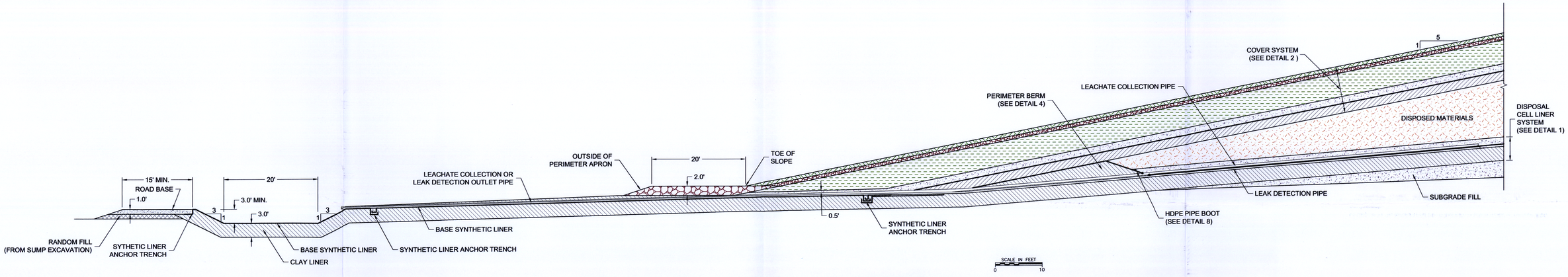
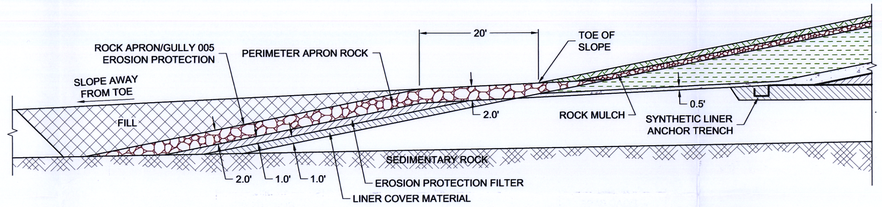
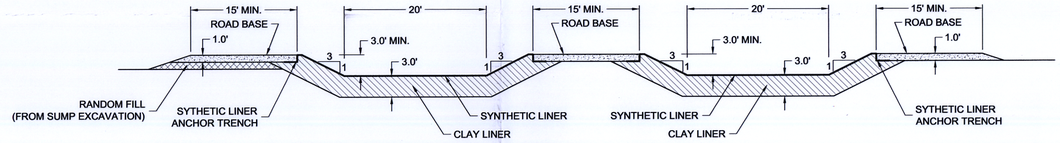


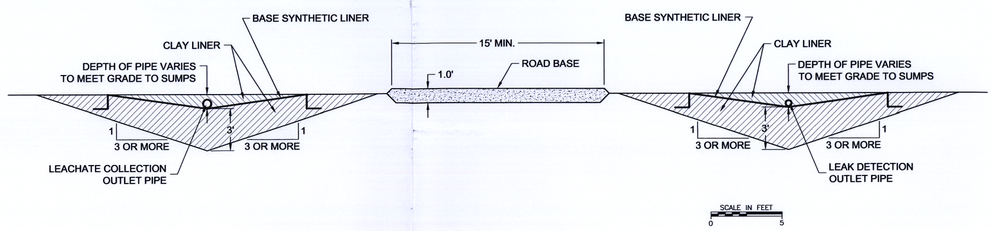
TYPICAL CROSS SECTION THROUGH COLLECTION SYSTEM OUTLETS AND SUMPS



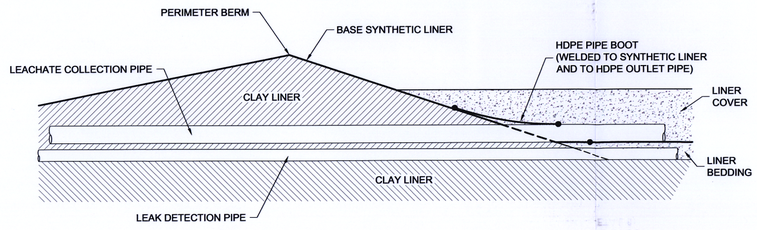
DETAIL 9
GULLY 005 EROSION PROTECTION DETAIL



TYPICAL CROSS SECTION THROUGH SUMPS



TYPICAL CROSS SECTION THROUGH OUTLET PIPE CHANNELS



DETAIL 8
HDPE PIPE BOOT

NOTES:

1. ROCK MULCH - Sandy gravel and cobbles with median particle size of 4.1 inches, and layer thickness of 9 inches.
2. PERIMETER APRON ROCK - Gravel and cobbles with median particle size of 6.8 inches and layer thickness of 24 inches.
3. EROSION PROTECTION FILTER - Gravel and sand with maximum particle size of 2.0 inches.
4. TOPSOIL - Approved material obtained from within facility boundary.
5. SOIL COVER - Gravelly clay to silty clay obtained from within facility boundary.
6. RANDOM FILL - Clean sandy gravel used for subgrade fill, with top surface rolled with vibratory roller or compactor.
7. DISPOSED MATERIALS - Materials from site cleanup operations, placed in lifts to minimize void spaces and rolled (where necessary) with vibratory roller or compactor.
8. BASE SYNTHETIC LINER - 60-mil nominal thickness HDPE, smooth surface on both sides, seamed and tested to form continuous liner.
9. SUBGRADE FILL - Granular material with maximum particle size of 6 inches.
10. CLAY LINER - Silty clay compacted to 95 percent of Standard Proctor density and within 2 percent of Standard Proctor optimum moisture content. Material obtained from within facility boundary.
11. LINER BEDDING AND COVER MATERIAL - Granular material with maximum particle size of 1.0 inches. Liner cover material placed in one lift to form a layer 1.5 ft. thick.
12. UPPER SURFACE OF DISPOSED MATERIALS - The upper surface of disposed materials shall be rolled with a drum roller or rubber-tired equipment.
13. COVER SYNTHETIC LINER - 60-mil nominal thickness HDPE, textured surface on both sides, seamed and tested to form continuous liner.
14. LEACHATE COLLECTION PIPE - 6-inch diameter blank HDPE pipe. Pipe perforated within inside toe of perimeter berm.
15. LEAK DETECTION PIPE - 4-inch diameter blank HDPE pipe. Pipe perforated 20 ft. inside of perimeter berm.
16. BASE SUBGRADE SURFACE - Compacted random fill, excavated soil surface, natural soil subsurface, or clean concrete or asphalt surface, forming base for subgrade fill.
17. STORMWATER LINER - 40-mil nominal thickness HDPE (or approved equivalent), smooth surface on both sides, seamed along stormwater berm.

REVISIONS

No.	DESCRIPTION	BY	CHKD.	APPROVED		DATE
A	ISSUED FOR PERMITTING	CLS				12/02
B	UPDATED LINER SYSTEM	CLS				8/03
C	DISPOSAL CELL CONSTRUCTION PLAN	CLS				2/04
D	MODIFIED FROM SETTLEMENT AGREEMENT	CLS				3/05
E	MODIFIED FROM NRC REVIEW	CLS				1/06

REFERENCES

DWG No.	DRAWING TITLE

DESIGNERS

ENGINEERING RECORD	BY	DATE
PRELIMINARY DESIGN	CLS	12/02
CELL OPERATIONS	DAS	2/04
ODEQ MODIFICATIONS	CLS	9/04

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engineers

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PREPARED FOR

SEQUOYAH FUELS
A GENERAL ATOMICS COMPANY

TITLE

COLLECTION SYSTEM SECTIONS AND DETAILS

PROJECT:	100734	DATE:	JANUARY 2006	DRAWING	REVISION
SCALE:	AS SHOWN	ACAD FILE:	SITE-12-REV-E	12	E

D-03