, 6/29/05
								1.5'		2.0-2.4'-CLAY w/ fr gravel and fr sand. Brn. (7.5YR 4/4 to 7.5YR 4/2). Med. plasticity and firm. (same as 0.0-1.5'). Sl. moist
	2.0'							2		
	Run #2	Rec.=1.2'					CL	2.4'		2.4-3.2'-Sandy GRAVEL/CLAY Mixture. Brn. (7.5YR 4/4). ~75% sandy GRAVEL and ~25% clay. Gravel (1/4-1" dia., sub-ang. to sub-rounded, predominately qtzite). Sand (c.g., sub-ang.). Wk. FeOxn diss. throughout clay and as coating on 1/4" gravel clasts. fr diss. caliche. 2" dia. qtzite cobble at 2.4'. Shattered qtzite cobble fm. 3.0-3.2'. Poor recovery due to cobbles. Sl. moist.
							GC CL	3		
								3.2'		3.2-4.0'=No recovery
	4.0'							4		
Box #1 (0.0→10.0')	Run #3	Rec.=1.7'		Bedrock Contact @ 4.2'			CL	4.2'		4.0-4.2'-Sandy, gravelly CLAY. Brn. (7.5YR 4/4) 5-10% gravel (1/4-1/2" dia., sub-rounded to sub-ang. pred. qtzite) 5-7% sand (c.g., sub-ang.). Clay has med. plasticity, Incr'd moisture fm. Sl. moist to moist. Bedrock Contact @ 4.2'
								4.7'		4.2-4.7'-CLAYSTONE (Bedrock). Gry'sh Brn. (10YR 5/2) to Gry. (10YR 5/1). Firm/dense. Blk. organic stringers common on undulating bedding planes. 1/4" Caliche lense at base of interval. MOIST. sharp basal contact, color change. 6/29/05
								5		
								5.1'		
	6.0'							6		
	Run #4	Rec.=1.7'						6.8'		
								7		4.7-5.0'-CLAYSTONE - FeOxd/weathered. Yellsh. brn. (10YR 4/6). Mod. to strng. perv. FeOxn. Mod. friable. 1/4" caliche lense @ top of interval and as blebs throughout. MOIST.
								7.7'		
	8.0'							8		
	Run #5	Rec.=2.0'						8.3		5.0-5.7'-~~CLAYSTONE~~ SILTY CLAYSTONE. Gry (10YR 4/1). Distinct color change. Massive texture. Caliche mottled throughout. Friable. Decrease moisture to V. slightly moist. 6/21/05
								9		5.7-6.0=No recovery
	10.0'							10.0'		6.0-7.0'-CLAYSTONE - FeOxd/weathered. dyll sh Brn. (10YR 5/4 to 5/4). Wk. perv. FeOxn. Wk. to moderately friable. fr wht. caliche stringers.

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98
Page 27 of 28

(4011-930-0134-930)(Form GT.1A)(03/01/97)

Thin caliche lense @ 6.8'. Sl. MOIST.
(see page 2 for 7.0'-10.0' description).

U.S. DEPARTMENT OF ENERGY ROCKY FLATS PLANT

FORM PRO.101A

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

Borehole Number: 73205
Location - North: _____ East: _____
Date: 6/21/05
Geologist: E. WARP
Drilling Equip. CME-750-Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 32.0'
Company: URS/Layne
Project No.: ~~HA051300~~ 6R201400 4/21/05
Sample Type: Cont. core split spoon

RMRS LOGGING SUPERVISOR APPROVAL: _____ DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL LITHOLOGIC LOG	SAMPLE DESCRIPTION
Box #2 (10.0 → 18.0')	10.0' Run #6 12.0'	Rec. = 2.0'						10.0, 11		7.0-7.7 - CLAYSTONE, Gry'sh Brn. (10YR 5/2). Decr. FeOxn to Tr as stringers. Mod. friable. Massive texture. Sl. moist. 7.7-8.0 = No recovery 8.0-8.3 - Silty CLAYSTONE - FeOxid. Yell'sh Brn. (10YR 5/4). Wk to mod. perv. FeOxn. Massive texture. Wk. to moderately friable. Blk. MnOx. (possible organics) bleb @ 8.2'. Sl. moist.
	Run #7 14.0'	Rec. = 2.0'						12, 13, 13.3		8.3-12.0' - CLAYSTONE - Gry (10YR 5/1). Decr. FeOxn to Tr. Massive texture. Firm yet wkly. friable. Tr blk. organic stringers throughout. Blk. organic lense (1/8" thick) @ 11.2'. Tr. FeOxn stringers fm. 11.2 to 12.0. Decr. moisture to V. Sl. moist. Hard, Crystalline calcareous clast ~3/8" fm 9.5'. 6/29/05. 12.0-13.3 - CLAYSTONE - Gry (10YR 6/1). Massive texture. Dense/firm, wkly friable. Tr to some FeOxn. Abundant blk. organic material fm. 12.8 to 13.0'. V. Sl. moist. 6/29/05
	Run #8 16.0'	Rec. = 2.0'						14, 15		13.3-15.0' - CLAYSTONE - Gry (10YR 6/1). Massive texture as above fm. 12.0-13.3. Un-old bedrock. Tr blk. organic stringers. Firm/dense. Thin caliche lense along internal bedding plane @ 13.7'. V. sl. moist.
	Run #9 18.0'	Rec. = 2.0'						16, 17, 18		15.0-20.8' - Silty CLAYSTONE, Gry (10YR 6/1). Wk. FeOxn along horizontal bedding planes. Predominately massive texture. Tr blk. organic stringers and blebs. Firm/dense. Wk. to mod. perv. FeOxn fm. 17.3 to 17.7'. Near vertical fracture (~80°) fm. 18.9 to 19.5' with FeOx coating. 1/4" horizontal lense of carbonate (druse) @ 19.7'. Interval Sl. Moist. Occ. sandy intervals, as at 17.1', 17.6-17.7' and claystone intervals, as at 18.8-19.1'. Rip-up clasts, Fe ox. replaced organic debris present. Sand is vfg-fg. 6/29/05
	Run #10	Rec. = 2.0'						19, 20.0		

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98

(401)-930-01 34-930(Form GT.1A)(03/01,92)

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

Borehole Number: 73205
Location - North: _____ East: _____
Date: 6/21/05
Geologist: E. Warp
Drilling Equip. CME-750-Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 32.0'
Company: URS/Layne Project No. ~~HA051300~~ GR201400 ESW 6/21/05
Sample Type: Continuous Core-Split spoon

RMRS LOGGING SUPERVISOR APPROVAL [signature] DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
Box #3 (18.0-26.8')	Run #11	Rec. = 2.0'		~60°				20.0		20.0-20.8- See previous page for description. Silty CLAYSTONE
	22.0'							20.8'		20.8-21.6'- CLAYSTONE - Gry'sh Brn (10YR 5/2) Wk. FeOx'n as stringers and along bedding planes. Blk. organic material along bedding planes. Poss. MnOx associated w/ FeOx'n along bedding surfaces planes. Dense/firm. Sl. moist. fracture 6/29/05
	Run #12	Rec. = 2.0'		~50°				21.6'		21.6-23.1- CLAYSTONE - Gry (10YR 6/1 to 5/1). Tr. Wk. FeOx'n as stringers and along bedding surfaces planes. FeOx'n as frac. (~50) coating @ 22.6'. Interval wk-moderately friable. Massive texture. Slightly moist. fracture 6/29/05
	24.0							23.1'		23.1-30.4- CLAYSTONE - Dk. Gry (10YR 4/1) Firm/Dense. Tr FeOx'n along bedding planes. Bedding planes are faintly visible. Tr Blk. organic material along bedding and as clasts (to 1/2" diam.). Wk. perv. FeOx'n fm. 29.1-29.3. Slightly moist fm. 23.1-24.2', decr. to Tr moisture fm. ~~23.1~~ 24.2' to 30.4'. fracture surfaces. 6/29/05 ESW 6/21/05
	Run #13	Rec. = 1.6'		~80°				24		
	26.0'							25		
26.8'	Run #14	Rec. = 2.0'		~70°				26		
Box #4 (26.8'-32.0')	28.0'							26.8'		
	Run #15	Rec. = 2.0'		~70°				27		
	30.0'							28		
								29		
								30.0		

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98

1401 1-930 01 34-930 Form GT.1A(03/01/92)

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE BOREHOLE LOG

Borehole Number: 73205
Location - North: _____ East: _____
Date: 6/21/05
Geologist: E. WARP
Drilling Equip.: CME-750-Hollow Stem Auger

Surface Elevation: _____
Area: Present Landfill
Total Depth: 32.0'
Company: URS/Layne
Project No. GR201400
Sample Type: Continuous Core - Split Spoon

RMRS LOGGING SUPERVISOR
APPROVAL [signature]
DATE 6/29/05

TOP/BOTTOM OF CORE IN BOX	TOP/BOTTOM OF INTERVAL	FEET OF CORE IN INTERVAL (FIELD MEASUREMENT)	SAMPLE NUMBER	FRACTURE ANGLE	BEDDING ANGLE	GRAIN SIZE DISTRIBUTION	USCS SYMBOL	DEPTH IN FEET	SOIL/LITHOLOGIC LOG	SAMPLE DESCRIPTION
	30.0'							30.0'		30.0-30.4 - CLAYSTONE - SEE PREVIOUS PAGE FOR DESC.
Box #4 (cont.) (26.8-32.0')	Run #16	REC = 2.0'						30.4		30.4-32.0' - CLAYSTONE - Un-FeOx'd/Un-weathered. V. Dk Gry (10YR 3/1); Firm and dense. Tr FeOx stringers @ 31.8-31.9'. Distinct color change. Sub-horizontal, undulatory bedding faintly visible. Blk. organic material / common along bedding planes and Tr moisture.
32.0'	32.0'		T.D @ 32.0'					32.0'		T.D. @ 32.0'

as clasts to 1/2" diam. [initials] 6/29/05

NOTES: General: USCS is modified for this log as follows:
Materials amounts are estimated by % volume instead of % weight.
(1) Badly broken core, accurate footage measurements not possible.
(2) Core breaks cannot be matched, accurate footage measurements not possible.

Procedure No. RMRS/OPS-PRO.101
Revision 0
Date effective: 12/31/98
Page 27 of 28

APPENDIX N

LANDFILL ENGINEERING
POST-CONSTRUCTION EAST FACE COVER STABILITY ANALYSIS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ACCELERATED ACTION DESIGN FOR THE PRESENT LANDFILL

LANDFILL ENGINEERING
POST-CONSTRUCTION EAST FACE COVER STABILITY ANALYSIS

JULY 15, 2005

Prepared by:

Earth Tech, Inc.
5575 DTC Parkway, Suite 200
Englewood, Colorado 80111
(303) 694-6660

This calculation was performed by Earth Tech, Inc. Although each sheet composing this calculation may or may not be initialed, it has nonetheless been reviewed and checked.

Prepared By:	Stan Kline	Date:	6/14/05
Checked By:	Scott Powell	Date:	6/18/05
Approved By:	Randy Thompson	Date:	6/18/05

TABLE OF CONTENTS

1.0 INTRODUCTION 2
2.0 REFERENCES 2
3.0 DESIGN CRITERIA 3
4.0 PCSTABL MODELS 4
5.0 RESULTS 6
6.0 CONCLUSIONS 7

LIST OF TABLES

Table 1 Design Criteria
Table 2 Engineering Material Properties
Table 3 Post-Construction East Face Cover Stability

LIST OF ATTACHMENTS

Attachment 1 Figures
Attachment 2 Computer Runs

1.0 INTRODUCTION

The Present Landfill is located within the Rocky Flats Environmental Technology Site (RFETS), north of the industrial area, and occupies approximately 22 acres. RFETS is located in the semiarid region of central Colorado, approximately 16 miles northwest of Denver. As part of the accelerated action for closure of the Present Landfill, a geosynthetic cover was installed over the landfill including the east face. Prior to cover placement on the east face, the area was regraded to a 4H:1V slope to enhance the stability. Following construction, the actual cover layer termination differed from that originally evaluated and saturated soil conditions were visible on the east face above the level of saturation assumed in Appendix G of the Accelerated Action Design for the Present Landfill Final Design Analysis and Design Calculations ([Final Design] October 2004). This analysis presents a revision of the cover layer stability modeling with the new cover layer termination more reflective of as-built conditions.

2.0 REFERENCES

Slope Stability evaluation of the proposed cover was completed using PCSTBL5M software and the guidelines provided in the following documents:

1. PCSTABL5M Design Software. Purdue University.
2. Accelerated Action Design for the Original Landfill - Geotechnical Investigation, Earth Tech 2004.
3. Factors of Safety: "Technical Guidance for RCRA/CERCLA Final Covers", Chapter 6, Geotechnical Analysis and Design, US EPA, Draft April 2002 (Attachment 1, Page 6-21) and Reference 1.

3.0 DESIGN CRITERIA

The stability analysis is required to meet the following design criteria developed in the Accelerated Action Design for the Original landfill Geotechnical Investigation (Earth Tech 2004). Static stability is based on technical Guidance for RCRA/CERCLA Final Covers. There are no specific guidelines regarding the seismic or stability so the criteria was developed considering the project site setting, geologic conditions, standard of practice, and various regulatory requirements. Therefore, the design criteria are as follows:

Table 1 Design Criteria

Stability	Minimum Safety Factor
Static (peak interface shear strengths)*	1.5
Static (large-displacement interface shear strengths)*	1.2
Seismic	1.0 for a seismic coefficient of 0.06g or Deformation analysis with a seismically induced permanent displacement of 12-inches or less

* These values are obtained from the EPA Technical Guidance for RCRA/CERCLA Final Covers Section 6.2.6 (page 6-23)

4.0 PCSTABL MODELS

The PCSTABL model runs were conducted for the east face cover layers to determine if the design criteria listed above were achieved. The east face cover layer analysis is focused on the specific interfaces of the cover along the 4H:1V slope.

The PCSTABL models require development of a section for analysis as well as input of the engineering properties of the material within the sections. Additional input data including boundaries, piezometric surface data, and failure type is also required. The following sections summarize this input.

Section for Analysis

The section for analysis is explained in detail and is shown in Attachment 1. Revisions to the section for analysis from the Final Design include the revised cover layer termination on the bench built into the regrade surface, and a revised saturation level on the bench. Attachment 1 includes both the revised cross section of the east face cover layers and a figure with the strength criteria defined for each layer. Saturation levels are further discussed in the Computer Program Input Data section.

Engineering Material Properties

Engineering material properties are explained in detail in Appendix G of the Final Design. The material properties were obtained from geotechnical testing conducted during design of the Present Landfill cover including a geotechnical investigation conducted on the east face. Engineering material properties were obtained for the various geosynthetic interfaces of the cover for the east face slope and are as follows:

Table G-3 Interface Tests

Interface	Interface Friction Angle (Φ)	Adhesion (psf)
Cushion Soil / GDN	37° – Maximum 35° – Large Displacement	0 – Maximum 0 – Large Displacement
GDN / FML Textured #2*	34° – Maximum 17° – Large Displacement	45 – Maximum 91 – Large Displacement
GDN / FML Textured #3*	32° – Maximum 17° – Large Displacement	50 – Maximum 72 – Large Displacement
FML Textured / GCL Non-Woven	28° – Maximum 20° – Large Displacement	0 – Maximum 0 – Large Displacement
GCL Non-Woven / Cushion (use GCL Woven / Cushion)	28° – Maximum 24° – Large Displacement	60 – Maximum 33 – Large Displacement

* Interface testing conducted three times due to low initial values. First value discarded due to concern over inconsistent testing and results.

A plot of the engineering properties of the interface shear tests is included in Attachment 1. This plot presents the strength envelopes for each of the four tested interfaces using the maximum strength and large-displacement test results. From this plot it can be seen that the critical interface, or the lower bound of the strength envelope, is the Textured FML / GCL result. The testing results show a friction angle of 28° and adhesion of 0 pounds per square foot

(psf) for the maximum, and 20° and adhesion of 0 psf for the large displacement. These are used in the stability analysis.

Computer Program Input Data

Input data can be found in Attachment 2 and includes boundaries of the section for analysis, the piezometric surface data, and the failure type. For this analysis, the piezometric surface was modified to reflect the post-construction conditions, and includes evaluation of a saturated cushion layer and saturation at the cover layer termination bench. For static conditions, a total of four situations were analyzed which included stability of the cover layer without seepage and with 10 inches of seepage within the cushion soil for both the Textured FML / GCL maximum friction angle, and large displacement friction angle. The seismic condition was also evaluated.

5.0 RESULTS

The following tables summarize the output of the PCSTABL model runs found in Attachment 2.

Table 3 Cover Slope Stability

Condition	Seepage	Friction Angle	Friction Angle	Minimum obtained FS
Static	None	Maximum (28°)	28°	2.2
Static	10-inches	Maximum (28°)	28°	2.0
Static	None	Large Displacement (20°)	20°	1.6
Static	10-inches	Large Displacement (20°)	20°	1.4
Pseudostatic (0.06g)	None	Large Displacement (20°)	20°	1.3

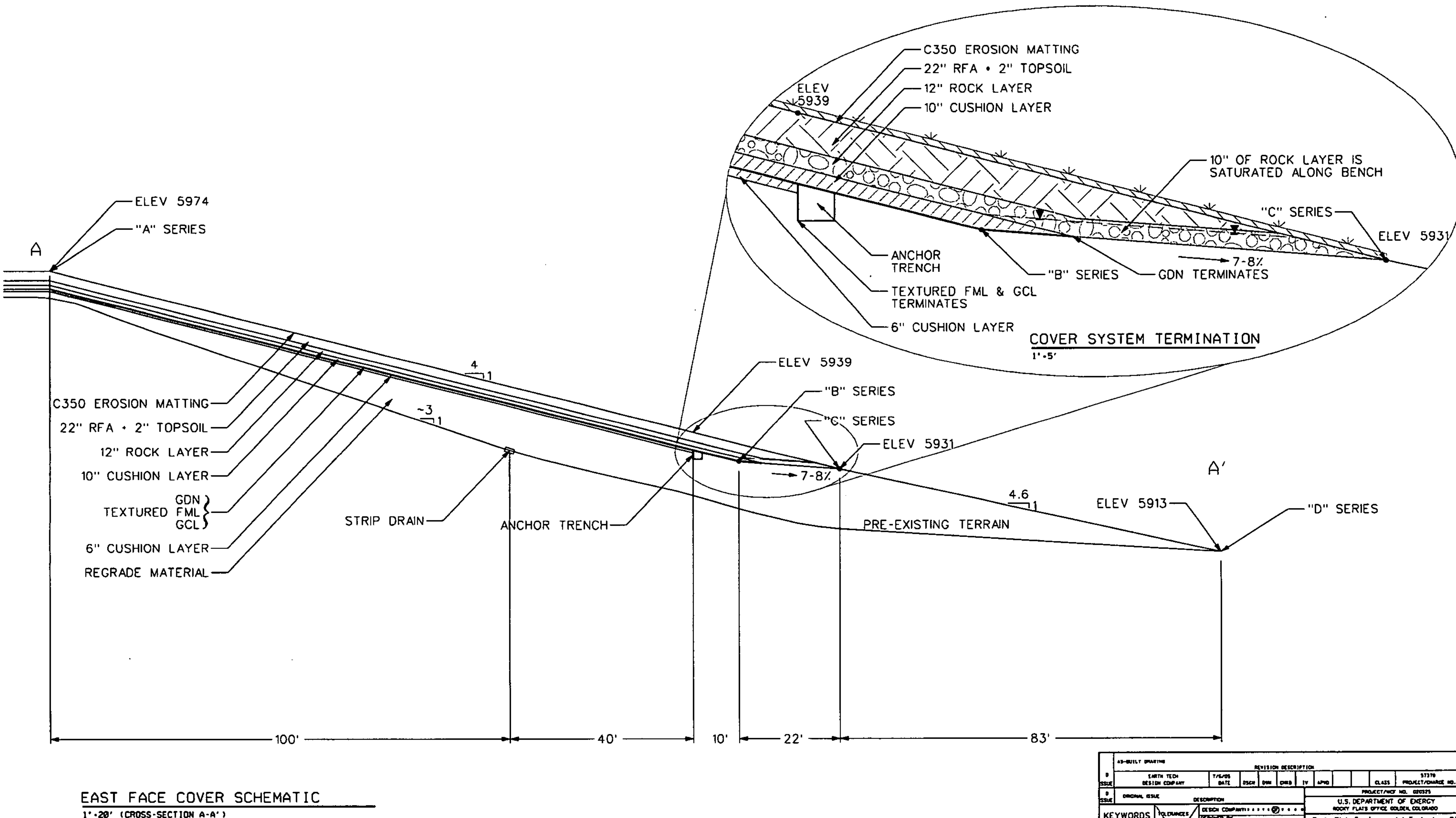
As seen in Table 3, the analysis demonstrates that the stability of the east face cover layers as constructed exceeds the required factors of safety.

6.0 CONCLUSIONS

Slope stability of the east face meets the required factors of safety for both the static and pseudostatic conditions even with the following conservative aspects:

- Three dimensional effects of "U-shaped" slope of the east face, which would tend to provide buttress effects to the east face slope is not accounted for in the two dimensional analysis;
- Strength parameters used for critical material controlling stability results are conservative lower bound values of all test data;
- Neglecting cohesions in weathered bedrock material, particularly for undrained strength used for short term seismic loading is conservative to stability analysis results; and,
- The currently observed surface saturation likely does not extend the full distance back into the landfill as the geosynthetics on the east face will eliminate further infiltration.

ATTACHMENT 1
FIGURES



AS-BUILT DRAWING	REVISION DESCRIPTION
0 ISSUE	EARTH TECH DESIGN COMPANY · 7/6/05 DATE · DSGN · DWN · CHKD · IV · APVD · CLASS · 57370 PROJECT/CHARGE NO.
0 ISSUE	ORIGINAL ISSUE · DESCRIPTION

PROJECT/WCF NO. 020325

U.S. DEPARTMENT OF ENERGY
ROCKY FLATS OFFICE GOLDEN, COLORADO

Rocky Flats Environmental Technology Site
GOLDEN, COLORADO

LANDFILL COVER DETAILS EAST FACE

PRESENT LANDFILL ACCELERATED ACTION AS-BUILT

KEYWORDS: 1. 2. 3. 4. 5.

DESIGNED BY: R. ARCHIBALD (RA)
DRAWN BY: D. BAXTER (DB)
CHECKED BY: R. THOMPSON (RT)
INDEPENDENT VERIFIER: S. LAWRENCE (SL)
APPROVED BY: R. THOMPSON (RT)

ROOM/AREA: NA
GRID COORD./COL. NO.: NA
NEXT ASSEMBLY: NA
SCALE: AS SHOWN
SIZE: B
ISSUE: 0

L:\GROUP\CAD\ROCKY_FLATS\NEW DESIGN 2004 \DETAILS\LNDFILLCVR3.DGN 7/6/05

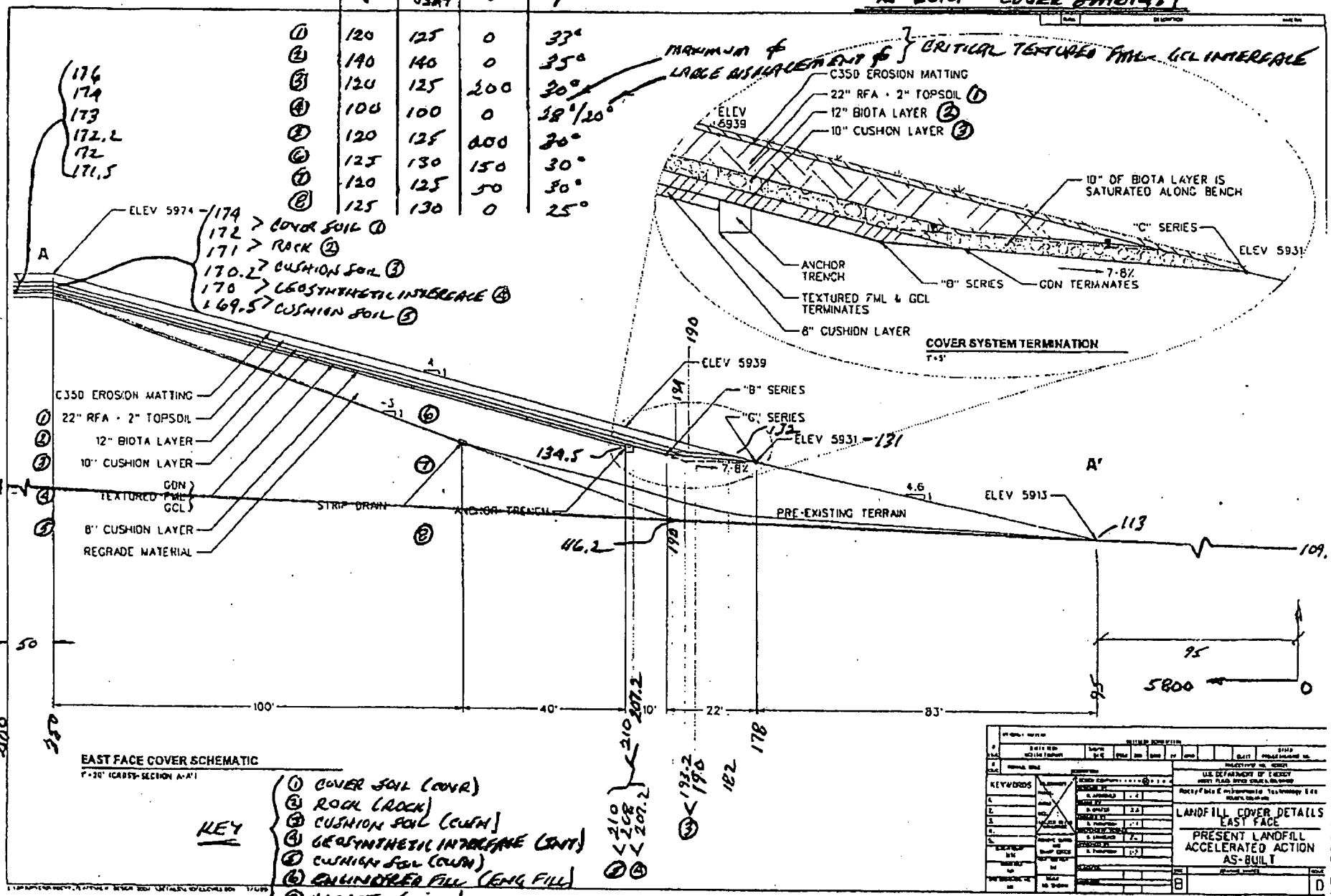
③

STABILITY PARAMETERS

	γ	γ_{SAT}	c	φ
①	120	125	0	33°
②	140	140	0	35°
③	120	125	200	30°
④	100	100	0	28°/20°
⑤	120	125	200	30°
⑥	125	130	150	30°
⑦	120	125	50	30°
⑧	125	130	0	25°

MAXIMUM φ
LARGE DISPLACEMENT φ } CRITICAL TEXTURED FML - GCL INTERFACE

'AS-BUILT' COVER STABILITY



EAST FACE COVER SCHEMATIC
1"=20' (CROSS-SECTION A-A')

KEY
① COVER SOIL (COVR)
② ROCK (ROCK)
③ CUSHION SOIL (CUSH)
④ GEOSYNTHETIC INTERFACE (INT)
⑤ CUSHION SOIL (CUSH)
⑥ ENGINEERED FILL (ENG FILL)
⑦ WASTE (WAST)
⑧ WEATHERED BEDROCK FOUNDATION (FNDN)

U.S. DEPARTMENT OF ENERGY
Rocky Flats Environmental Technology Site
KEYWORDS

LANDFILL COVER DETAILS
EAST FACE
PRESENT LANDFILL
ACCELERATED ACTION
AS-BUILT

B D

57372.4020
SHN 7/14/05
ACSTABSM
SECTION / PARAMETERS

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

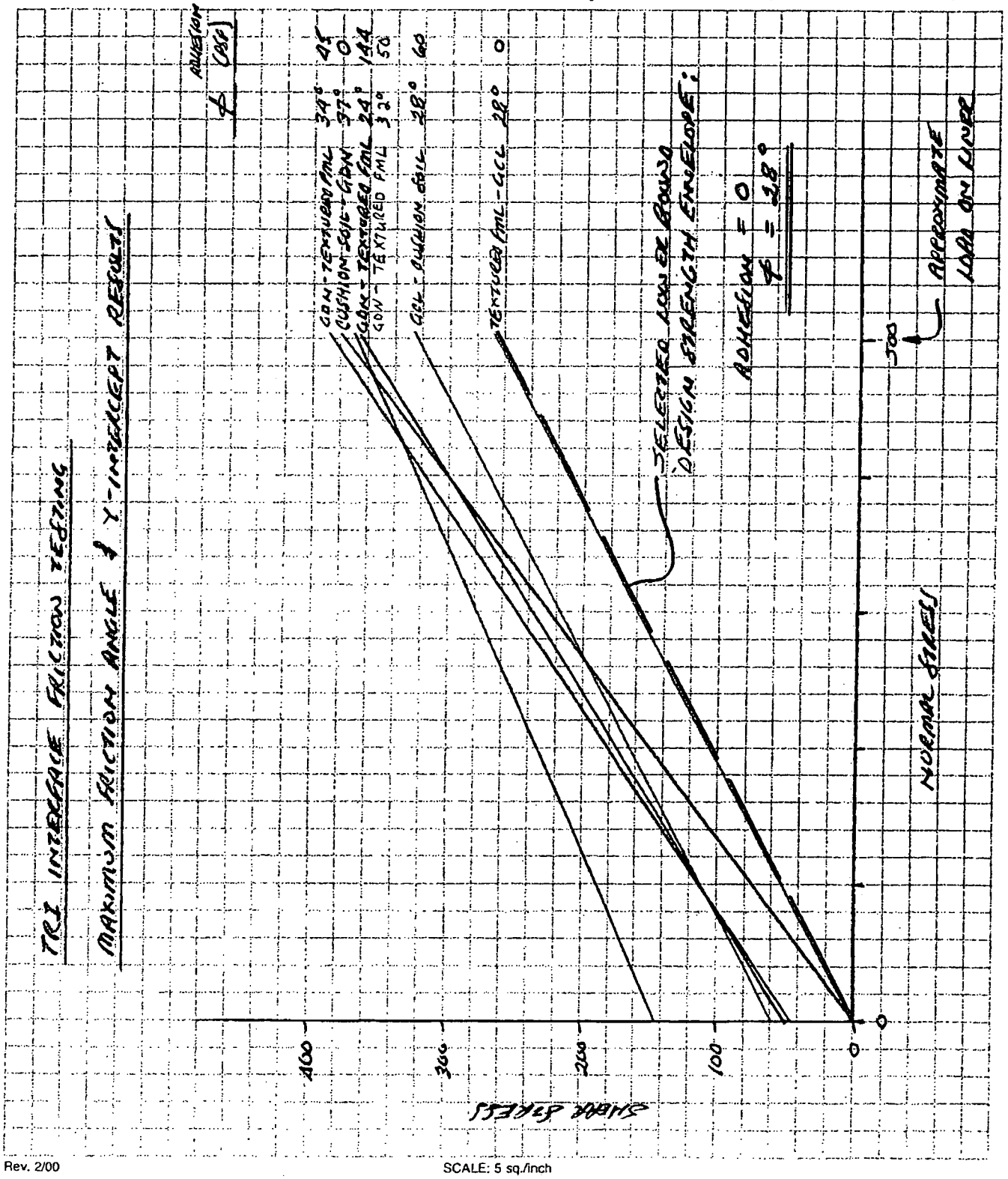
CALCULATION SHEET PAGE ____ OF ____

PROJECT NO. 57378.4001

CLIENT KAISER-HILL SUBJECT 4:1 EAST SLOPE Prepared By SAM DATE 1/20/05

PROJECT ROCKY FLATS PLF SYNTHETIC LINER Reviewed By _____ DATE _____

COVER STABILITY Approved By _____ DATE _____



Rev. 2/00

SCALE: 5 sq./inch

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

CALCULATION SHEET

PAGE ____ OF ____

PROJECT NO. 57378.4001

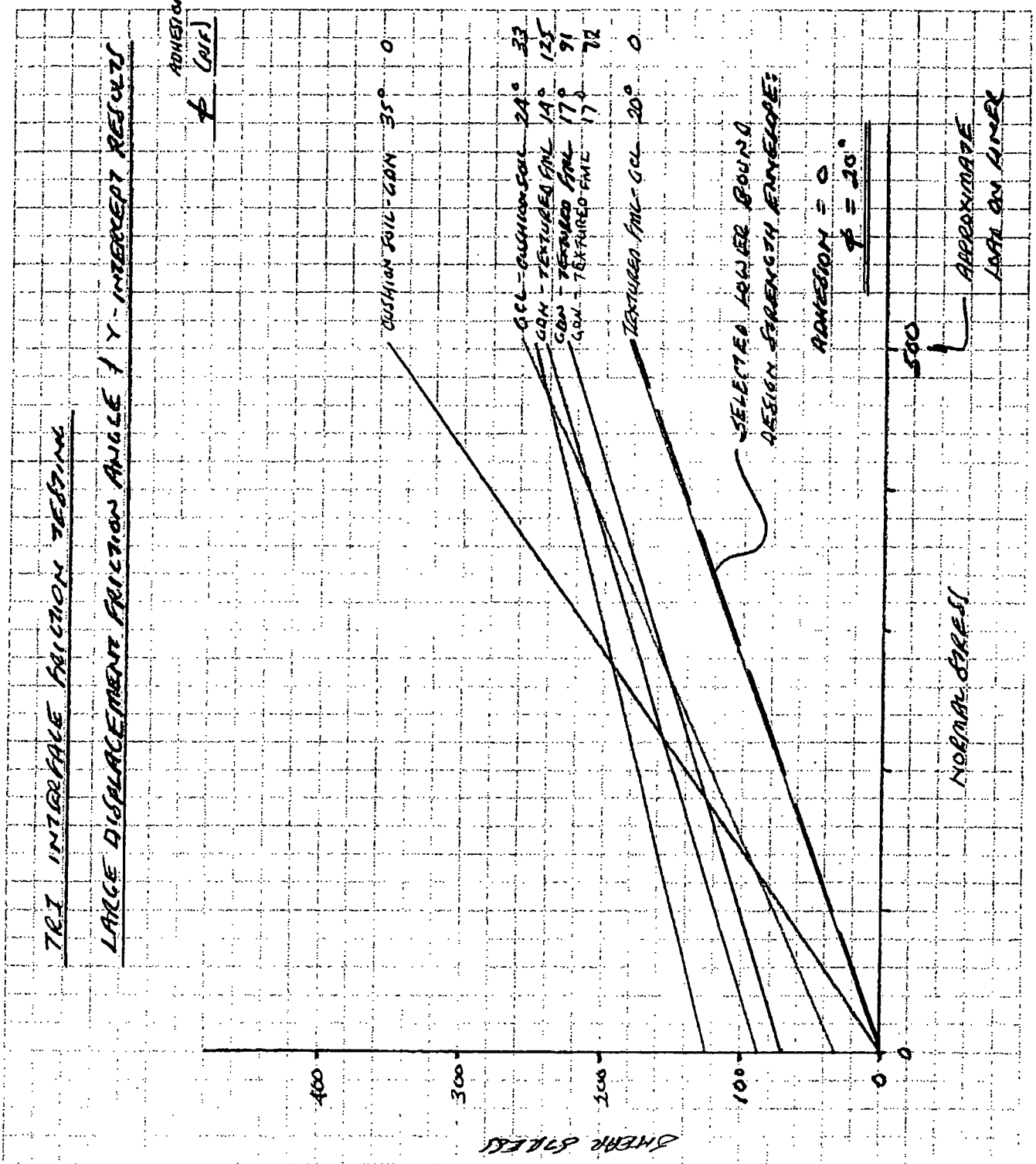
CLIENT Kaiser - Hill

SUBJECT 4:1 East Slope Synthetic Liner Cover Stability

Prepared By SMK DATE 1/20/05

Reviewed By _____ DATE _____

Approved By _____ DATE _____



Rev. 2/00

SCALE: 5 sq./inch

ATTACHMENT 2
COMPUTER RUNS

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

CALCULATION SHEET

PAGE ___ OF ___

PROJECT NO. 57378.4020

CLIENT KAISER - HILL SUBJECT EAST SLOPE Prepared By [illegible] DATE 7/14/05

PROJECT ROCKY FLATS PLF 'AS - BUILT' Reviewed By ___ DATE ___

COVER STABILITY Approved By [illegible] DATE 7/18/05

(4) COMPUTER PROGRAM INPUT DATA - PCSTABL5M

BOUNDARY

	LEFT X	LEFT Y	RIGHT X	RIGHT Y	SOIL
1	0	109.8	95	113	8
2			178	131	6
3			182	132	2
4			350	174	1
5			400	176	1
6	182	132	190	132	2
7			350	172	2
8			400	174	2
9	178	131	190	131	6
10			350	171	3
11			400	173	3
12	190	131	193.2	131	6
13			207.2	134.5	6
14			350	170.2	4
15			400	172.2	4
16	207.2	134.5	208	134.5	6
17			350	170	5
18			400	172	5
19	208	134.5	210	134.5	6
20			350	169.5	6
21			400	171.5	7
22	95	113	190	116.2	8
23			350	169.5	7
24	190	116.2	400	123.4	8

SOIL

(LISTED ON CROSS SECTION IN (3))

Rev. 2/00

SCALE: 5 sq./inch

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

CALCULATION SHEET

PAGE ____ OF ____

PROJECT NO. 57378.4020

CLIENT _____ SUBJECT _____ Prepared By SAL DATE 7/14/05

PROJECT _____ Reviewed By _____ DATE _____

Approved By RT DATE 7/18/05

(4) (CONTINUED

PIEZOMETRIC SURFACE (FOR SEEPAGE CONDITION)

BASED ON ENTIRE 10" CUSHION SOIL LAYER ABOVE GDN/FML/GCL BECOMING SATURATED (10" SEEPAGE) & LOWER TOE FILL BELOW COVER TERMINATION BENCH AT EL. 5931 FULLY SATURATED

POINT	X	Y
1	0	109.8
2	95	113
3	182	132
4	194	132
5	350	171
6	400	173

SLIDING BLOCK SEARCH

- BOXES DEFINING CENTRAL BLOCK BASE WITHIN CRITICAL TEXTURED FML - GCL INTERFACE MODELED ZONE & EXTENDING DOWN INTO SATURATED TOE BELOW COVER TERMINATION BENCH

BOX	LEFT X	LEFT Y	RIGHT X	RIGHT Y	HEIGHT
1	150	120.1	250	145.1	0
2	270	150.1	350	170.1	0

- 100 TRIAL SURFACES
- LINE SEGMENT FOR ACTIVE/PASSIVE PORTION ⟹ 16

Rev. 2/00

SCALE: 5 sq./inch

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

CALCULATION SHEET

PAGE ____ OF ____

PROJECT NO. 57378-4020

CLIENT Kaiser-Hill SUBJECT East Slope Prepared By [illegible] DATE 7/14/05

PROJECT Rocky Flats PLF "As-Built" Reviewed By ____ DATE ____

Cover Stability Approved By [illegible] DATE 7/18/05

(5) INPUT / OUTPUT FILE SET-UP

	CONDITION	FILE NAME
MAXIMUM FRICTION ANGLE 28°	STATIC - NO SEEPAGE	I 28 NS
	STATIC w/ 10" SEEPAGE[2]	I 28 WS
LARGE DISPLACEMENT FRICTION ANGLE 20°	STATIC - NO SEEPAGE	I 20 NS
	STATIC w/ 10" SEEPAGE[2]	I 20 WS
	0.06g - NO SEEPAGE	I 20 NE

1 BASED ON CONSERVATIVE LOWER BOUND STRENGTH ENVELOP FOR ALL VARIOUS INTERFACE TEST DATA WITHIN A NORMAL STRESS RANGE UP TO 500 PSF (LOAD OF OVERLYING MATERIALS)

2 10" CUSHION SOIL LAYER ABOVE LINER SATURATED

EARTH TECH

A tyco INTERNATIONAL LTD. COMPANY

CALCULATION SHEET

PAGE ____ OF ____

PROJECT NO. 57378.4020

CLIENT Kaiser - Hill

SUBJECT East Slope

Prepared By [illegible] DATE 7/14/05

PROJECT Rocky Flats PLF

'As - Built'

Reviewed By ____ DATE ____

COVER STABILITY

Approved By [illegible] DATE 7/18/05

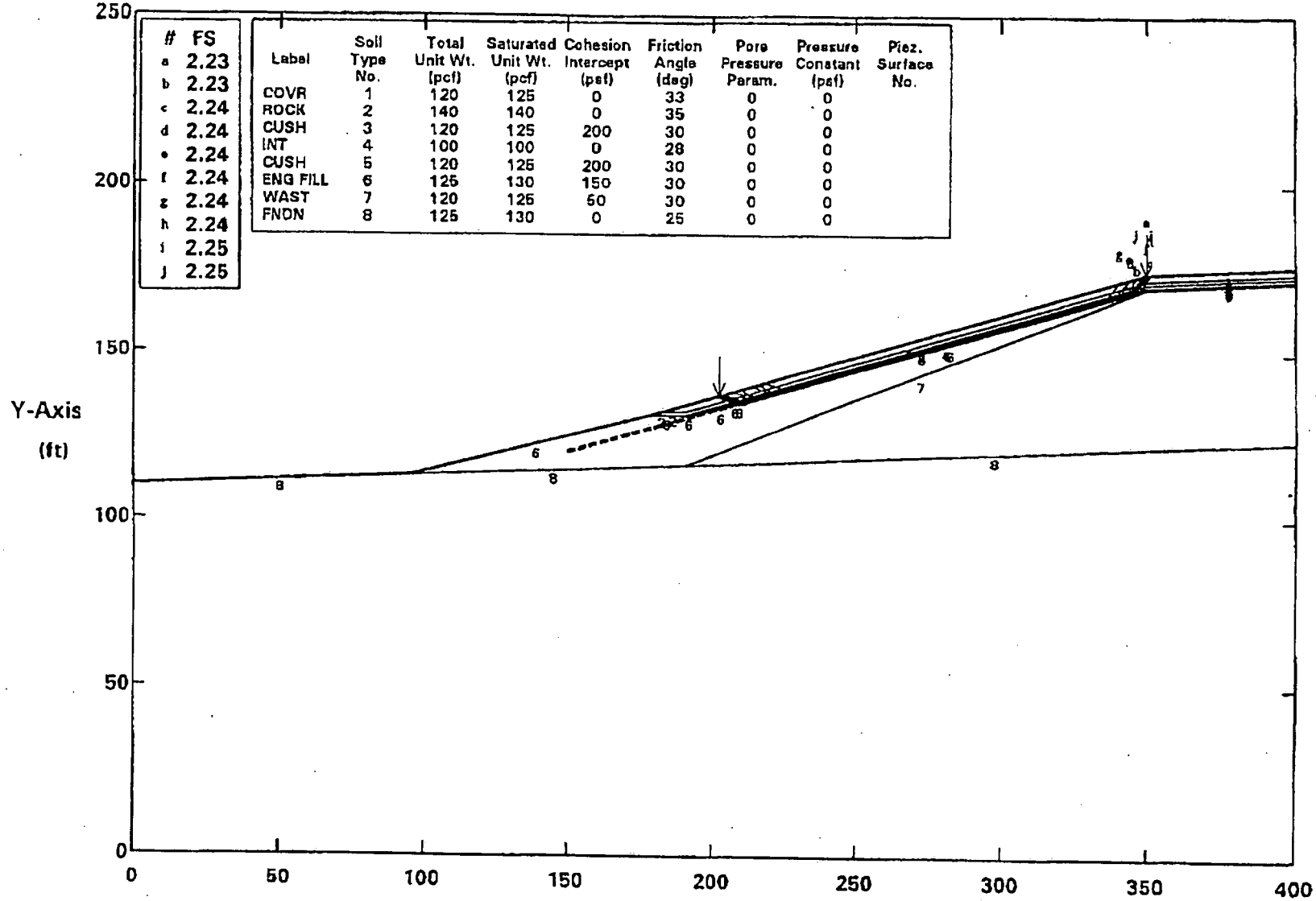
(6) COMPUTER RUNS

Rev. 2/00

SCALE: 5 sq./inch

ROCKY FLATS PLF - COVER - NOSEEP - INTER FACE = 28deg - STATIC

Ten Most Critical. C:I28NS.PLT By: STAN KLINE 07-14-05 10:53pm



#	FS
a	2.23
b	2.23
c	2.24
d	2.24
e	2.24
f	2.24
g	2.24
h	2.24
i	2.25
j	2.25

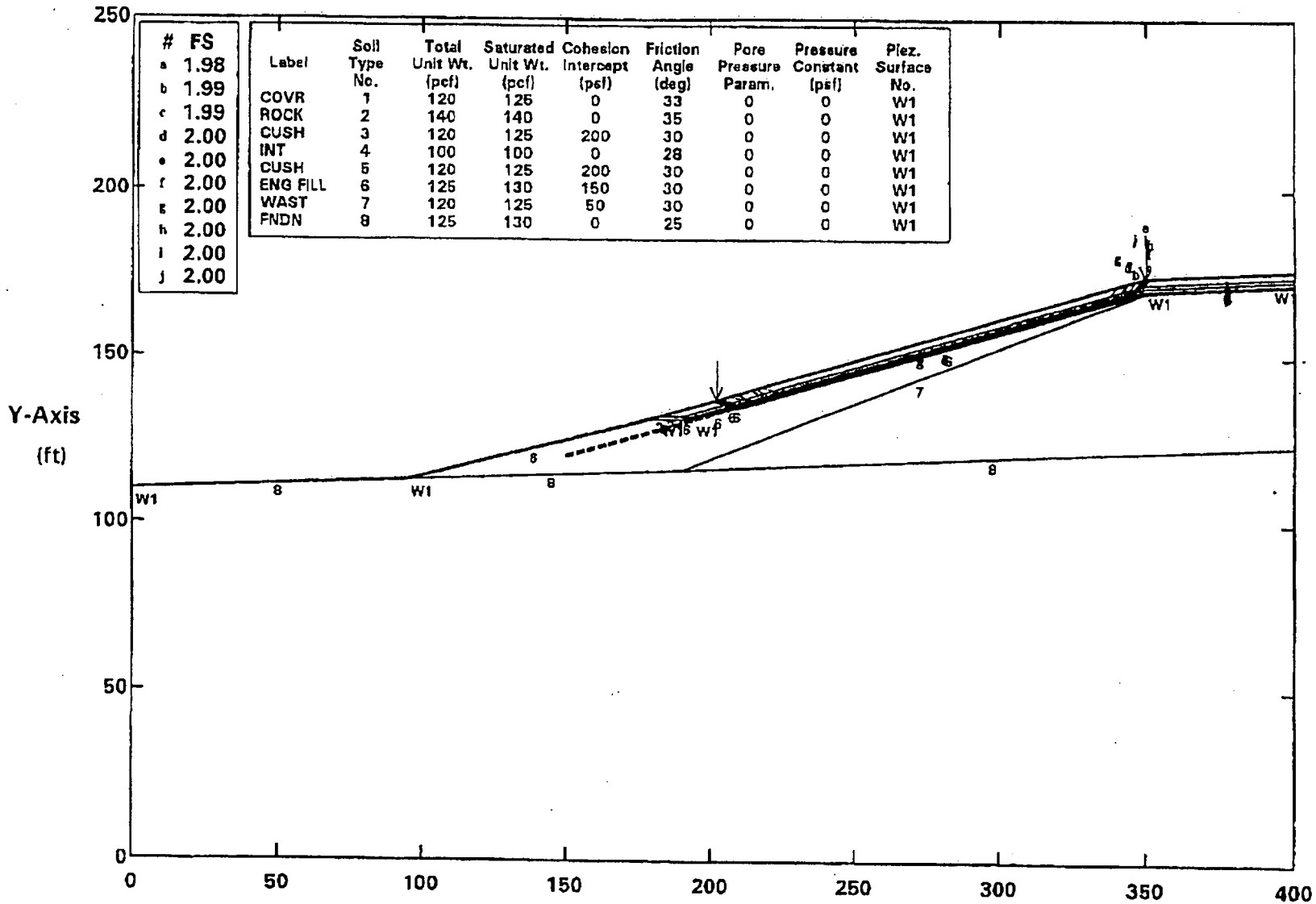
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
COVR	1	120	125	0	33	0	0	
ROCK	2	140	140	0	35	0	0	
CUSH	3	120	125	200	30	0	0	
INT	4	100	100	0	28	0	0	
CUSH	5	120	125	200	30	0	0	
ENG FILL	6	125	130	150	30	0	0	
WAST	7	120	125	50	30	0	0	
FNDN	8	125	130	0	25	0	0	

PCSTABL5M/SI FSmin = 2.23 X-Axis (ft)

Factors Of Safety Calculated By The Modified Janbu Method

ROCKY FLATS PLF - COVER - W/10" SEEPAGE - INTERFACE=28deg - STATIC

Ten Most Critical. C:I28WS.PLT By: STAN KLINE 07-14-05 10:55pm



#	FS
a	1.98
b	1.99
c	1.99
d	2.00
e	2.00
f	2.00
g	2.00
h	2.00
i	2.00
j	2.00

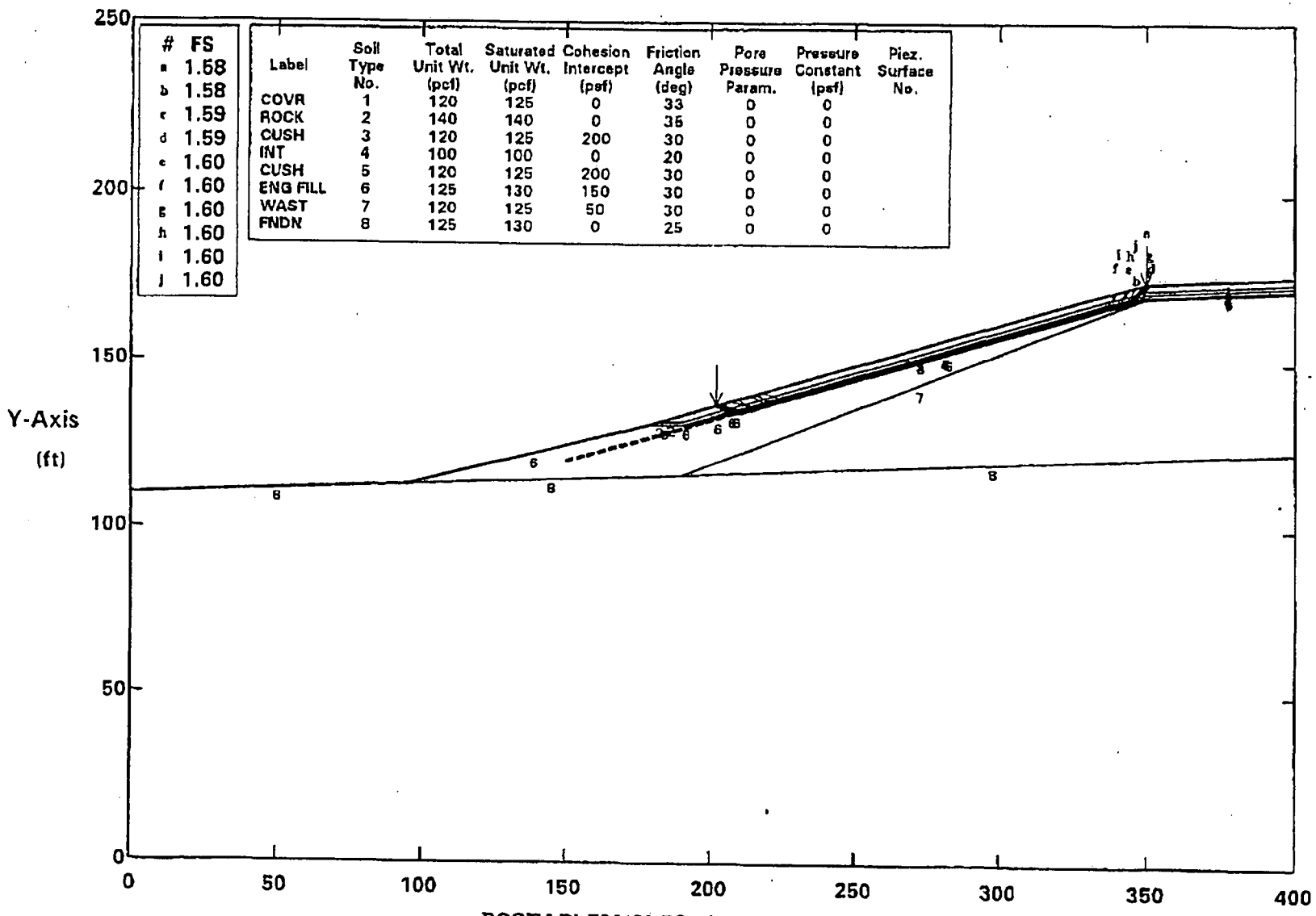
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
COVR	1	120	125	0	33	0	0	W1
ROCK	2	140	140	0	35	0	0	W1
CUSH	3	120	125	200	30	0	0	W1
INT	4	100	100	0	28	0	0	W1
CUSH	5	120	125	200	30	0	0	W1
ENG FILL	6	125	130	150	30	0	0	W1
WAST	7	120	125	50	30	0	0	W1
FNDN	8	125	130	0	25	0	0	W1

PCSTABL5M/SI FSmin=1.98 X-Axis (ft)

Factors Of Safety Calculated By The Modified Janbu Method

ROCKY FLATS PLF - COVER - NOSEEP - INTER FACE=20deg - STATIC

Ten Most Critical. C:I20NS.PLT By: STAN KLINE 07-14-05 10:56pm



#	FS
a	1.58
b	1.58
c	1.59
d	1.59
e	1.60
f	1.60
g	1.60
h	1.60
i	1.60
j	1.60

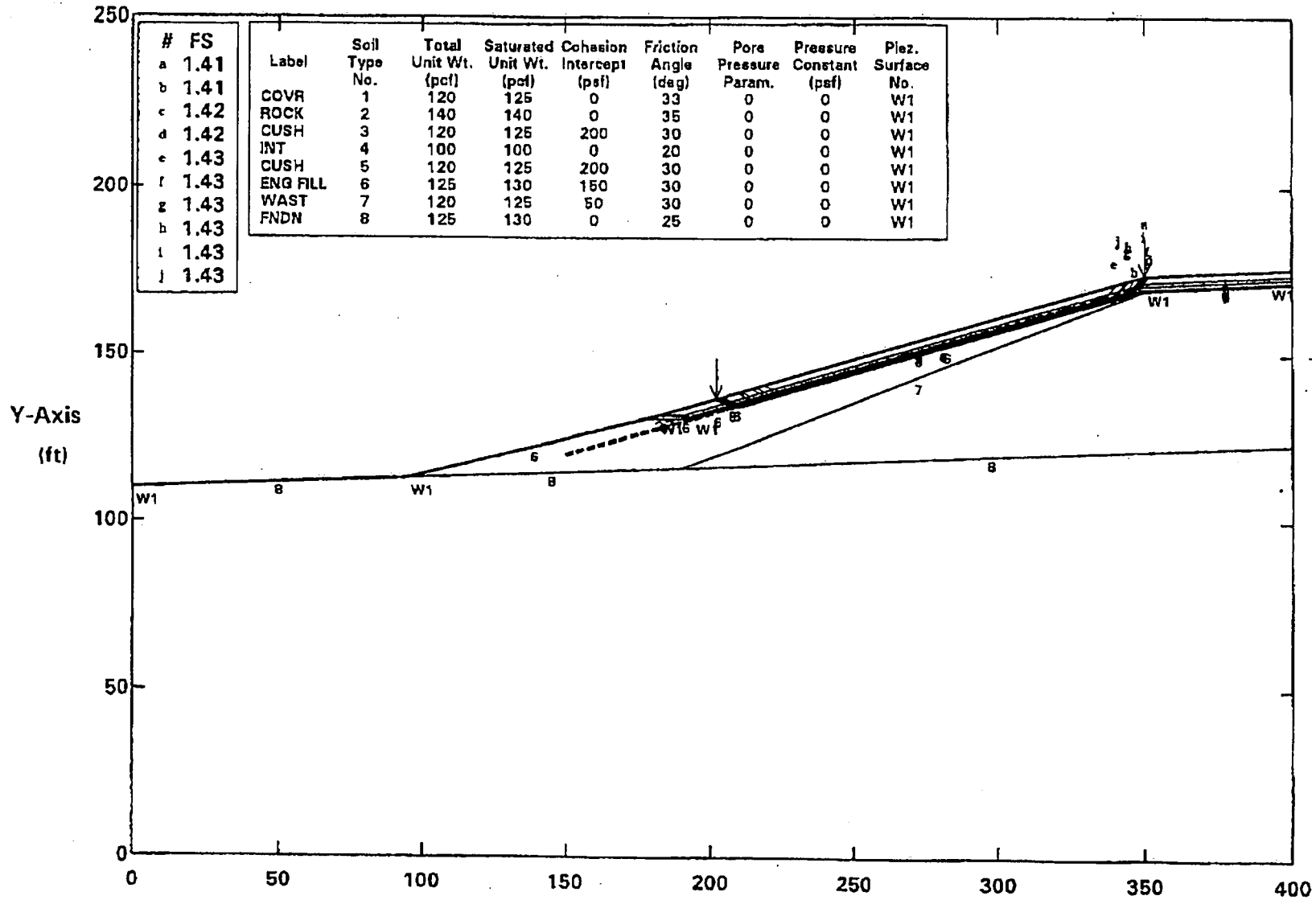
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
COVR	1	120	125	0	33	0	0	
ROCK	2	140	140	0	35	0	0	
CUSH	3	120	125	200	30	0	0	
INT	4	100	100	0	20	0	0	
CUSH	5	120	125	200	30	0	0	
ENG FILL	6	125	130	150	30	0	0	
WAST	7	120	125	50	30	0	0	
FNDN	8	125	130	0	25	0	0	

PCSTABL5M/SI FSmin=1.58 X-Axis (ft)

Factors Of Safety Calculated By The Modified Janbu Method

ROCKY FLATS PLF - COVER - W/10" SEEPAGE - INTERFACE=20deg - STATIC

Ten Most Critical. C:I20WS.PLT By: STAN KLINE 07-14-05 10:57pm



#	FS
a	1.41
b	1.41
c	1.42
d	1.42
e	1.43
f	1.43
g	1.43
h	1.43
i	1.43
j	1.43

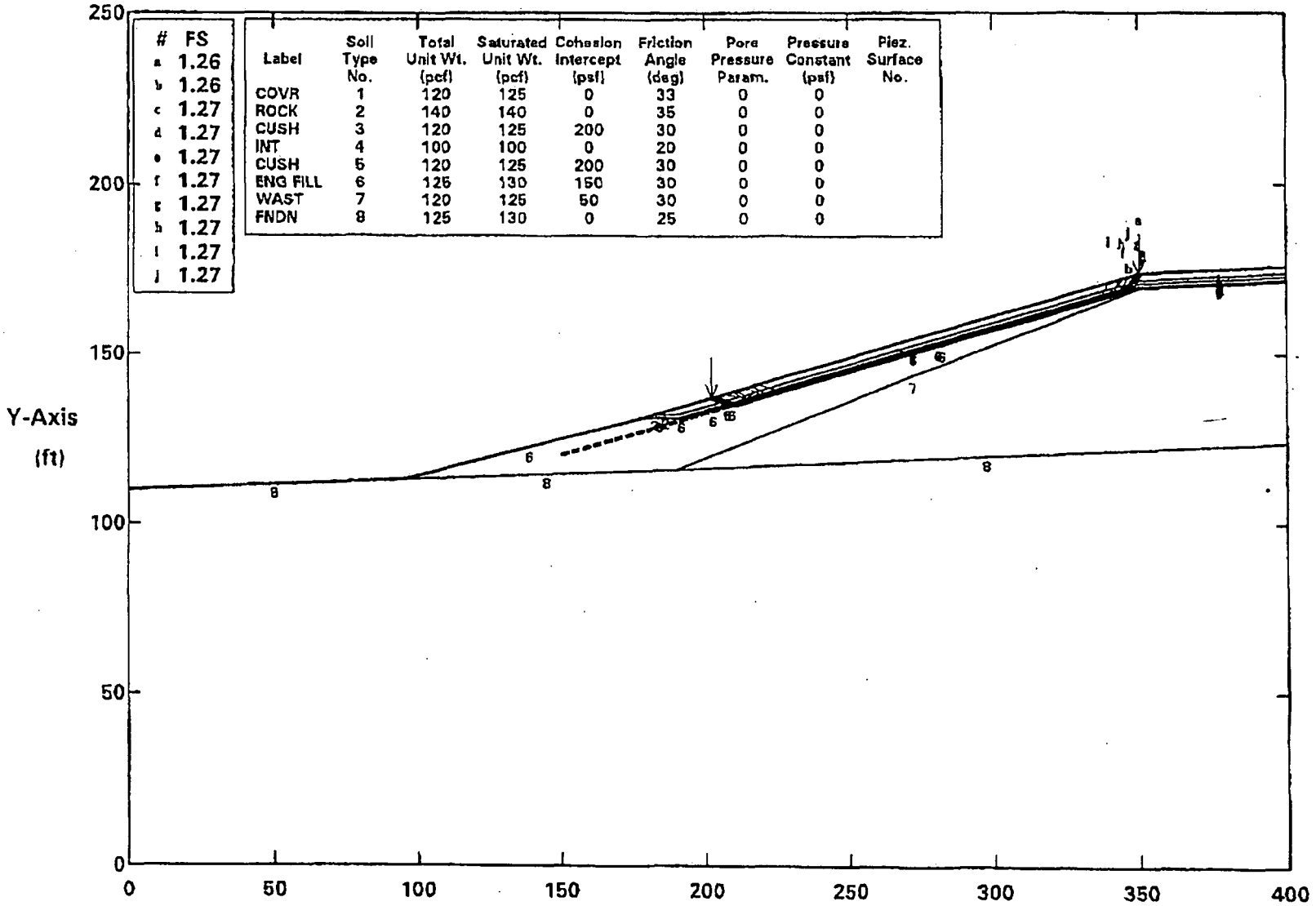
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
COVR	1	120	125	0	33	0	0	W1
ROCK	2	140	140	0	35	0	0	W1
CUSH	3	120	125	200	30	0	0	W1
INT	4	100	100	0	20	0	0	W1
CUSH	5	120	125	200	30	0	0	W1
ENG FILL	6	125	130	150	30	0	0	W1
WAST	7	120	125	50	30	0	0	W1
FNDN	8	125	130	0	25	0	0	W1

PCSTABL5M/SI FSmin = 1.41 X-Axis (ft)

Factors Of Safety Calculated By The Modified Janbu Method

ROCKY FLATS PLF - COVER - NOSEEP - INTER FACE = 20deg - 0.06g

Ten Most Critical. C:I20NE.PLT By: STAN KLINE 07-14-05 10:57pm



Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
COVR	1	120	125	0	33	0	0	
ROCK	2	140	140	0	35	0	0	
CUSH	3	120	125	200	30	0	0	
INT	4	100	100	0	20	0	0	
CUSH	5	120	125	200	30	0	0	
ENG FILL	6	125	130	150	30	0	0	
WAST	7	120	125	50	30	0	0	
FNDN	8	125	130	0	25	0	0	

PCSTABL5M/SI FSmin = 1.26 X-Axis (ft)

Factors Of Safety Calculated By The Modified Janbu Method

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ACCELERATED ACTION DESIGN FOR THE PRESENT LANDFILL

LANDFILL ENGINEERING
POST-CONSTRUCTION EAST FACE SLOPE STABILITY ANALYSIS

JUNE 21, 2005

Prepared by:

Earth Tech, Inc.
5575 DTC Parkway, Suite 200
Englewood, Colorado 80111
(303) 694-6660

This calculation was performed by Earth Tech, Inc. Although each sheet composing this calculation may or may not be initialed, it has nonetheless been reviewed and checked.

Prepared By:	Stan Kline	Date:	6/15/05
Checked By:	Ryan Archibald	Date:	6/21/05
Approved By:	Randy Thompson	Date:	6/22/05

EARTH TECH
A tyco INTERNATIONAL LTD COMPANY
5575 DTC Parkway, Suite 200
Englewood, Colorado 80111

Project: Rocky Flats Environmental Technology Site – Present Landfill Project No. 57378 4001 Date: 6/22/05

Subject: Landfill Engineering - Post Construction East Face Slope Stability Analysis

By: SK Date: 6/15/05 Chk By: RA Date: 6/21/05 App By: RT Date: 6/22/05

TABLE OF CONTENTS

1.0 INTRODUCTION 2
2.0 REFERENCES 2
3.0 DESIGN CRITERIA 2
4.0 PCSTABL MODELS 2
5.0 RESULTS 4
6.0 CONCLUSIONS 4

LIST OF TABLES

Table 1 Design Criteria
Table 2 Post-Construction East Face Slope Stability – Circular Search

LIST OF ATTACHMENTS

Attachment 1 Figures
Attachment 2 Computer Runs

1.0 INTRODUCTION

The Present Landfill is located within the Rocky Flats Environmental Technology Site (RFETS), north of the industrial area, and occupies approximately 22 acres. RFETS is located in the semiarid region of central Colorado, approximately 16 miles northwest of Denver. As part of the accelerated action for closure of the Present Landfill, a geosynthetic cover was installed over the landfill including the east face. Prior to cover placement on the east face, the area was regraded to a 4H:1V slope to enhance the stability. Following construction, saturated soil conditions were visible on the east face above the level of saturation assumed in Appendix G of the Accelerated Action Design for the Present Landfill Final Design Analysis and Design Calculations ([Final Design] October 2004). This analysis presents a revision of the slope stability modeling with the new saturation level and engineered fill more reflective of as-built conditions.

2.0 REFERENCES

Slope Stability evaluation of the proposed cover was completed using PCSTBL5M software and the guidelines provided in the following documents:

1. PCSTABL5M Design Software. Purdue University.
2. Accelerated Action Design for the Original Landfill - Geotechnical Investigation, Earth Tech 2004.
3. Factors of Safety: "Technical Guidance for RCRA/CERCLA Final Covers", Chapter 6, Geotechnical Analysis and Design, US EPA, Draft April 2002 (Attachment 1, Page 6-21) and Reference 1.

3.0 DESIGN CRITERIA

The stability analysis is required to meet the following design criteria developed in the Accelerated Action Design for the Original landfill Geotechnical Investigation (Earth Tech 2004). Static stability is based on technical Guidance for RCRA/CERCLA Final Covers. There are no specific guidelines regarding the seismic or stability so the criteria was developed considering the project site setting, geologic conditions, standard of practice, and various regulatory requirements. Therefore, the design criteria is as follows:

Table 1 Design Criteria

Stability	Minimum Safety Factor
Static (peak interface shear strengths)*	1.5
Static (large-displacement interface shear strengths)*	1.2
Seismic	1.0 for a seismic coefficient of 0.06g or Deformation analysis with a seismically induced permanent displacement of 12-inches or less

* These values are obtained from the EPA Technical Guidance for RCRA/CERCLA Final Covers Section 6.2.6 (page 6-23)

4.0 PCSTABL MODELS

The PCSTABL model runs were conducted for the east face slope to determine if the design criteria listed above were achieved. The east face slope analysis is focused on the stability of the entire east face slope lithology including the claystone materials, waste materials, and structural fill materials. The analysis also includes saturation level data reflecting post-construction conditions as well as additional engineered fill at the foot of the east face. During construction, weathered claystone was removed from the base of the east face and replaced with engineered fill.

The PCSTABL models require development of a section for analysis as well as input of the engineering properties of the material within the sections. Additional input data including boundaries, piezometric surface data, and failure type is also required. The following sections summarize this input.

Section for Analysis

The section for analysis is explained in detail in Appendix G of the Final Design and is shown in Attachment 1. Revisions to the section for analysis from the Final Design include the revised saturation level and the additional engineered fill at the base. Attachment 1 also includes photograph documentation of the weathered claystone removal and placement of engineered fill. Additionally, Attachment 1 includes surveyed points of surface saturation relative to the geosynthetics anchor trench and rock layer termination points. Saturation levels are further discussed in the Computer Program Input Data section.

Engineering Material Properties

Engineering material properties are explained in detail in Appendix G of the Final Design. The material properties were obtained from geotechnical testing conducted during design of the Present Landfill cover including a geotechnical investigation conducted on the east face.

Computer Program Input Data

Input data can be found in Appendix G of the Final Design and includes boundaries of the section for analysis, the piezometric surface data, and the failure type. For this analysis, the piezometric surface was modified to reflect the post-construction saturation conditions. For static and pseudostatic conditions, a total of four situations were analyzed which include stability of the overall slope and the stability of the saturated portion of the slope. For each of these situations, the saturation level was modified to an elevation of 5932 feet and 5938 feet. The first elevation, 5932 feet, is the surveyed elevation of the saturated material. The figures in Attachment 1 show the surveyed saturated locations (labeled wet spots) in relation to the end of the rock layer (labeled C points). The second elevation, 5938 feet, is an elevation 2 feet below the anchor trench that simulates a condition of the saturation rising above the current level.

5.0 RESULTS

The following tables summarize the output of the PCSTABL model runs found in Attachment 2.

Table 2 Post-Construction East Face Slope Stability – Circular Search

Condition	Saturation Level	PCTABL FS	Required FS
Static	5932	1.6	1.5
Static	5938	1.6	1.5
Pseudostatic (0.06g)	5932	1.3	1.0
Pseudostatic (0.06g)	5938	1.2	1.0

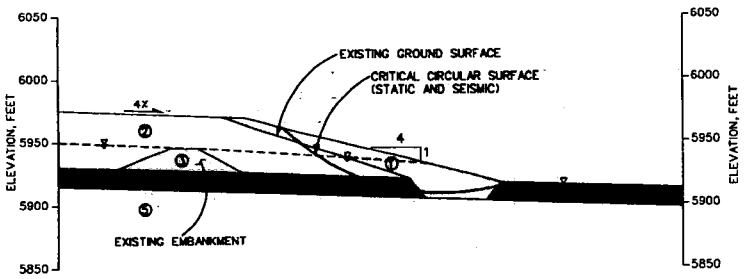
As seen in Table 2, the analysis demonstrates that the stability of the east face as constructed exceeds the required factors of safety.

6.0 CONCLUSIONS

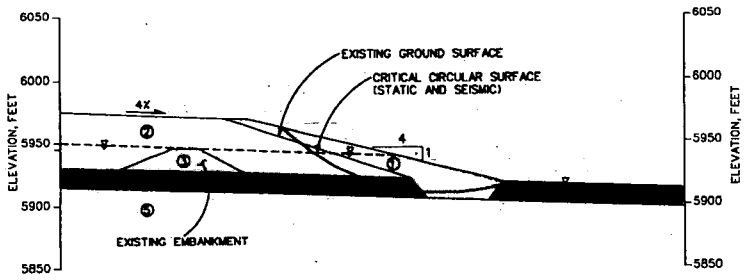
Slope stability of the east face meets the required factors of safety for both the static and pseudostatic conditions even with the following conservative aspects:

- Three dimensional effects of "U-shaped" slope of the east face, which would tend to provide buttress effects to the east face slope is not accounted for in the two dimensional analysis;
- Strength parameters used for critical material controlling stability results (existing embankment fill and weathered bedrock material) are conservative lower bound values of all test data;
- Neglecting cohesions in weathered bedrock material, particularly for undrained strength used for short term seismic loading is conservative to stability analysis results; and,
- The currently observed surface saturation likely does not extend the full distance back into the landfill as the geosynthetics on the east face will eliminate further infiltration.

ATTACHMENT 1
FIGURES



LOW GROUNDWATER CONDITION (5932')



HIGH GROUNDWATER CONDITION (5938')

GROUNDWATER CONDITION	ANALYSIS TYPE	MINIMUM SAFETY FACTOR		YIELD[2] ACCELERATION	MAXIMUM[3] SEISMIC DISPLACEMENT
		STATIC	0.06 g		
LOW	CIRCULAR SEARCH	1.6	1.3	NA	NA
HIGH	CIRCULAR SEARCH	1.6	1.2	NA	NA

[1] SEISMIC COEFFICIENT FOR PSEUDOSTATIC ANALYSIS.

[2] SEISMIC COEFFICIENT THAT PRODUCES SAFETY FACTOR OF 1.0 IN PSEUDOSTATIC ANALYSIS.

[3] ESTIMATED MAXIMUM SEISMICALLY INDUCED PERMANENT DISPLACEMENT USING SIMPLIFIED DEFORMATION ANALYSIS.

STABILITY ANALYSIS SOIL PARAMETERS

KEY	MATERIAL DESIGNATION	DESCRIPTION	UNIT WEIGHT		SHEAR STRENGTH			
					STATIC		SEISMIC	
			MOIST (pcf)	SATURATED (pcf)	COHESION (psf)	FRICTION ANGLE (degrees)	COHESION (psf)	FRICTION ANGLE (degrees)
	①	ENGINEERED FILL	125	130	150	30	150	30
	②	WASTE / FILL	120	125	50	30	50	30
	③	EMBANKMENT FILL	125	130	200	26	250	15
	④	WEATHERED CLAYSTONE	125	130	0	25	0	18
	⑤	UNWEATHERED CLAYSTONE	125	130	600	30	600	30

0 25 50
SCALE IN FEET

EARTH TECH

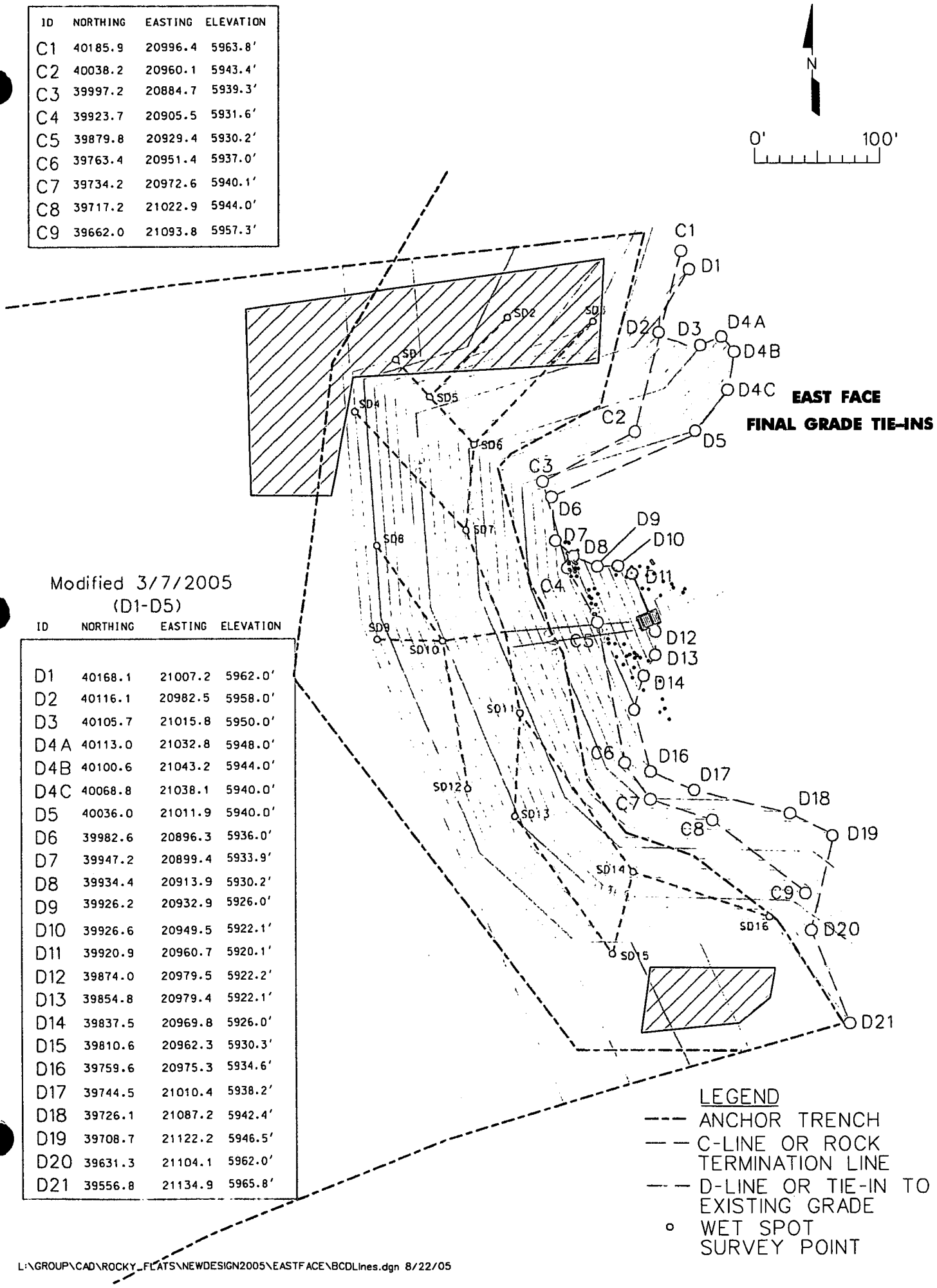
PRESENT LANDFILL POST-CONSTRUCTION
EAST SLOPE STABILITY ANALYSIS

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
GOLDEN, COLORADO

JUNE 2005 57378

L:\Group\Cad\Rocky_Flats\Stuff\LF_6_2005\Section1.dgn - 22 Jun 2005

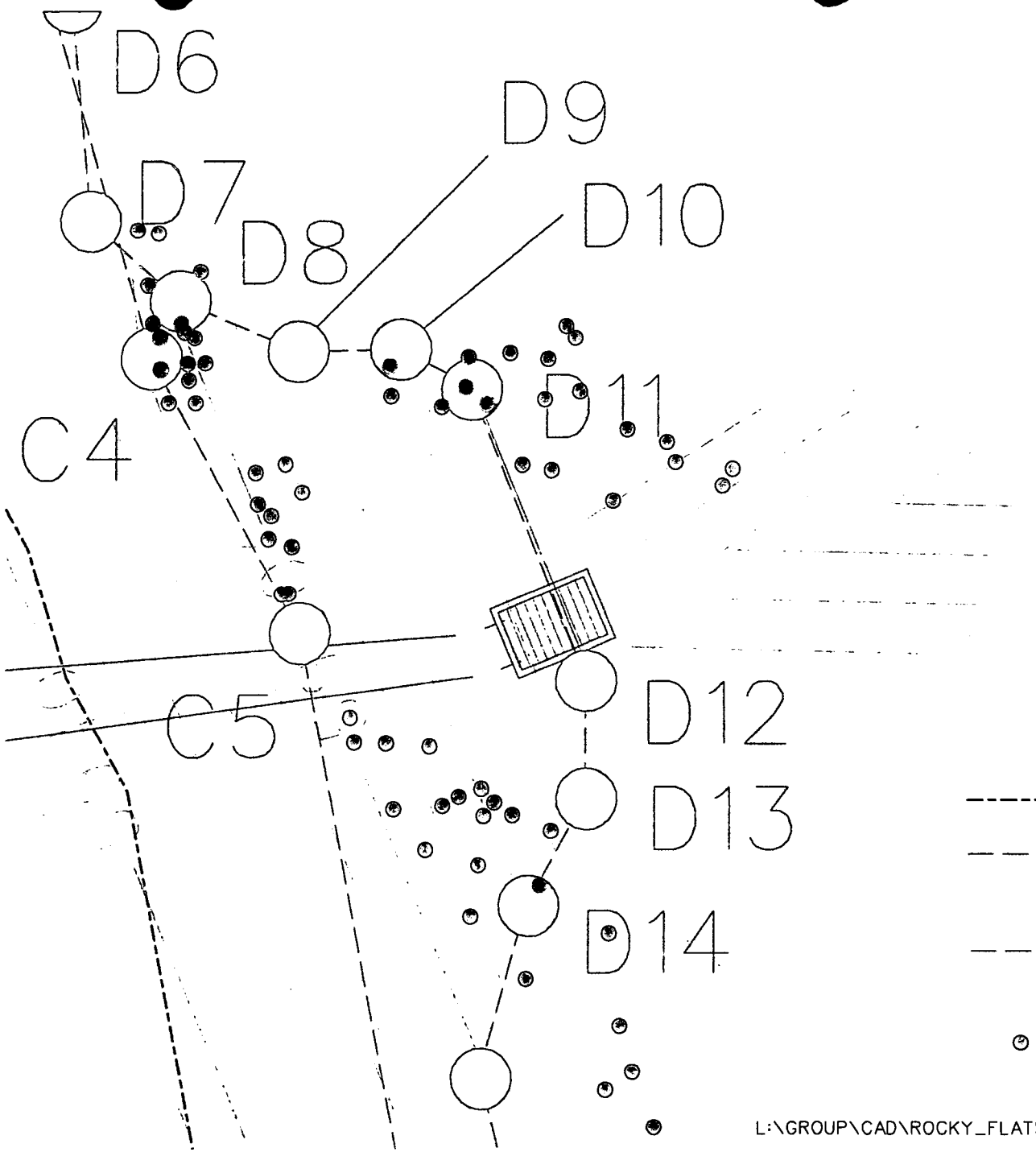
ID	NORTHING	EASTING	ELEVATION
C1	40185.9	20996.4	5963.8'
C2	40038.2	20960.1	5943.4'
C3	39997.2	20884.7	5939.3'
C4	39923.7	20905.5	5931.6'
C5	39879.8	20929.4	5930.2'
C6	39763.4	20951.4	5937.0'
C7	39734.2	20972.6	5940.1'
C8	39717.2	21022.9	5944.0'
C9	39662.0	21093.8	5957.3'



Modified 3/7/2005
(D1-D5)

ID	NORTHING	EASTING	ELEVATION
D1	40168.1	21007.2	5962.0'
D2	40116.1	20982.5	5958.0'
D3	40105.7	21015.8	5950.0'
D4A	40113.0	21032.8	5948.0'
D4B	40100.6	21043.2	5944.0'
D4C	40068.8	21038.1	5940.0'
D5	40036.0	21011.9	5940.0'
D6	39982.6	20896.3	5936.0'
D7	39947.2	20899.4	5933.9'
D8	39934.4	20913.9	5930.2'
D9	39926.2	20932.9	5926.0'
D10	39926.6	20949.5	5922.1'
D11	39920.9	20960.7	5920.1'
D12	39874.0	20979.5	5922.2'
D13	39854.8	20979.4	5922.1'
D14	39837.5	20969.8	5926.0'
D15	39810.6	20962.3	5930.3'
D16	39759.6	20975.3	5934.6'
D17	39744.5	21010.4	5938.2'
D18	39726.1	21087.2	5942.4'
D19	39708.7	21122.2	5946.5'
D20	39631.3	21104.1	5962.0'
D21	39556.8	21134.9	5965.8'

L:\GROUP\CAD\ROCKY_FLATS\NEWDESIGN2005\EASTFACE\BCDLines.dgn 8/22/05



1"=25'

LEGEND

- ANCHOR TRENCH
- C-LINE OR ROCK TERMINATION LINE
- D-LINE OR TIE-IN TO EXISTING GRADE
- WET SPOT SURVEY POINT

L:\GROUP\CAD\ROCKY_FLATS\NEW_DESIGN2005\EASTFCA\BCDLines.dgn 6/14/05

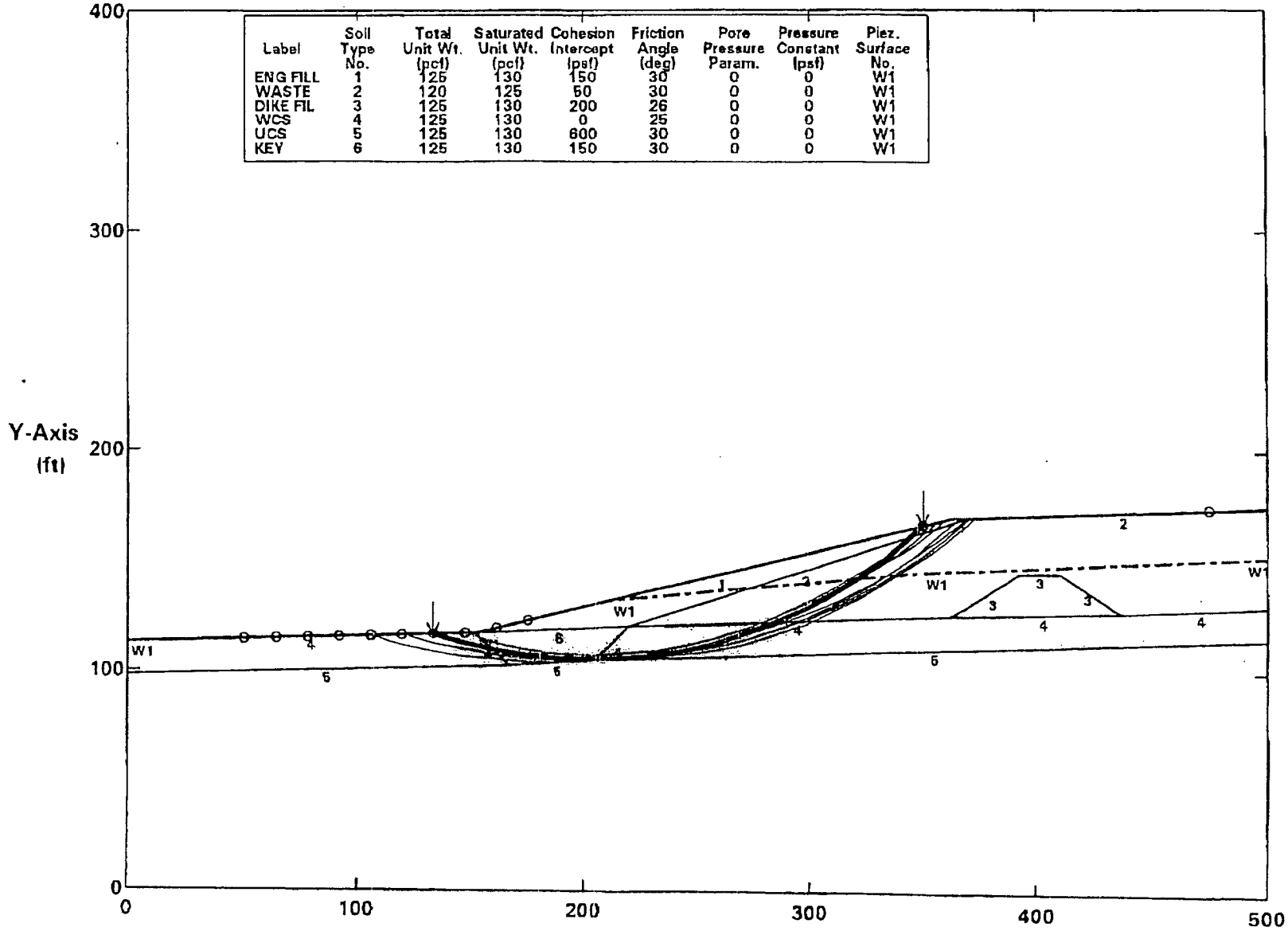
FEB 7 2005

FEB 19

ATTACHMENT 2
COMPUTER RUNS

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5932 EXIT - TOTAL SLOPE - W/KEY - STATIC
Ten Most Critical. C:ESH2OKS.PLT By: STAN KLINE 06-15-05 7:35pm

Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1

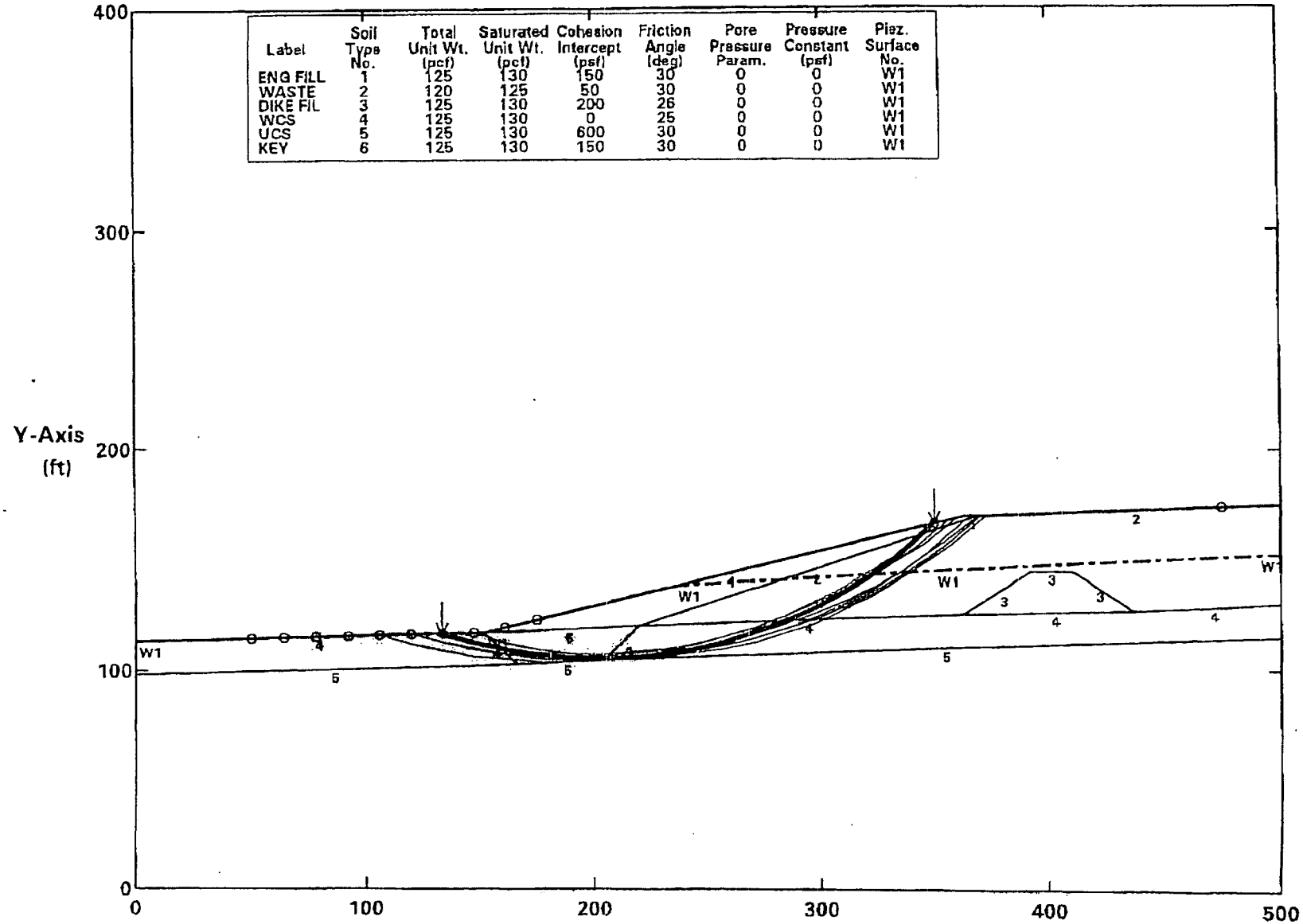


PCSTABL5M/SI FSmin = 1.63 X-Axis (ft)
Factors Of Safety Calculated By The Modified Bishop Method

JUN 15 2005 23:24 FR EARTH TECH 4082232801 TO 913036944410

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5938 EXIT - TOTAL SLOPE - W/KEY - STATIC
Ten Most Critical. C:ESH80KS.PLT By: STAN KLINE 06-15-05 8:08pm

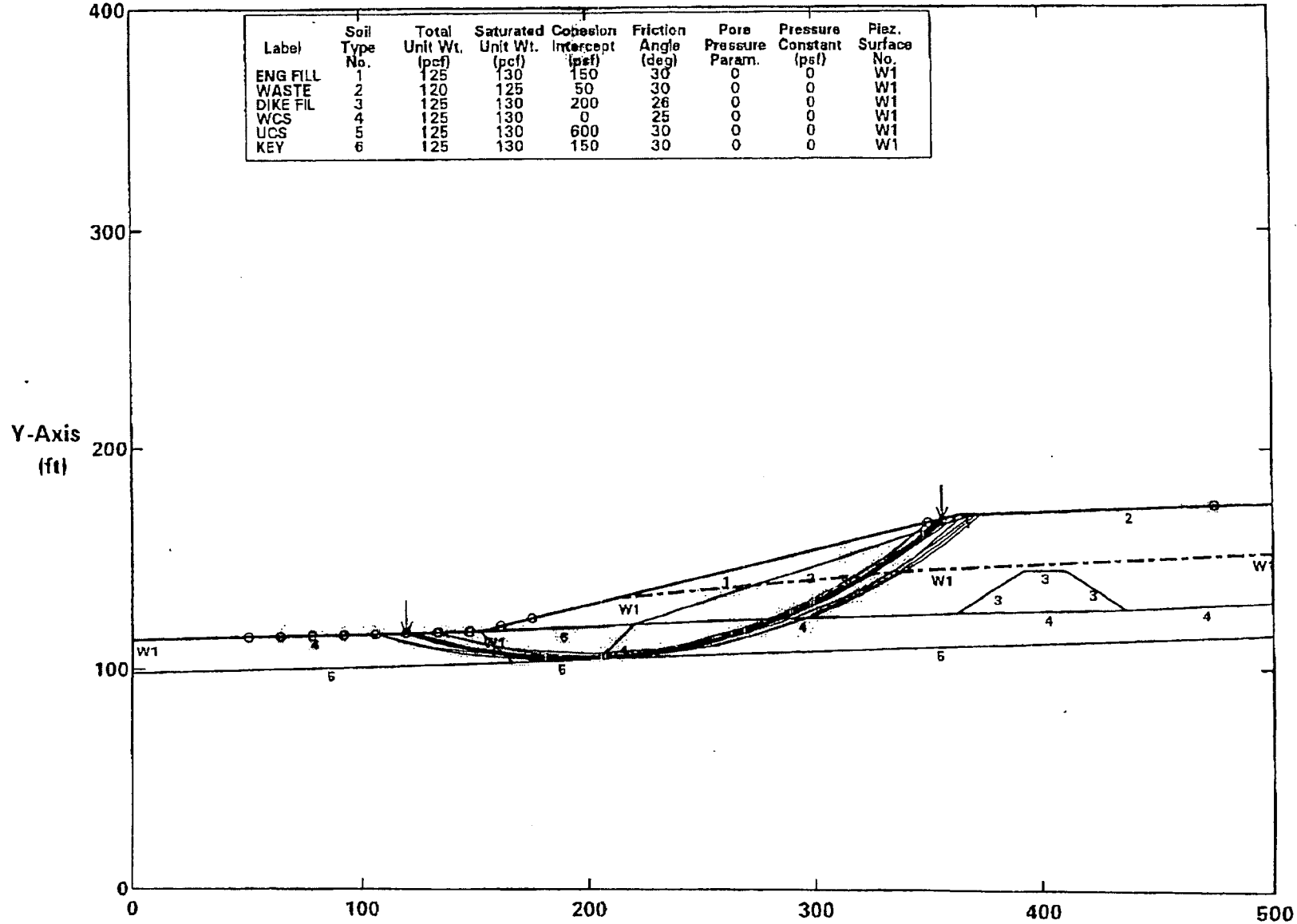
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1



PCSTABL5M/SI FSmin = 1.57 X-Axis (ft)
Factors Of Safety Calculated By The Modified Bishop Method

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5932 EXIT - TOTAL SLOPE - W/KEY - 0.06g
Ten Most Critical. C:ESH2OK06.PLT By: STAN KLINE 06-15-05 8:15pm

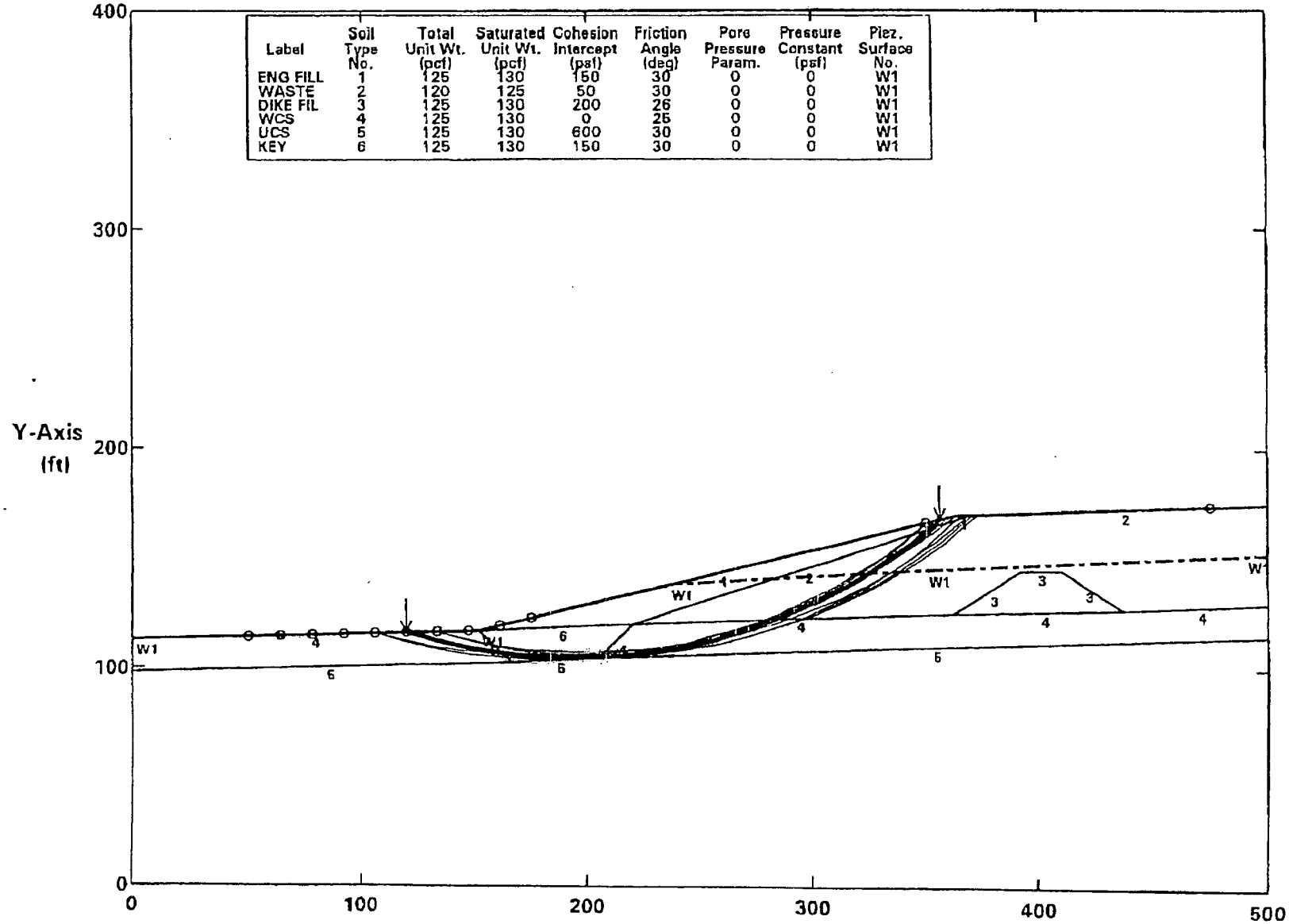
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1



PCSTABL5M/SI FSmin = 1.27 X-Axis (ft)
Factors Of Safety Calculated By The Modified Bishop Method

JUN 15 2005 23:24 FR EARTH TECH 4082322801 TO 913036944410

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5938 EXIT - TOTAL SLOPE - W/KEY - 0.06g
Ten Most Critical. C:ESH8OK06.PLT By: STAN KLINE 06-15-05 8:22pm

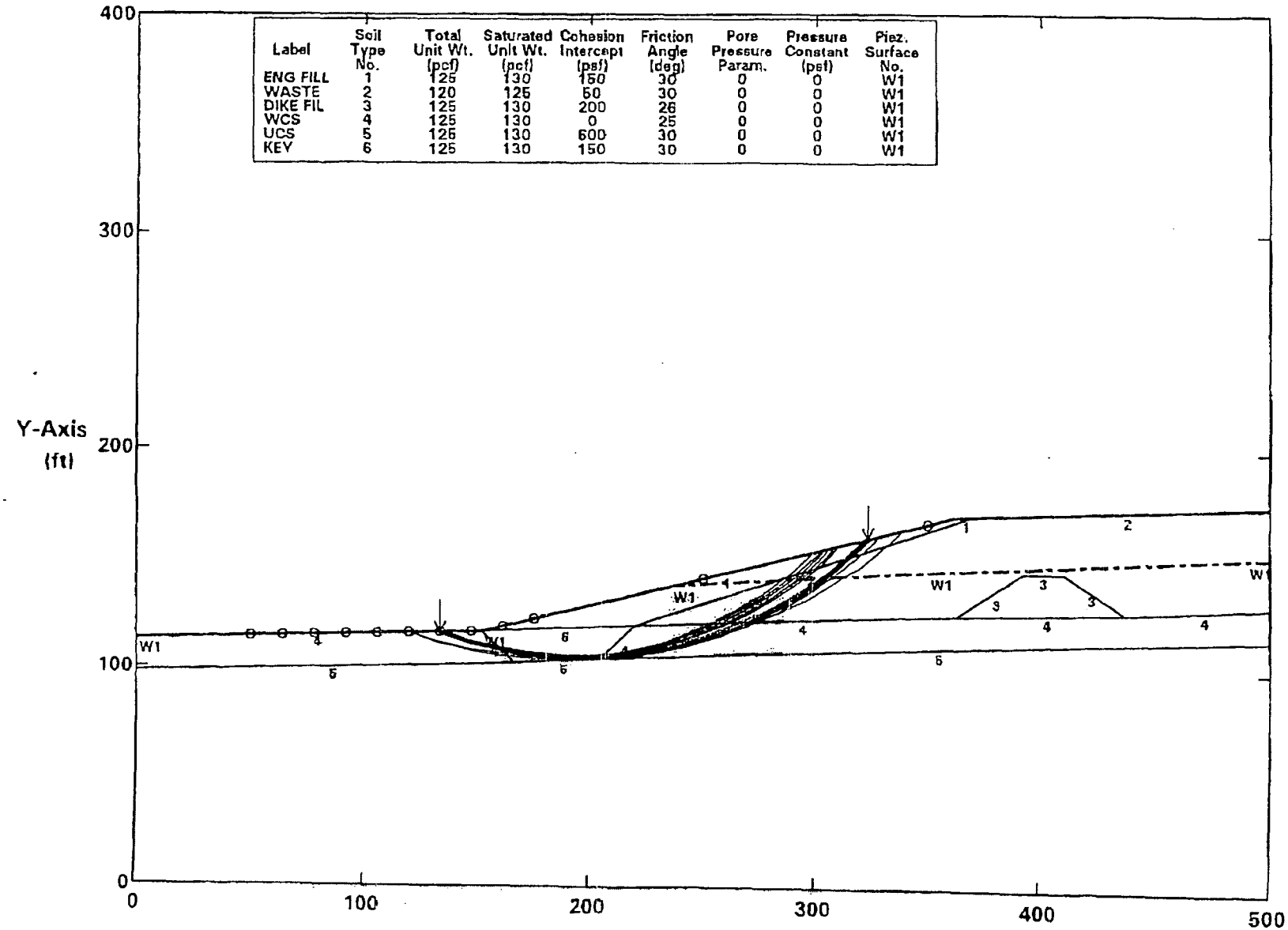


Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1

PCSTABL5M/SI FSmin = 1.23 X-Axis (ft)
Factors Of Safety Calculated By The Modified Bishop Method

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5938 EXIT - LOWER SLOPE - W/KEY - STATIC
Ten Most Critical. C:ESH8TKS.PLT By: STAN KLINE 06-15-05 8:09pm

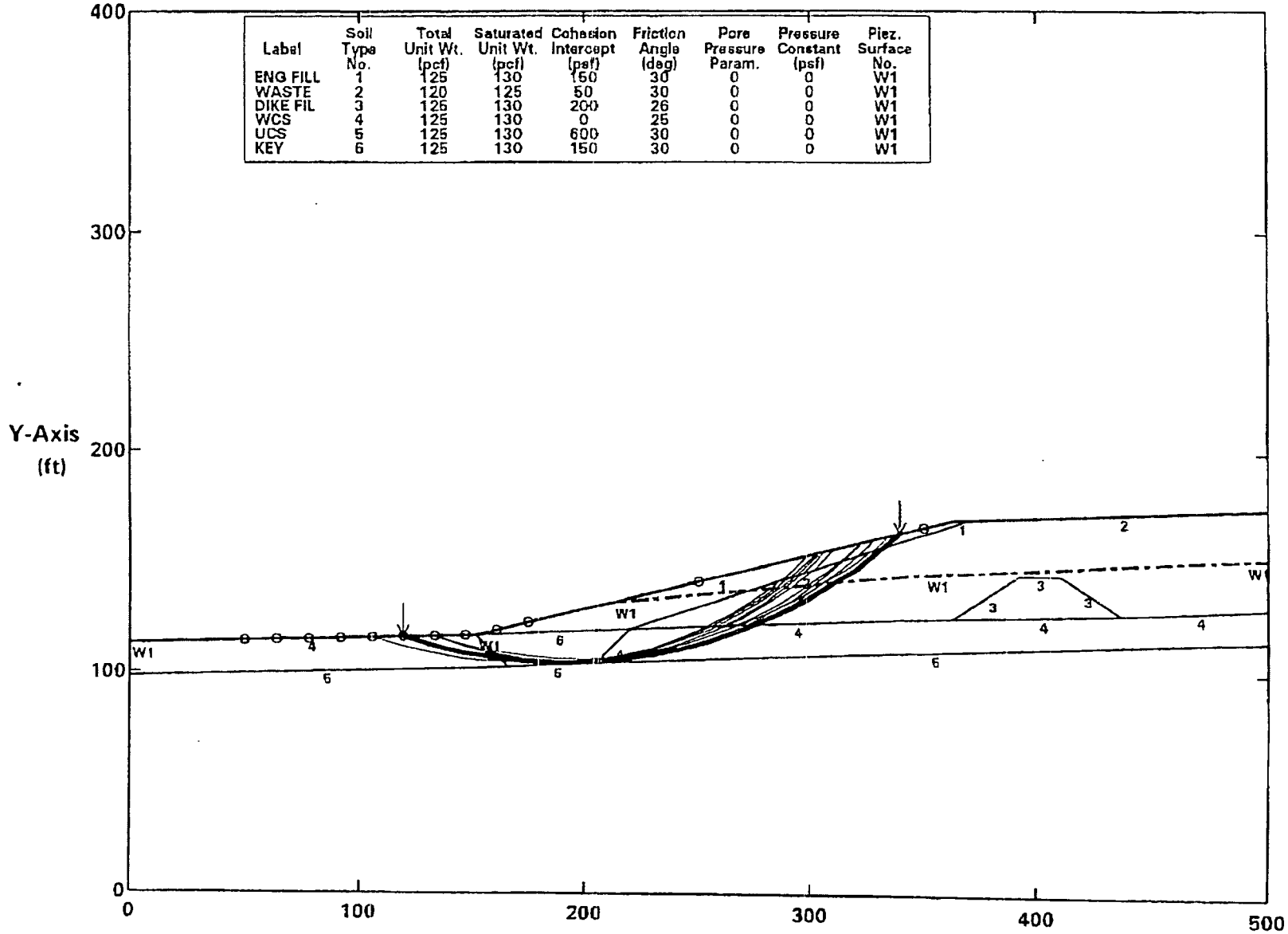
Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1



PCSTABL5M/SI FSmin = 1.55 X-Axis (ft)
Factors Of Safety Calculated By The Modified Bishop Method

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5932 EXIT - LOWER SLOPE - W/KEY - 0.06g
Ten Most Critical. C:ESH2TK06.PLT By: STAN KLINE 06-15-05 8:17pm

Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1



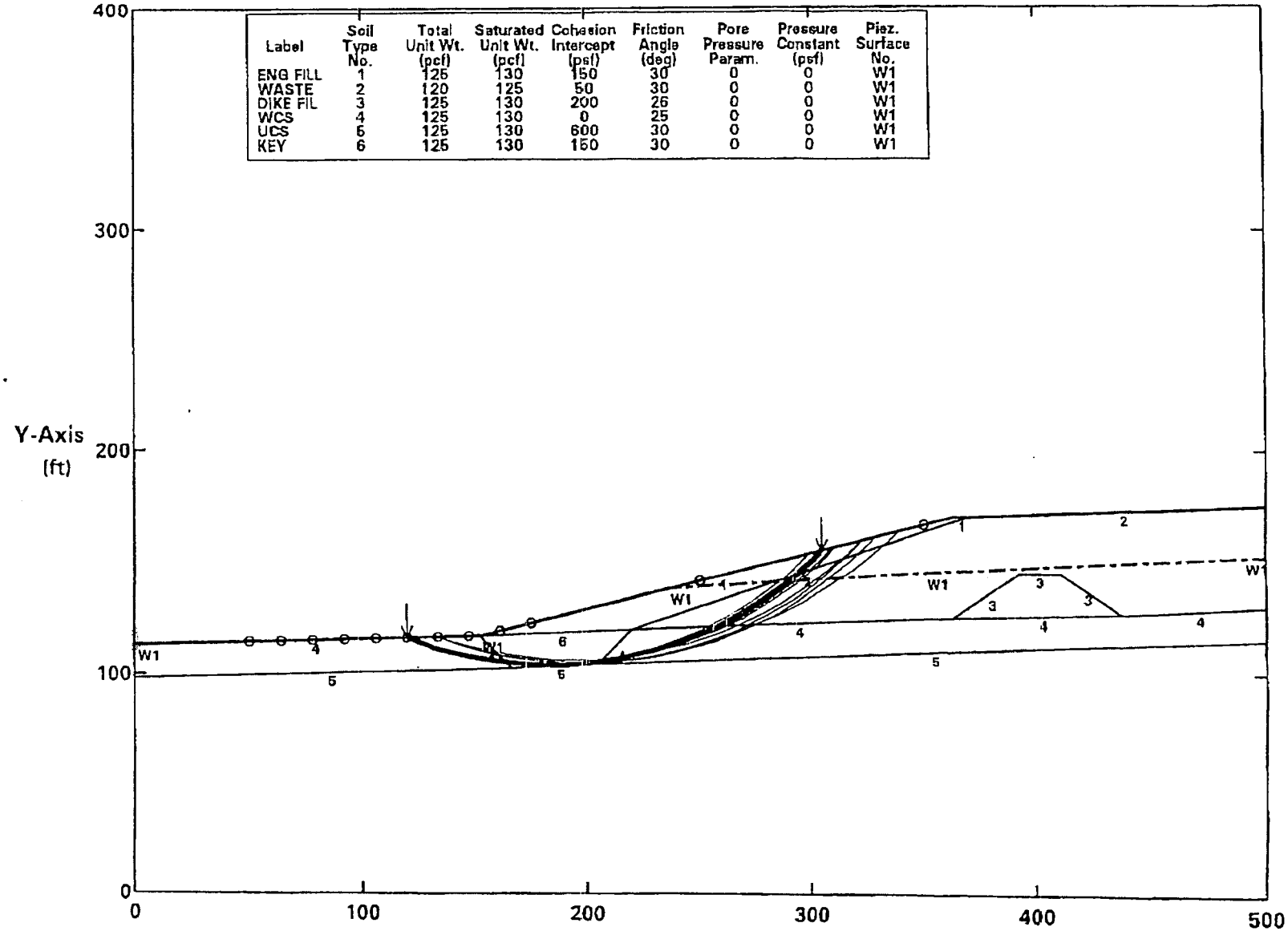
PCSTABL5M/SI FSmin = 1.27 X-Axis (ft)
Factors Of Safety Calculated By The Modified Bishop Method

JUN 15 2005 23:25 FR EARTH TECH 4082232801 TO 913036944410

ROCKY FLATS PLF - EAST SLOPE - 4:1HGW - 5938 EXIT - LOWER SLOPE - W/KEY - 0.06g

Ten Most Critical. C:ESH8TK06.PLT By: STAN KLINE 06-15-05 8:23pm

Label	Soil Type No.	Total Unit Wt. (pcf)	Saturated Unit Wt. (pcf)	Cohesion Intercept (psf)	Friction Angle (deg)	Pore Pressure Param.	Pressure Constant (psf)	Piez. Surface No.
ENG FILL	1	125	130	150	30	0	0	W1
WASTE	2	120	125	50	30	0	0	W1
DIKE FIL	3	125	130	200	26	0	0	W1
WCS	4	125	130	0	25	0	0	W1
UCS	5	125	130	600	30	0	0	W1
KEY	6	125	130	150	30	0	0	W1



PCSTABL5M/SI FSmin = 1.21 X-Axis (ft)

Factors Of Safety Calculated By The Modified Bishop Method

APPENDIX O

LANDFILL ENGINEERING
POST-CONSTRUCTION EAST FACE STORMWATER MANAGEMENT

ROCKY FLATS ENVIRONMENTAL TECHNOLOGY SITE
ACCELERATED ACTION DESIGN FOR THE PRESENT LANDFILL

LANDFILL ENGINEERING
POST-CONSTRUCTION EAST FACE STORMWATER MANAGEMENT

JULY 6, 2005

Prepared by:

Earth Tech, Inc.
5575 DTC Parkway, Suite 200
Englewood, Colorado 80111
(303) 694-6660

This calculation was performed by Earth Tech, Inc. Although each sheet composing this calculation may or may not be initialed, it has nonetheless been reviewed and checked.

Prepared By:	Scott Powell	Date:	7/6/05
Checked By:	Ryan Archibald	Date:	7/6/05
Approved By:	Randy Thompson	Date:	7/6/05

EARTH TECH
A tyco INTERNATIONAL LTD. COMPANY
5575 DTC Parkway, Suite 200
Englewood, Colorado 80111

Project: Rocky Flats Environmental Technology Site – Present Landfill Project No. 57378 4020 Date: 7/6/05

Subject: Landfill Engineering - Post Construction East Face Stormwater Management

By: SP Date: 7/6/05 Chk By: RA Date: 7/6/05 App By: RT Date: 7/6/05

TABLE OF CONTENTS

1.0 INTRODUCTION 2
2.0 RESULTS 2
3.0 1000-YEAR 24-HOUR STORM 2
4.0 CONSTRUCTION 3

LIST OF TABLES

Table 1 Present Landfill East Face - Structure Design
Table 2 Present Landfill East Face - 1000-Year 24-Hour Comparison

LIST OF ATTACHMENTS

Attachment 1 Surface Water Drainage Map
Attachment 2 SEDCAD Reports
Attachment 2 Construction Plans

1.0 INTRODUCTION

The Present Landfill is located within the Rocky Flats Environmental Technology Site (RFETS), north of the industrial area, and occupies approximately 22 acres. RFETS is located in the semiarid region of central Colorado, approximately 16 miles northwest of Denver. As part of the accelerated action for closure of the Present Landfill, a geosynthetic cover was installed over the landfill including the east face. Prior to cover placement on the east face, the area was regraded to a 4H:1V slope to enhance the stability. Following construction, saturated soil conditions were visible on the east face as a result of surface water collection as well as possible drainage from the rock layer. This analysis presents the calculations used to design two riprap channels at the toe of the east face to collect this surface water and route it east of the seep treatment system.

The design criteria and hydrologic approach used in this design are identical to that used in Appendix H of the Accelerated Action Design for the Present Landfill Final Design Analysis and Design Calculations ([Final Design] October 2004). Similar to the Final Design, SEDCAD 4 software was used to determine the channel sizes using the 100-year 24-hour rain event (5.0 inches) and the freeboard capacity was verified using the 1000-year 24-hour rain event (6.4 inches). Please see the Final Design for a detailed explanation on the design criteria and hydrologic approach.

2.0 RESULTS

The east face was divided into two watersheds that will drain into two trapezoidal riprap channels constructed near the east face toe (Attachment 1). The channels are designed to begin at the termination point of the Present Landfill rock layer or the "C-Line". The riprap channels will then convey the surface water to east of the seep treatment system. Results of the stormwater analysis can be found in the SEDCAD output (Attachment 2) and are summarized in the following table.

Table 1
Present Landfill East Face– Structure Design

Structure	Slope	Shape	Bottom Width	Sideslopes	Minimum Height or Depth	Permanent Lining
Riprap Channel 1	Maximum of 25%	Trapezoidal	4 feet	2H:1V	1.0 feet	Riprap
Riprap Channel 2	Maximum of 25%	Trapezoidal	4 feet	2H:1V	1.0 feet	Riprap

Permanent erosion matting was considered as a lining for the channels but did not meet the design criteria due to the maximum slopes of 25%.

3.0 1000-YEAR 24-HOUR STORM

To determine if the 9-inch freeboard capacity of the 100-year 24-hour storm is sufficient to handle the 1000-year 24-hour storm, the design was conducted with a rainfall depth of 6.4 inches. The output is provided in Attachment 2. A summary of the findings is found in the following table:

Table 2
Present Landfill East Face– 1000-Year 24-Hour Comparison

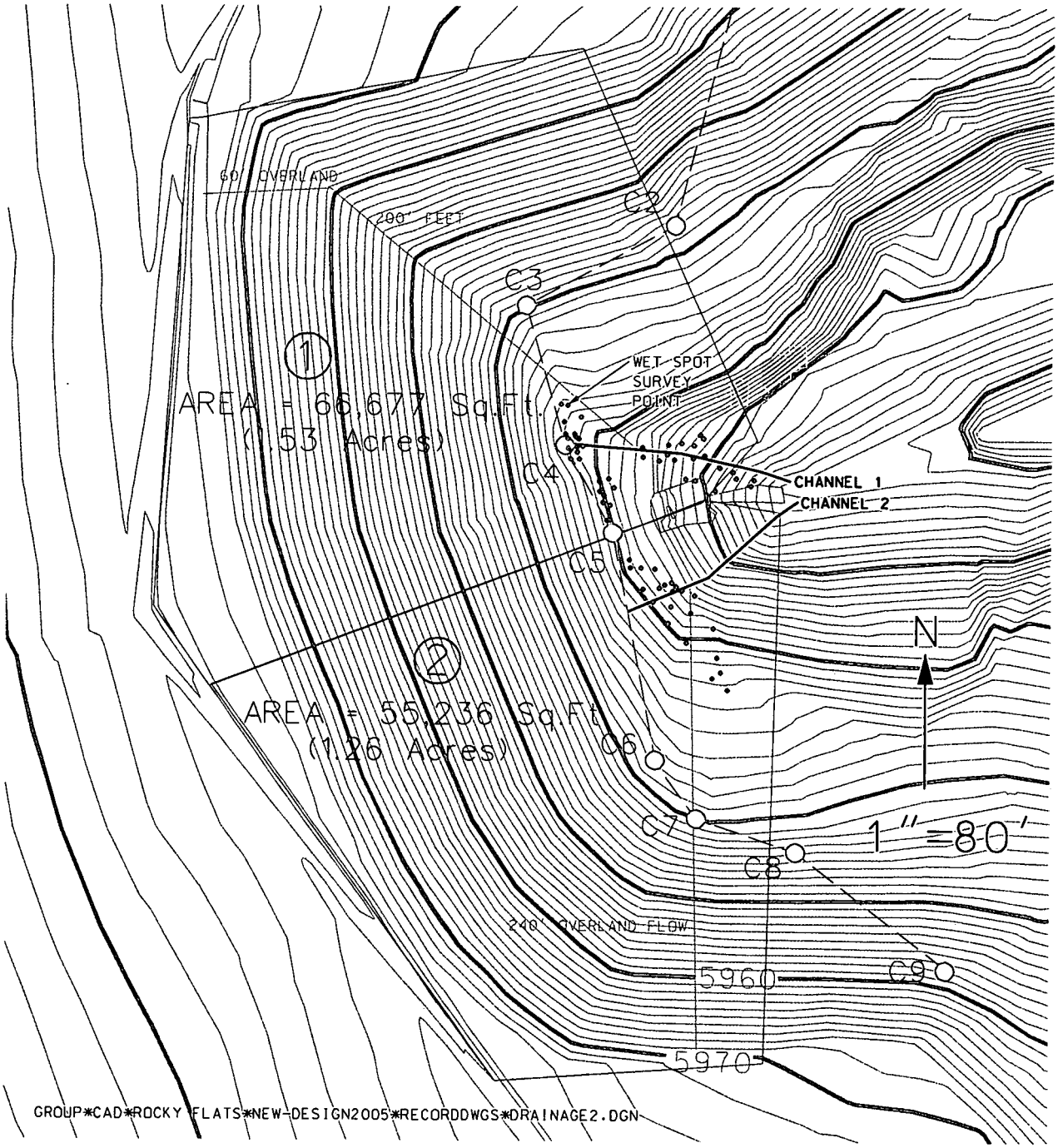
Structure	100-Year Flow Depth with Freeboard (ft)	1000-Year Flow Depth without freeboard (ft)
Riprap Channel 1	1.00	0.28
Riprap Channel 2	0.96	0.26

As shown in Table 2, the design based on the 100-year 24-hour storm with freeboard is sufficient to handle surface water from the 1000-year 24-hour storm for the riprap channels.

4.0 CONSTRUCTION

Construction details of the riprap lined V-channels are found in Attachment 3. The drawings include a location map with control points and a detail. The total excavated depth of the channels will be 3-feet at the centerline. After the geotextile, bedding material, and riprap are placed, the approximate depth of the channels will be 1.0 feet.

ATTACHMENT 1
SURFACE WATER DRAINAGE MAP


60' OVERLAND
200' FEET
C2
C3
1
AREA = 66,677 Sq.Ft.
(1.53 Acres)
WET SPOT
SURVEY
POINT
C4
CHANNEL 1
CHANNEL 2
C5
N
2
AREA = 55,236 Sq.Ft.
(1.26 Acres)
C6
C7
1" = 80'
C8
240' OVERLAND FLOW
5960
C9
5970
GROUP*CAD*ROCKY FLATS*NEW-DESIGN2005*RECORDDWGS*DRAINAGE2.DGN

ATTACHMENT 2
SEDCAD REPORTS

RFETS - PLF East Face Post-Construction 100-Year

Scott Powell

Earth Tech, Inc.
5575 DTC Pkwy, Suite 200
Englewood, CO 80111

Phone: 303-804-2435
Email: scott.powell@earthtech.com

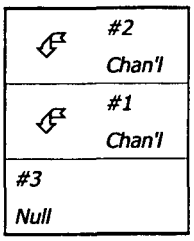
General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	100 yr - 24 hr
Rainfall Depth:	5.000 inches

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Channel	#1	==>	#3	0.000	0.000	
Channel	#2	==>	#3	0.000	0.000	
Null	#3	==>	End	0.000	0.000	



Structure Summary:

	Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)
#2	1.260	1.260	4.20	0.36
#1	1.530	1.530	5.10	0.44
#3	0.000	2.790	9.30	0.81

Structure Detail:

Structure #2 (Riprap Channel)

Trapezoidal Riprap Channel Inputs:

Material: Riprap

Bottom Width (ft)}	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)
4.00	2.0:1	2.0:1	25.0	0.75		

Riprap Channel Results:

PADER Method - Steep Slope Design

	w/o Freeboard	w/ Freeboard
Design Discharge:	4.20 cfs	
Depth:	0.21 ft	0.96 ft
Top Width:	4.84 ft	7.84 ft
Velocity:	4.53 fps	
X-Section Area:	0.93 sq ft	
Hydraulic Radius:	0.188	
Froude Number:	1.82	
Manning's n:	0.0540	
Dmin:	2.00 in	
D50:	3.00 in	
Dmax:	4.50 in	

Structure #1 (Riprap Channel)

Trapezoidal Riprap Channel Inputs:

Material: Riprap

Bottom Width (ft)}	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)
4.00	2.0:1	2.0:1	25.0	0.75		

Riprap Channel Results:

PADER Method - Steep Slope Design

	w/o Freeboard	w/ Freeboard
Design Discharge:	5.10 cfs	
Depth:	0.25 ft	1.00 ft
Top Width:	4.98 ft	7.98 ft
Velocity:	4.63 fps	
X-Section Area:	1.10 sq ft	
Hydraulic Radius:	0.216	
Froude Number:	1.73	
Manning's n:	0.0580	
Dmin:	2.00 in	
D50:	3.00 in	
Dmax:	4.50 in	

Structure #3 (Null)

Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#2	1	1.260	0.016	0.000	0.000	86.000	M	4.20	0.364
	Σ	**1.260**						**4.20**	**0.364**
#1	1	1.530	0.011	0.000	0.000	86.000	M	5.10	0.442
	Σ	**1.530**						**5.10**	**0.442**
#3	Σ	**2.790**						**9.30**	**0.806**

Subwatershed Time of Concentration Details:

Stru #	SWS #	Land Flow Condition	Slope (%)	Vert. Dist. (ft)	Horiz. Dist. (ft)	Velocity (fps)	Time (hrs)
#1	1	3. Short grass pasture	25.00	15.00	60.00	4.000	0.004
		6. Grassed waterway	25.00	50.00	200.00	7.500	0.007
#1	**1**	**Time of Concentration:**					**0.011**
#2	1	3. Short grass pasture	25.00	60.00	240.00	4.000	0.016
#2	**1**	**Time of Concentration:**					**0.016**

Copyright 1998 Pamela J. Schwab

RFETS - PLF East Face Post-Construction 1000-Year

Scott Powell

Earth Tech, Inc.
5575 DTC Pkwy, Suite 200
Englewood, CO 80111

Phone: 303-804-2435
Email: scott.powell@earthtech.com

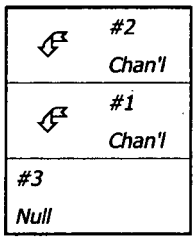
General Information

Storm Information:

Storm Type:	NRCS Type II
Design Storm:	100 yr - 24 hr
Rainfall Depth:	6.410 inches

Structure Networking:

Type	Stru #	(flows into)	Stru #	Musk. K (hrs)	Musk. X	Description
Channel	#1	==>	#3	0.000	0.000	
Channel	#2	==>	#3	0.000	0.000	
Null	#3	==>	End	0.000	0.000	



Structure Summary:

	Immediate Contributing Area (ac)	Total Contributing Area (ac)	Peak Discharge (cfs)	Total Runoff Volume (ac-ft)
#2	1.260	1.260	5.63	0.50
#1	1.530	1.530	6.84	0.61
#3	0.000	2.790	12.47	1.12

Structure Detail:

Structure #2 (Riprap Channel)

Trapezoidal Riprap Channel Inputs:

Material: Riprap

Bottom Width (ft)}	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)
4.00	2.0:1	2.0:1	25.0			

Riprap Channel Results:

PADER Method - Steep Slope Design

	w/o Freeboard	w/ Freeboard
Design Discharge:	5.63 cfs	
Depth:	0.26 ft	
Top Width:	5.03 ft	
Velocity:	4.84 fps	
X-Section Area:	1.16 sq ft	
Hydraulic Radius:	0.226	
Froude Number:	1.78	
Manning's n:	0.0570	
Dmin:	2.00 in	
D50:	3.00 in	
Dmax:	4.50 in	

Structure #1 (Riprap Channel)

Trapezoidal Riprap Channel Inputs:

Material: Riprap

Bottom Width (ft)}	Left Sideslope Ratio	Right Sideslope Ratio	Slope (%)	Freeboard Depth (ft)	Freeboard % of Depth	Freeboard Mult. x (VxD)
4.00	2.0:1	2.0:1	25.0			

Riprap Channel Results:

PADER Method - Steep Slope Design

	w/o Freeboard	w/ Freeboard
Design Discharge:	6.84 cfs	
Depth:	0.28 ft	
Top Width:	5.12 ft	
Velocity:	5.37 fps	
X-Section Area:	1.27 sq ft	
Hydraulic Radius:	0.243	
Froude Number:	1.90	
Manning's n:	0.0540	
Dmin:	2.00 in	
D50:	3.00 in	
Dmax:	4.50 in	

Structure #3 (Null)

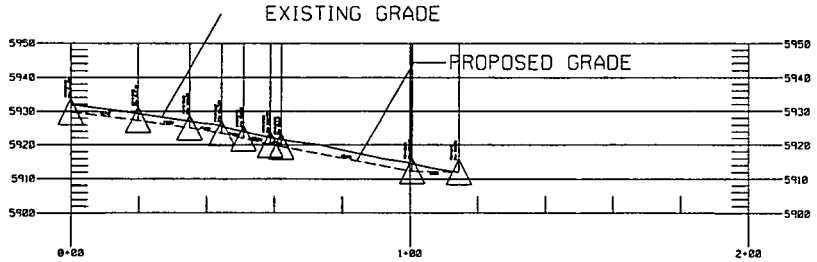
Subwatershed Hydrology Detail:

Stru #	SWS #	SWS Area (ac)	Time of Conc (hrs)	Musk K (hrs)	Musk X	Curve Number	UHS	Peak Discharge (cfs)	Runoff Volume (ac-ft)
#2	1	1.260	0.016	0.000	0.000	86.000	M	5.63	0.504
	Σ	**1.260**						**5.63**	**0.504**
#1	1	1.530	0.011	0.000	0.000	86.000	M	6.84	0.612
	Σ	**1.530**						**6.84**	**0.612**
#3	Σ	**2.790**						**12.47**	**1.116**

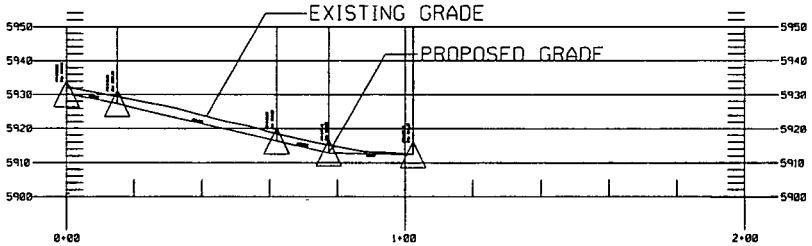
Subwatershed Time of Concentration Details:

Stru #	SWS #	Land Flow Condition	Slope (%)	Vert. Dist. (ft)	Horiz. Dist. (ft)	Velocity (fps)	Time (hrs)
#1	1	3. Short grass pasture	25.00	15.00	60.00	4.000	0.004
		6. Grassed waterway	25.00	50.00	200.00	7.500	0.007
#1	**1**	**Time of Concentration:**					**0.011**
#2	1	3. Short grass pasture	25.00	60.00	240.00	4.000	0.016
#2	**1**	**Time of Concentration:**					**0.016**

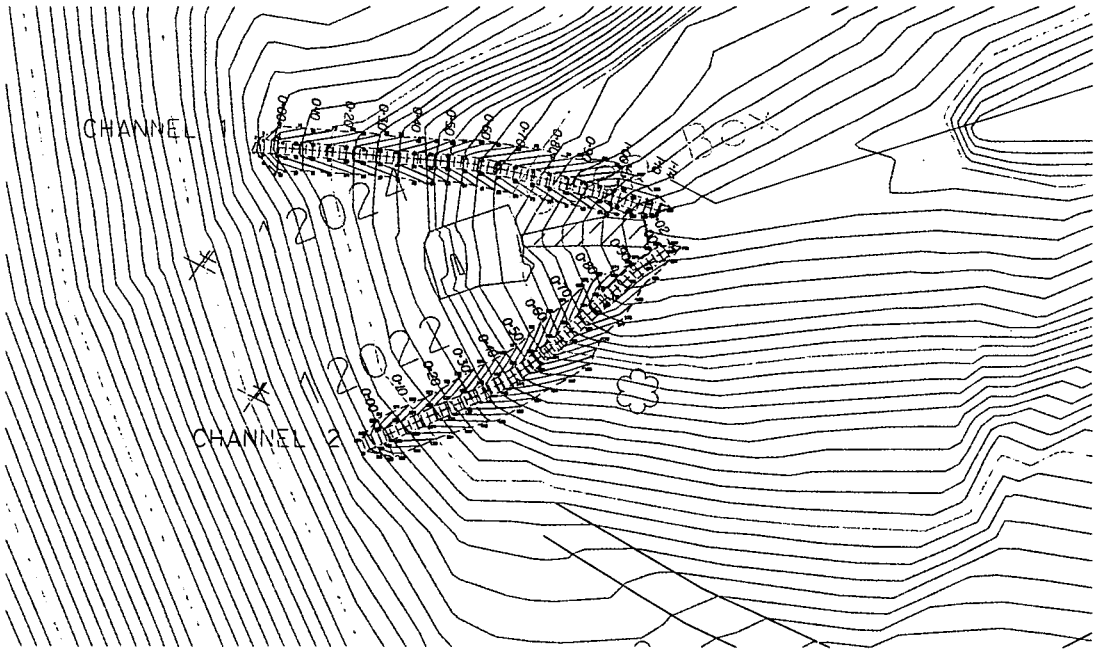
ATTACHMENT 3
CONSTRUCTION PLANS



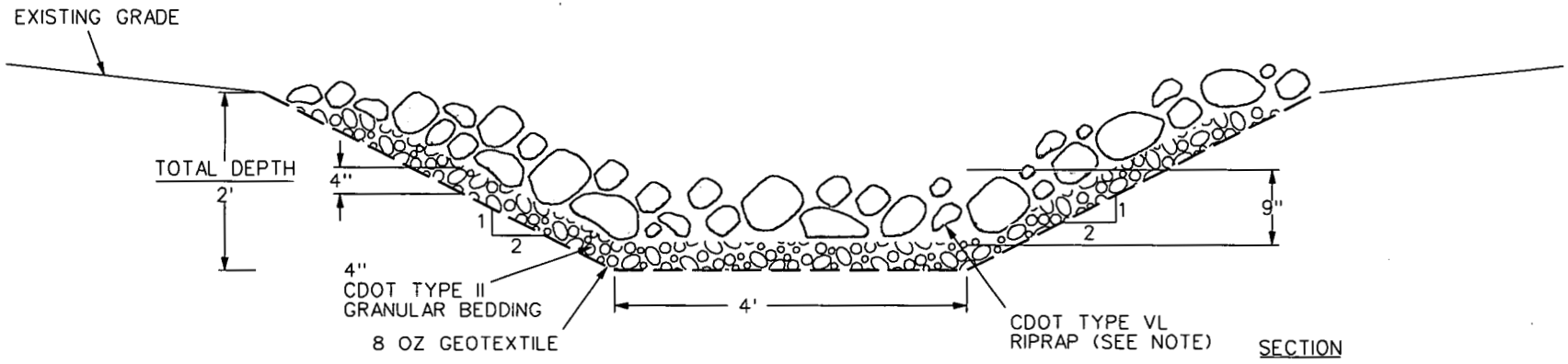
CHANNEL 1
CUT: 76 CY



CHANNEL 2
CUT: 71 CY



..\rvsn_englewood\channel_2.dgn 7/7/2005 3:18:20 PM



NOTE:
TYPE VL RIPRAP (D50=6") HAS A MAXIMUM STONE SIZE OF 12" OR LARGER THAN THE DESIGN RIPRAP LINING THICKNESS. 12" STONES ARE ACCEPTABLE TO PLACE SO LONG HAS THE % OF LARGER STONES IS WITHIN SPECIFICATIONS.

RIPRAP LINED V-CHANNEL

NTS

1	20900.97	39924.53	5933.80	1
2	20902.74	39928.37	5933.06	2
3	20905.00	39929.44	5932.60	3
4	20905.00	39928.21	5931.94	4
5	20905.00	39924.20	5931.77	5
6	20905.00	39921.61	5932.96	6
7	20908.46	39918.15	5932.68	7
8	20908.93	39923.88	5929.80	8
9	20909.26	39927.87	5929.80	9
10	20910.00	39932.01	5931.85	10
11	20910.00	39927.81	5929.71	11
12	20910.00	39923.79	5929.67	12
13	20910.00	39918.38	5932.31	13
14	20915.00	39931.66	5931.25	14
15	20915.00	39927.40	5929.09	15
16	20915.00	39923.38	5929.04	16
17	20915.00	39918.79	5931.29	17
18	20920.00	39931.27	5930.64	18
19	20920.00	39926.99	5928.46	19
20	20920.00	39922.97	5928.42	20
21	20920.00	39918.62	5930.55	21
22	20925.00	39930.88	5930.02	22
23	20925.00	39926.58	5927.84	23
24	20925.00	39922.57	5927.80	24
25	20925.00	39918.16	5929.95	25
26	20930.00	39930.51	5929.41	26
27	20930.00	39926.17	5927.19	27
28	20930.00	39922.16	5927.14	28
29	20930.00	39917.96	5929.18	29
30	20935.00	39930.35	5928.78	30
31	20935.00	39925.76	5926.44	31
32	20935.00	39921.75	5926.39	32
33	20935.00	39917.64	5928.39	33
34	20940.00	39929.57	5927.85	34
35	20940.00	39925.35	5925.70	35
36	20940.00	39921.34	5925.65	36
37	20940.00	39917.24	5927.64	37
38	20945.00	39929.06	5927.04	38
39	20945.00	39924.94	5924.93	39
40	20945.00	39920.93	5924.87	40
41	20945.00	39916.77	5926.89	41
42	20950.00	39928.91	5926.29	42
43	20950.00	39924.53	5924.05	43
44	20950.00	39920.52	5924.00	44
45	20950.00	39915.72	5926.32	45
46	20955.00	39928.43	5925.31	46
47	20955.00	39924.13	5923.08	47
48	20955.00	39920.11	5923.00	48
49	20955.00	39915.85	5925.04	49
50	20960.00	39928.19	5924.18	50
51	20960.00	39923.72	5921.86	51
52	20960.00	39919.71	5921.79	52
53	20960.00	39915.68	5923.72	53
54	20965.00	39928.14	5923.31	54
55	20965.00	39923.21	5920.73	55
56	20965.00	39919.17	5920.61	56
57	20965.00	39915.02	5922.53	57
58	20970.00	39927.88	5922.52	58
59	20970.00	39922.44	5919.69	59
60	20970.00	39918.38	5919.56	60
61	20970.00	39914.06	5921.53	61
62	20975.00	39927.07	5921.75	62
63	20975.00	39921.43	5918.77	63

64	20975.00	39917.33	5918.60	64
65	20975.00	39913.02	5920.53	65
66	20980.00	39926.25	5920.97	66
67	20980.00	39920.30	5917.83	67
68	20980.00	39916.20	5917.66	68
69	20980.00	39911.88	5919.59	69
70	20985.00	39925.53	5920.24	70
71	20985.00	39919.17	5916.88	71
72	20985.00	39915.07	5916.71	72
73	20985.00	39911.06	5918.51	73
74	20990.00	39924.33	5919.26	74
75	20990.00	39918.05	5915.94	75
76	20990.00	39913.95	5915.77	76
77	20990.00	39910.19	5917.45	77
78	20995.00	39922.92	5918.16	78
79	20995.00	39916.92	5914.99	79
80	20995.00	39912.82	5914.83	80
81	20995.00	39909.28	5916.41	81
82	21000.00	39922.47	5917.57	82
83	21000.00	39915.79	5914.05	83
84	21000.00	39911.69	5913.88	84
85	21000.00	39908.38	5915.36	85
86	21005.00	39922.09	5917.05	86
87	21005.00	39914.61	5913.11	87
88	21005.00	39910.48	5912.92	88
89	21005.00	39907.27	5914.30	89
90	21006.91	39906.68	5913.93	90
91	21007.90	39909.65	5912.35	91
92	21009.03	39913.48	5912.35	92
93	21010.00	39921.32	5916.47	93
94	21010.00	39916.97	5914.16	94
95	21010.00	39913.18	5912.33	95
96	21010.00	39908.98	5912.31	96
97	21010.00	39906.71	5913.38	97
98	21010.45	39921.24	5916.42	98
99	21011.03	39920.70	5916.10	99
100	21015.00	39917.04	5914.87	100
101	21015.00	39911.57	5912.23	101
102	21015.00	39907.36	5912.20	102
103	21015.00	39906.61	5912.56	103
104	21018.33	39906.28	5912.13	104
105	21020.00	39912.64	5913.42	105
106	21020.00	39909.94	5912.12	106
107	21020.00	39906.78	5912.10	107
108	21025.05	39908.30	5912.02	108
109	20933.65	39840.47	5933.53	109
110	20935.00	39841.06	5932.79	110
111	20935.09	39836.69	5933.64	111
112	20938.45	39846.34	5931.90	112
113	20939.83	39843.15	5930.16	113
114	20940.00	39847.02	5931.58	114
115	20940.00	39838.85	5930.94	115
116	20940.00	39835.71	5933.01	116
117	20941.42	39839.48	5930.16	117
118	20943.34	39835.05	5932.58	118
119	20945.00	39849.20	5930.56	119
120	20945.00	39845.39	5929.10	120
121	20945.00	39841.03	5929.42	121
122	20945.00	39835.79	5932.22	122
123	20950.00	39851.37	5929.53	123
124	20950.00	39847.56	5928.07	124
125	20950.00	39843.20	5928.40	125
126	20950.00	39837.88	5931.23	126

190	21028.25	39896.81	5912.35	190

127	20955.00	39853.76	5928.45	127
128	20955.00	39849.72	5926.97	128
129	20955.00	39845.36	5927.37	129
130	20955.00	39840.10	5930.18	130
131	20960.00	39856.70	5927.45	131
132	20960.00	39851.89	5925.69	132
133	20960.00	39847.53	5926.10	133
134	20960.00	39841.97	5929.17	134
135	20965.00	39859.75	5926.42	135
136	20965.00	39854.06	5924.41	136
137	20965.00	39849.70	5924.82	137
138	20965.00	39843.54	5928.22	138
139	20970.00	39862.47	5925.07	139
140	20970.00	39856.42	5923.09	140
141	20970.00	39851.96	5923.55	141
142	20970.00	39845.20	5927.25	142
143	20975.00	39864.88	5923.45	143
144	20975.00	39859.15	5921.72	144
145	20975.00	39854.55	5922.26	145
146	20975.00	39846.48	5926.66	146
147	20980.00	39868.06	5921.88	147
148	20980.00	39862.27	5920.31	148
149	20980.00	39857.51	5920.92	149
150	20980.00	39849.43	5925.31	150
151	20985.00	39872.83	5920.50	151
152	20985.00	39865.84	5918.84	152
153	20985.00	39860.87	5919.53	153
154	20985.00	39852.48	5924.05	154
155	20990.00	39877.13	5918.84	155
156	20990.00	39869.92	5917.30	156
157	20990.00	39864.69	5918.09	157
158	20990.00	39855.70	5922.87	158
159	20995.00	39881.31	5917.26	159
160	20995.00	39874.43	5915.74	160
161	20995.00	39869.03	5916.56	161
162	20995.00	39858.32	5922.17	162
163	21000.00	39885.97	5915.80	163
164	21000.00	39878.98	5914.25	164
165	21000.00	39873.57	5915.05	165
166	21000.00	39861.69	5921.24	166
167	21001.04	39886.97	5915.50	167
168	21004.58	39883.13	5912.89	168
169	21005.00	39888.46	5914.65	169
170	21005.00	39883.51	5912.88	170
171	21005.00	39878.12	5913.56	171
172	21005.00	39870.60	5917.46	172
173	21007.26	39880.16	5912.89	173
174	21010.00	39890.36	5913.59	174
175	21010.00	39887.99	5912.74	175
176	21010.00	39882.62	5912.81	176
177	21010.00	39875.05	5916.02	177
178	21011.17	39875.85	5915.80	178
179	21015.00	39892.85	5912.85	179
180	21015.00	39892.26	5912.61	180
181	21015.00	39887.09	5912.68	181
182	21015.00	39882.02	5914.64	182
183	21020.00	39895.86	5912.49	183
184	21020.00	39890.95	5912.55	184
185	21020.00	39888.20	5913.70	185
186	21021.51	39896.93	5912.46	186
187	21025.00	39897.17	5912.40	187
188	21025.00	39894.50	5912.43	188
189	21025.00	39893.26	5912.95	189

Rocky Flats Environmental Technology Site

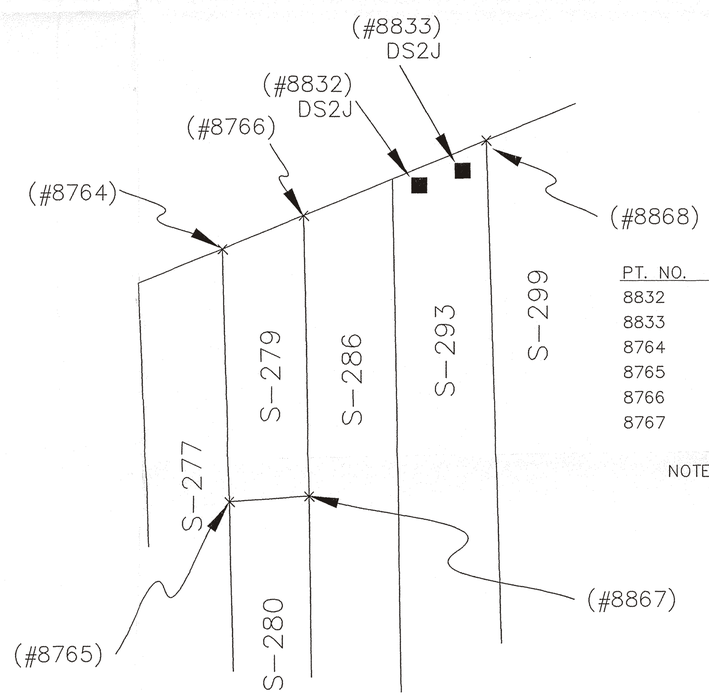
PROJECT RECORD SURVEYS

FINAL SUBMITTALS

TABLE OF CONTENTS

SHEET 1 OF 11---COVER SHEET
SHEET 2 OF 11---TOP OF REGRADE(fullfils1.02a-1)
SHEET 3 OF 11---TOP OF 6"CUSHION(fullfills 1.02a-1)
SHEET 4 OF 11---SOILS TEST LOCATIONS
SHEET 5 OF 11---GCL PANEL LOCATIONS(fullfills 1.02a-4)
SHEET 6 OF 11---FML PANEL LOCATIONS(fullfills 1.02a-4)
SHEET 7 OF 11---GDN PANEL LOCATIONS(fullfills 1.02a-4)
SHEET 8 OF 11---TOP OF 10"CUSHION(fullfills 1.02a-5)
SHEET 9 OF 11---TOP OF ROCK(fullfills 1.02a-7)
SHEET 10 OF 11---TOP OF SUBGRADE 22"
SHEET 11 OF 11---FINAL COVER(fullfills 1.02a-8)

LEGEND FOR PARAGON / GOLDER POINT CODES



PT. NO.	NORTHING	EASTING	GOLDER CODE	DESCRIPTION
8832	40028.51	20305.87	DS2J	DEFECT GCL
8833	40028.44	20311.19	DS2J	GCL
8764	40058.35	20275.85	S277-S279	INTERSECTION OF TWO GCL PANELS
8765	39970.30	20281.95	S277-S279-S280	INTERSECTION OF THREE GCL PANELS
8766	40066.14	20289.12	S279-S286	2 PANEL INTERSECTION LOCATION
8767	39970.99	20296.08	S279-S286-S280	3 PANEL INTERSECTION LOCATION

NOTES: 1.) THIS LEGEND/EXAMPLE DEPICTS A TYPICAL GCL DEPLOYMENT, FML AND GDN PANEL DEPLOYMENTS WERE SHOWN THE SAME

2.) POINT NUMBERS (EX. (#8832) AND GOLDER CODES ARE SHOWN ON INCLUDED GCL PANEL LOCATION SPREADSHEETS.

3.) GOLDER LINER ABBREVIATIONS:
- P# PRIMARY LINER PANEL (FML)
- S# SECONDARY LINER PANEL (GCL)
- T# TERTIARY LINER PANEL (GDN)
- DP-#letter DEFECT ON PRIMARY LINER FML
- DS-#letter DEFECT ON SECONDARY LINER GCL
- DT-#letter DEFECT ON TERTIARY LINER GDN
- DS/DFp DESTRUCTIVE/ DESTRUCT FUSION PRIMARY

4.) COORDINATES SHOWN ARE IN ROCKY FLATS COORDINATE SYSTEM

Michael J. Gregory, PLS No.26288
For And On The Behalf Of
Paragon Land Consultants, Inc.

COLORADO REGISTERED PROFESSIONAL LAND SURVEYOR MICHAEL J. GREGORY 26288

PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

BZ-A-000954
#F-324

U.S. Department of Energy Rocky Flats Environmental Technology Site Golden, Colorado

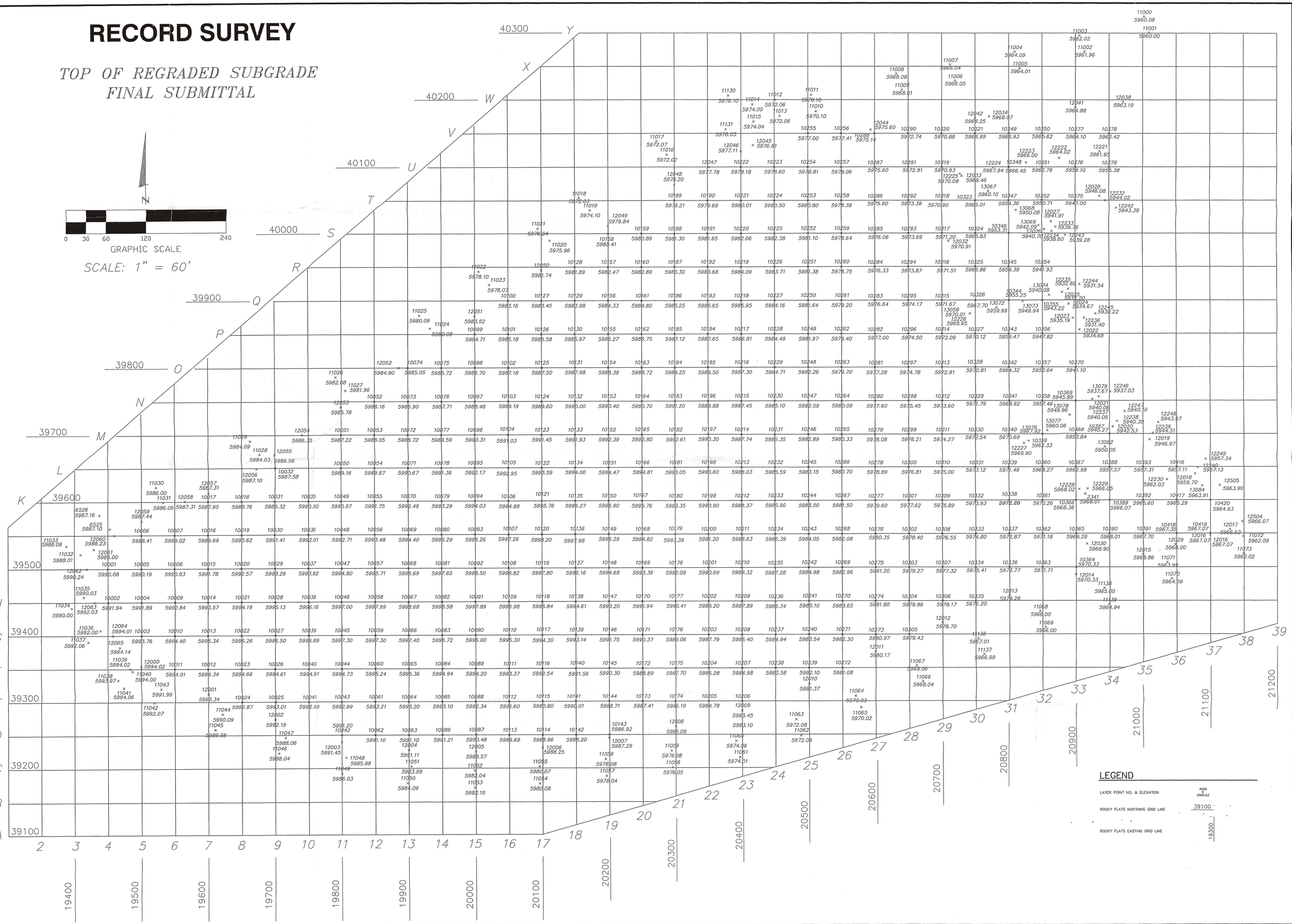
PROJECT RECORD SURVEYS
FOR THE PRESENT LANDFILL
ACCELERATED ACTION

No.	Date	Revisions Description

Drawing File:	PROREC_14.dwg
Issue Date:	06/21/05
Drawn By:	PEG
Checked By:	MJG
Sheet Number:	1 of 11

RECORD SURVEY

TOP OF REGRADED SUBGRADE
FINAL SUBMITTAL



PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

TOP OF REGRADED SUBGRADE – FINAL

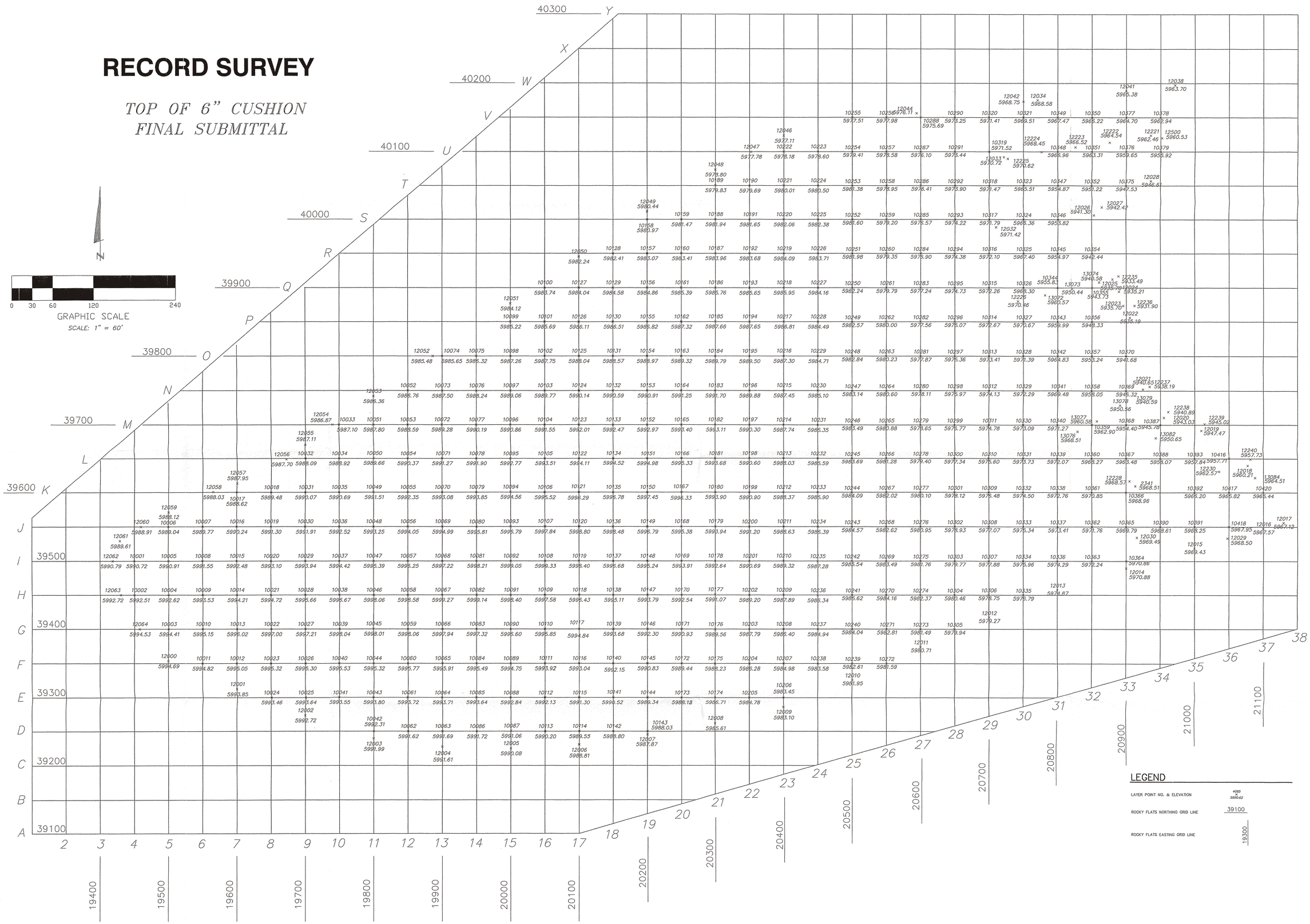
Revisions		
No.	Date	Description

Drawing File:	Final_RS60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	2 of 11

B2-A-009954
#335

RECORD SURVEY

TOP OF 6" CUSHION
FINAL SUBMITTAL



PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8900 Fax: (720) 857-8900

B2-A-000954
#324

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

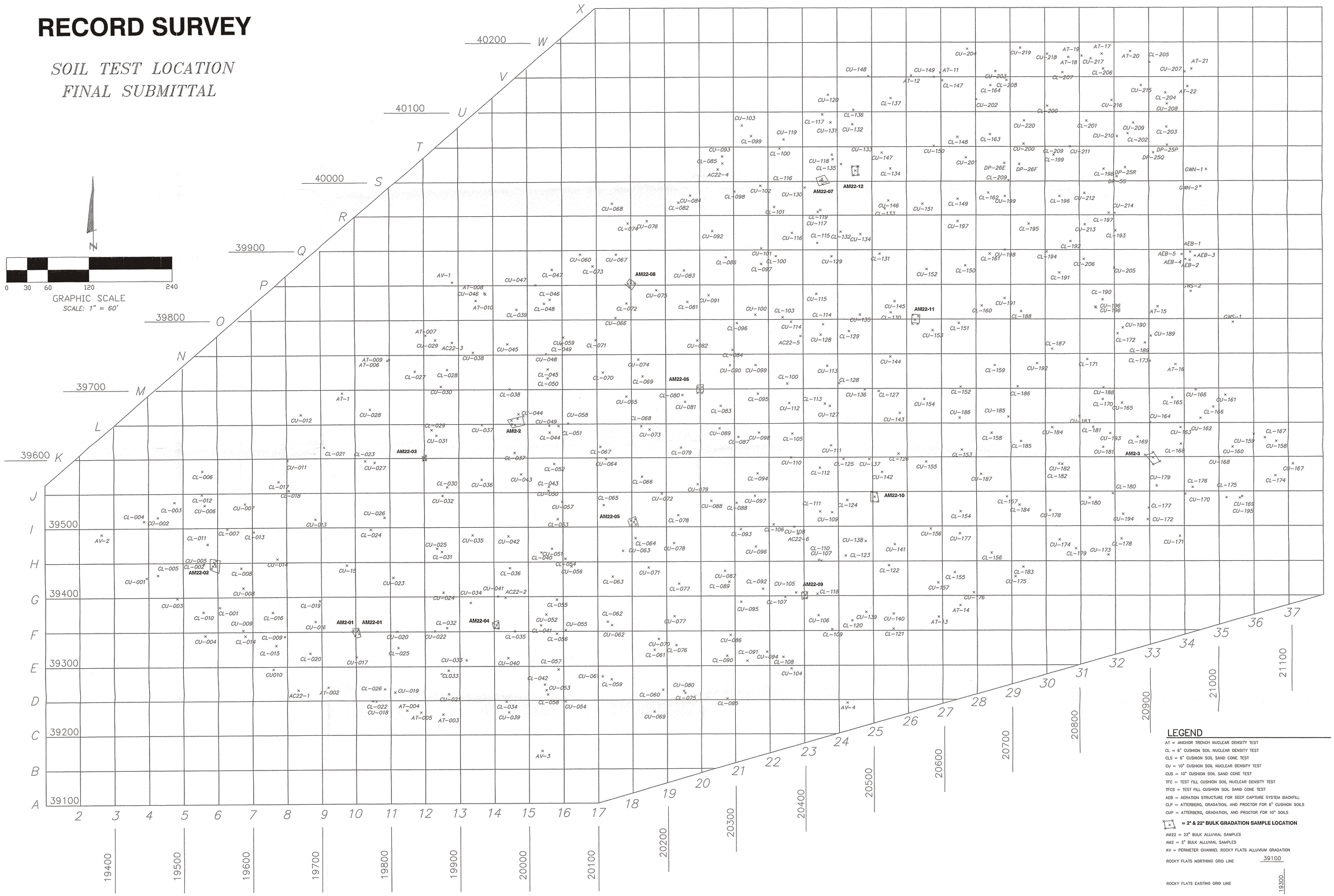
TOP OF 6" CUSHION – Final

Revisions		
No.	Date	Description

Drawing File:	Final_6cush60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	3 of 11

RECORD SURVEY

SOIL TEST LOCATION
FINAL SUBMITTAL



LEGEND

AT = ANCHOR TRENCH NUCLEAR DENSITY TEST
CL = 6" CUSHION SOIL NUCLEAR DENSITY TEST
CLS = 6" CUSHION SOIL SAND CONE TEST
CU = 10" CUSHION SOIL NUCLEAR DENSITY TEST
CUS = 10" CUSHION SOIL SAND CONE TEST
TFC = TEST FILL CUSHION SOIL NUCLEAR DENSITY TEST
TFCS = TEST FILL CUSHION SOIL SAND CONE TEST
AEB = AERATION STRUCTURE FOR SEEP CAPTURE SYSTEM BACKFILL
CLP = ATTERBERG, GRADATION, AND PROCTOR FOR 6" CUSHION SOILS
CUP = ATTERBERG, GRADATION, AND PROCTOR FOR 10" SOILS

= 2" & 22" BULK GRADATION SAMPLE LOCATION

AM22 = 22" BULK ALLUVIAL SAMPLES
AM2 = 2" BULK ALLUVIAL SAMPLES
AV = PERIMETER CHANNEL ROCKY FLATS ALLUVIUM GRADATION

ROCKY FLATS NORTHING GRID LINE 39100

ROCKY FLATS EASTING GRID LINE 19300

NOTE: A COMPLETE LIST OF TESTING ABBREVIATIONS IS FOUND IN THE FINAL FIELD AND LABORATORY TESTING DATA (JUNE1, 2005) PREPARED BY GOLDER ASSOCIATES

PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

SOIL TEST LOCATION - FINAL

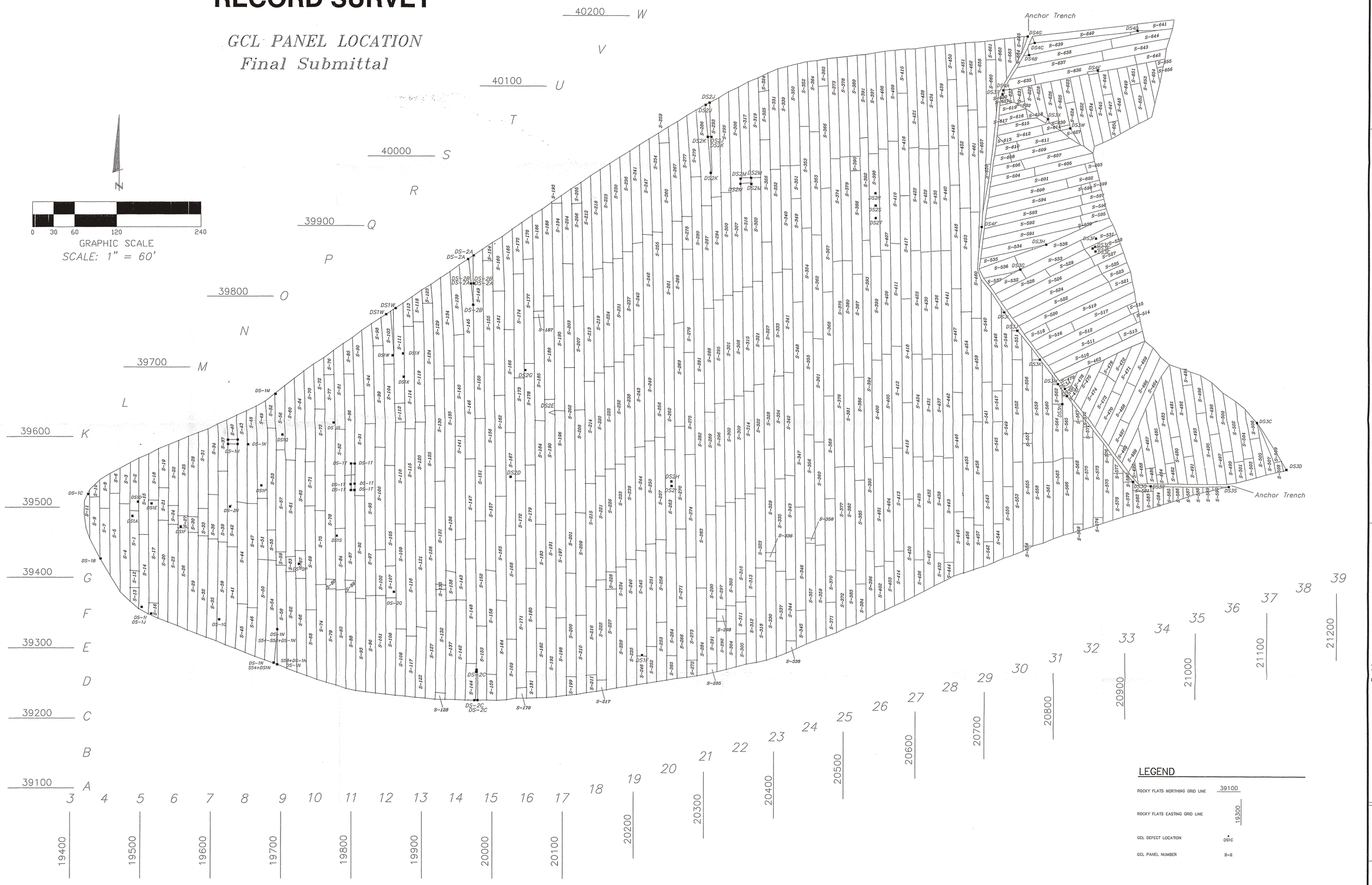
Revisions		
No.	Date	Description

Drawing File:	FINAL_ST60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	4 of 11

BZ-A-000954
#337

RECORD SURVEY

GCL PANEL LOCATION
Final Submittal



PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

B2-A-000954
H 328

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

GCL PANEL LOCATION – FINAL

Revisions

No.	Date	Description

Drawing File:	Final_GCL60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	5 of 11

RECORD SURVEY

FML PANEL LOCATION
Final Submittal

PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8900 Fax: (720) 857-8900

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

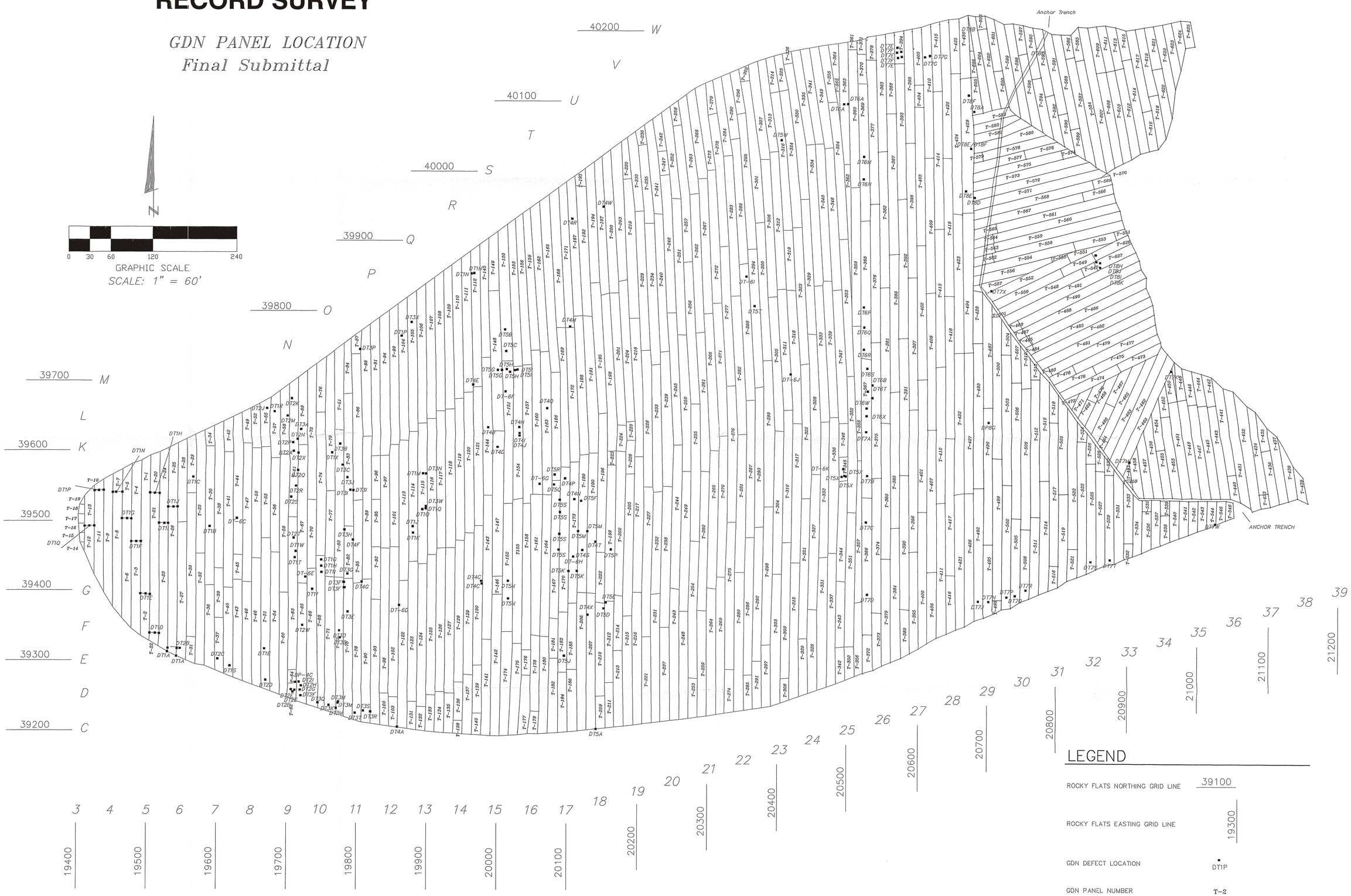
FML PANEL LOCATION – FINAL

Revisions		
No.	Date	Description

Drawing File:	Final_FML
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	6 of 11

RECORD SURVEY

GDN PANEL LOCATION
Final Submittal



PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

BZ-A-000954
A-330

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

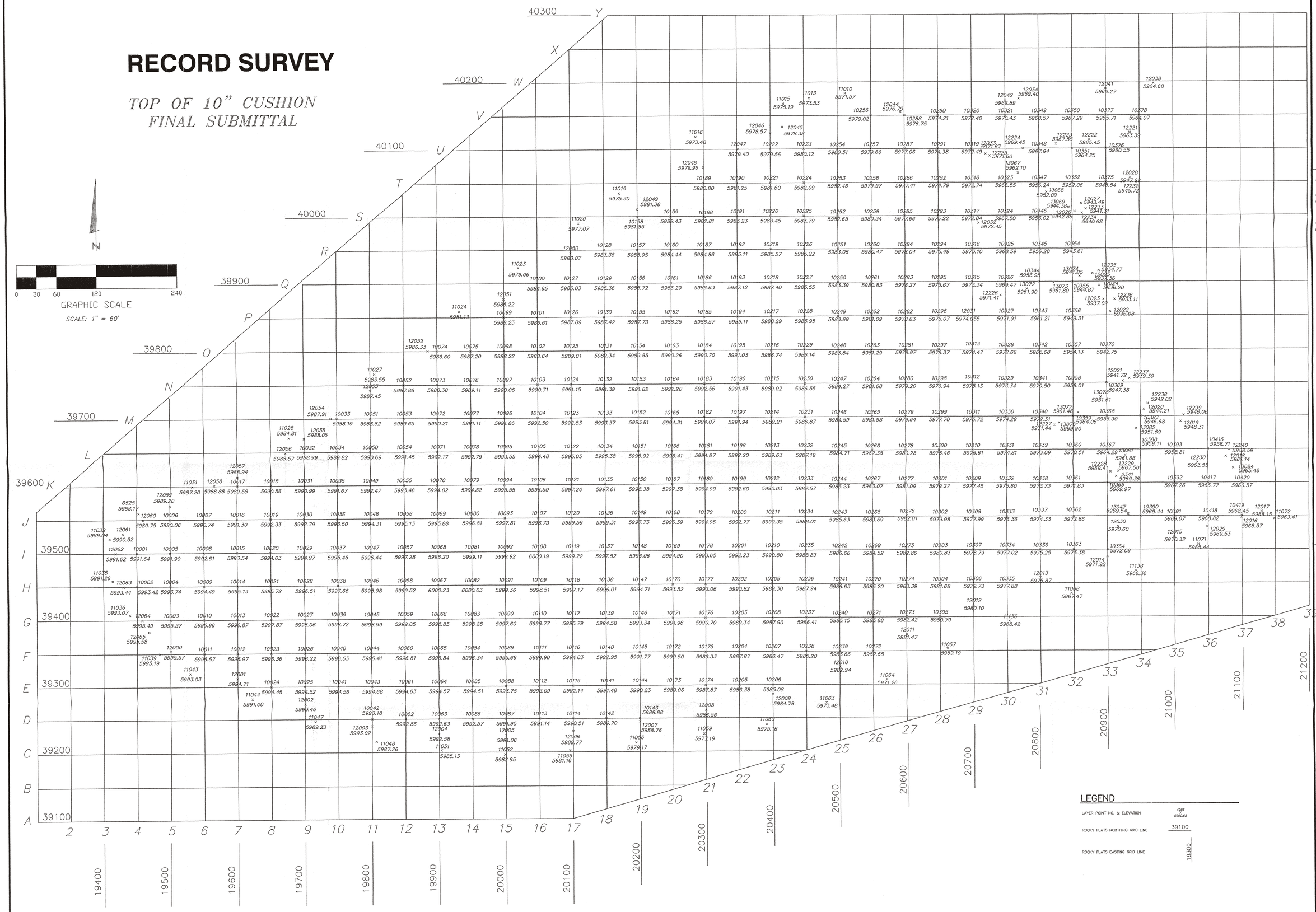
GDN PANEL LOCATION – FINAL

Revisions		
No.	Date	Description

Drawing File:	Final_GDN60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	7 of 11

RECORD SURVEY

TOP OF 10" CUSHION
FINAL SUBMITTAL



PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

B2-R-000954
#331

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

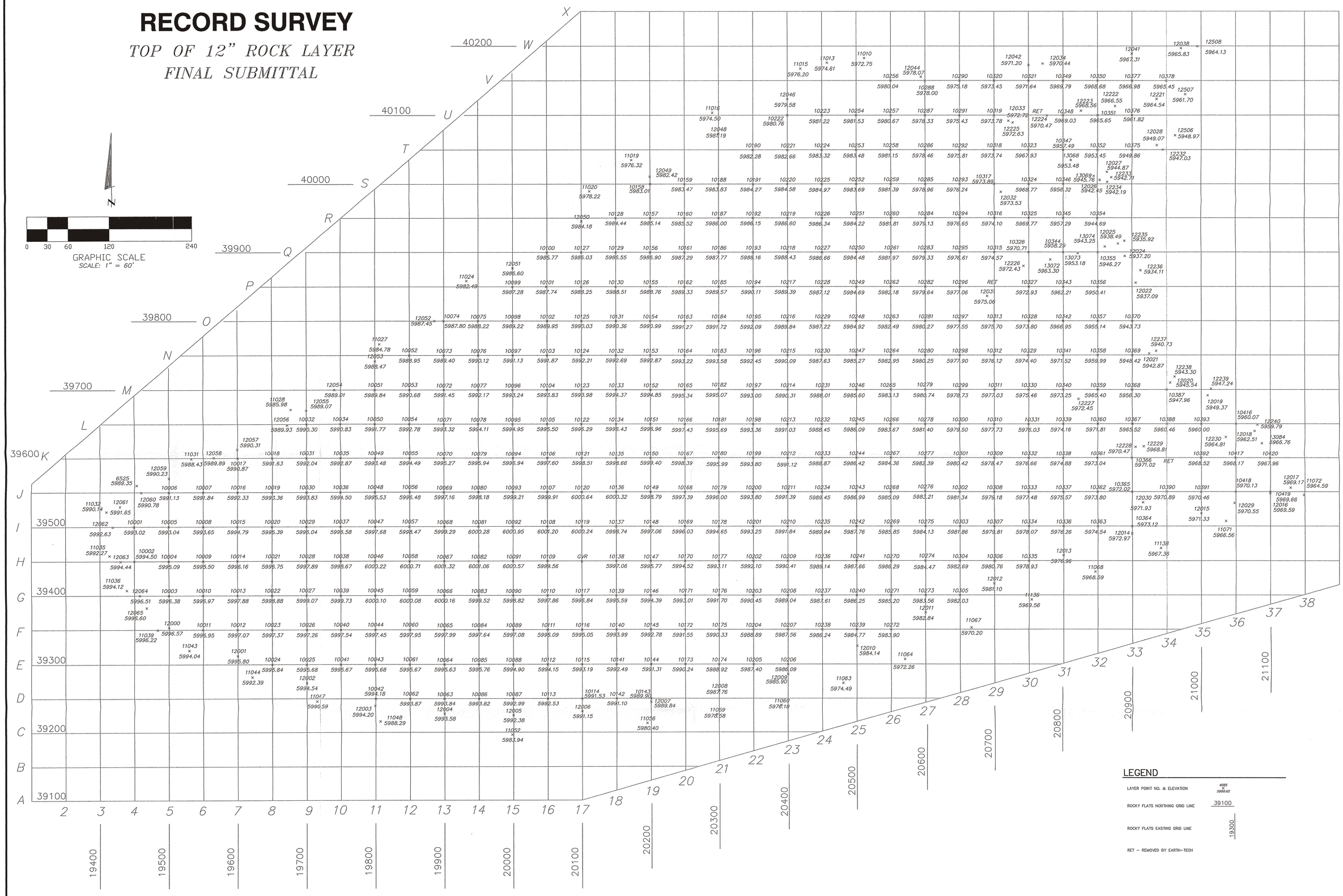
TOP OF 10" CUSHION – FINAL

Revisions		
No.	Date	Description

Drawing File:	Final_10cush60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	8 of 11

RECORD SURVEY

TOP OF 12" ROCK LAYER
FINAL SUBMITTAL



PARAGON
LAND CONSULTANTS, INC.
Norfolk Park Centre II
416 Norfolk Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

U.S. Department of Energy — *Rocky Flats Environmental Technology Site* — *Golden, Colorado*

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

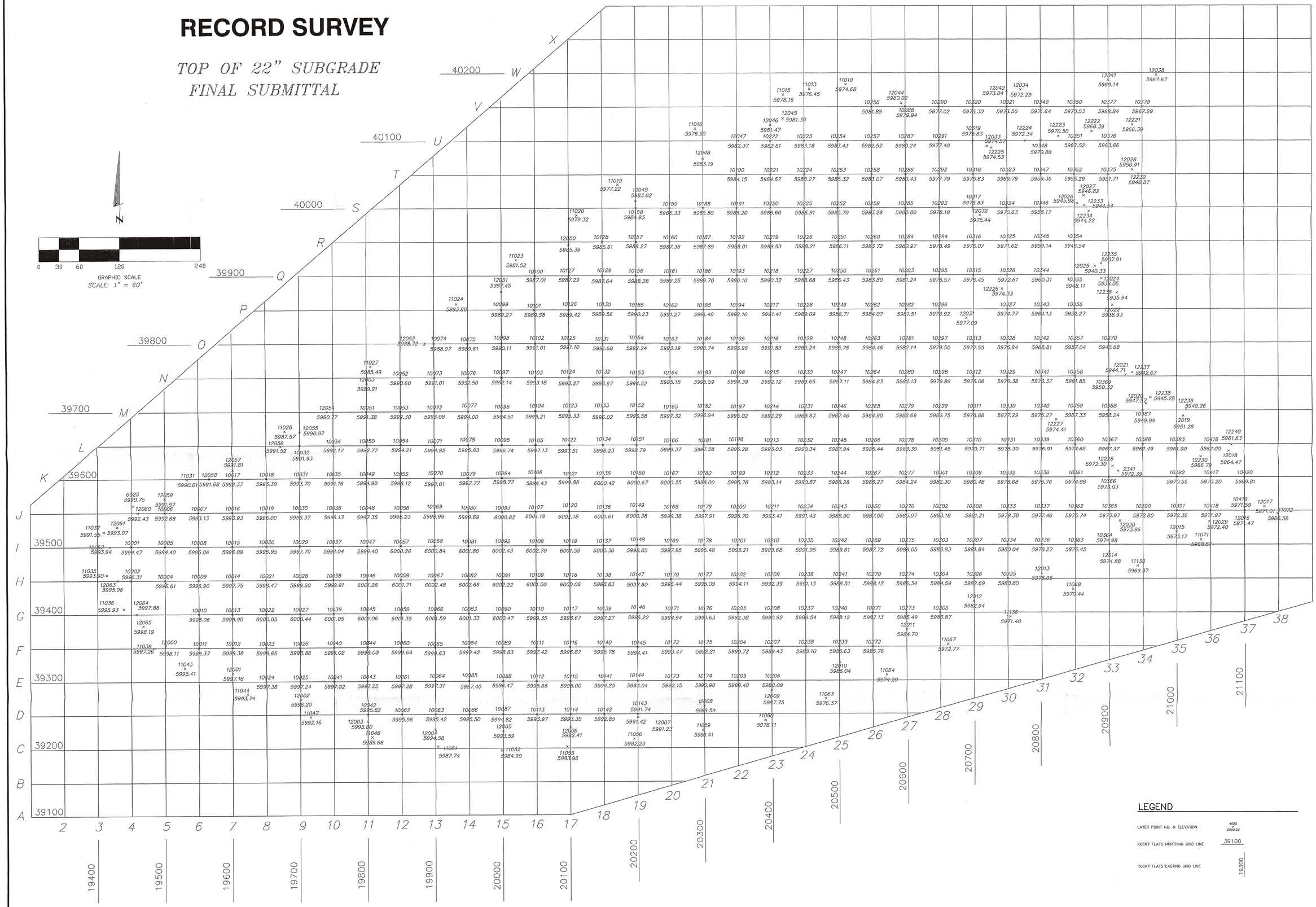
TOP OF 12" ROCK – FINAL

Revisions		
No.	Date	Description

Drawing File:	Final_ROCK60
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	9 of 11

RECORD SURVEY

TOP OF 22" SUBGRADE
FINAL SUBMITTAL



PARAGON
LAND CONSULTANTS, INC.
Norlok Park Centre II
416 Norlok Street
Aurora, Colorado 80011
(720) 857-9800 Fax: (720) 857-8900

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PERSENT LANDFILL ACCELERATED ACTION

TOP OF 22" SUBGRADE – FINAL

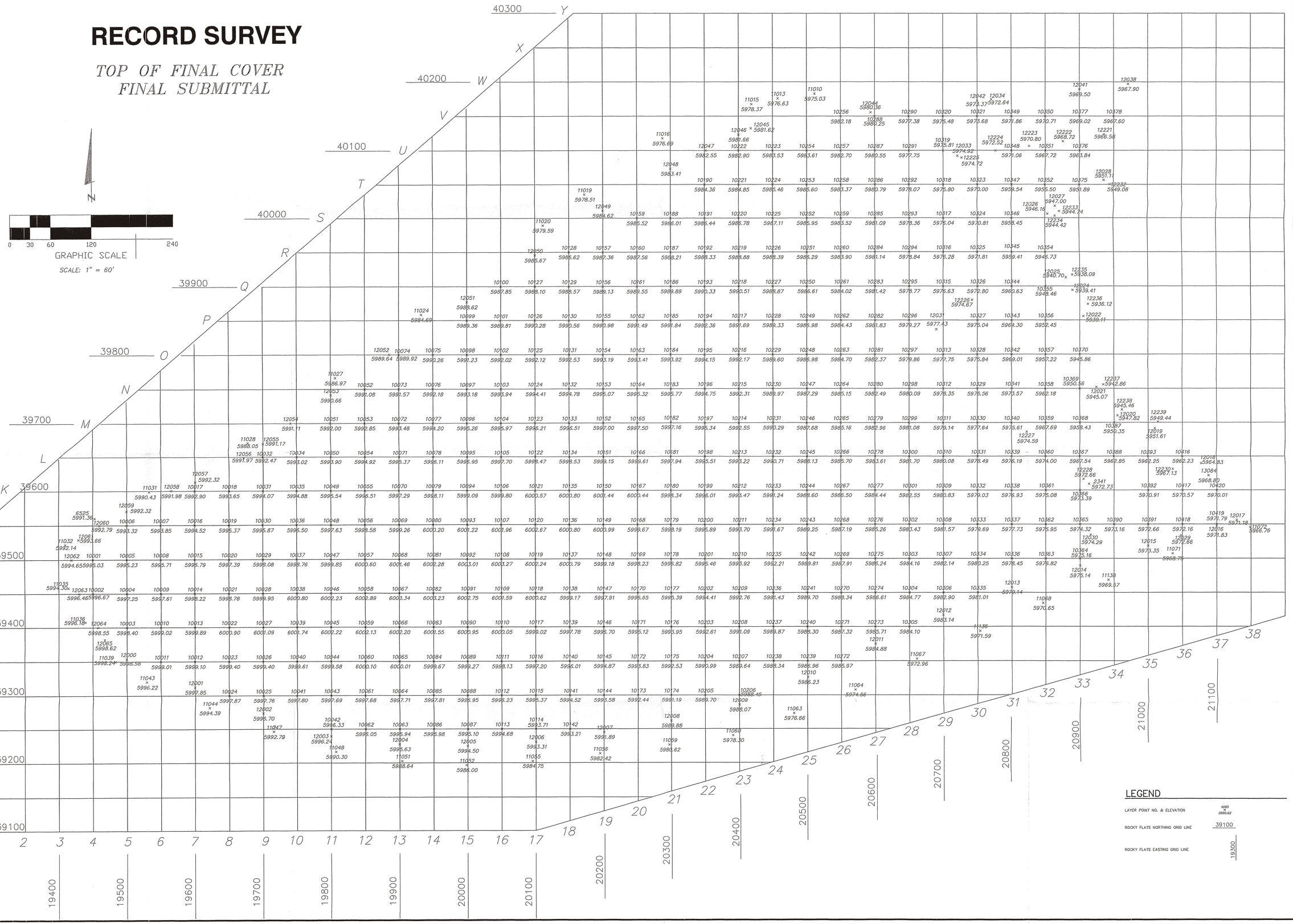
Revisions		
No.	Date	Description

Drawing File:	FINAL_SG
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	10 of 11

BZ-A-000954
#333

RECORD SURVEY

TOP OF FINAL COVER
FINAL SUBMITTAL



PARAGON
LAND CONSULTANTS, INC.
North Park Centre II
4100 E. Mexico Street
Aurora, Colorado 80011
(720) 857-8800 Fax: (720) 857-8900

B2-A-000454
#334

U.S. Department of Energy — Rocky Flats Environmental Technology Site — Golden, Colorado

PROJECT RECORD SURVEY
FOR THE PRESENT LANDFILL ACCELERATED ACTION

TOP OF FINISH GRADE – FINAL

Revisions			
No.	Date	Description	

Drawing File:	Finish_FINAL
Issue Date:	06/21/2005
Drawn By:	JVG
Checked By:	PEG
Sheet Number:	11 of 11