

Appendix A

Site Drawings

Phase V-B Extension Disposal Cell and Related Improvements, December 2018 (A-Mehr, Inc.)

Phase V-B Disposal Cell and Related Improvements, November 2010 (A-Mehr, Inc.)

Phase V-A Extension Disposal Cell and Related Improvements, September 2009 (A-Mehr, Inc.)

Phase IV-B Extension Disposal Cell and Related Improvements, February 2007 (A-Mehr, Inc.)

Phase IV-A Modifications, September 2004 (A-Mehr, Inc.)

Phase IV-A Expansion Design Drawings, 1999 (Parametrix, Inc.)

Central Maui Landfill Puunene, Hawaii

Phase V-B Extension And Related Improvements Record Drawings

Prepared by:

A-Mehr, Inc.
23016 Mill Creek Drive
Laguna Hills, CA 92653
(949) 206-0157
2/16/18
Revision Date: 12/17/18

This work was prepared by me
or under my supervision



Project Engineer:

Ali Mehrzarin, P.E.

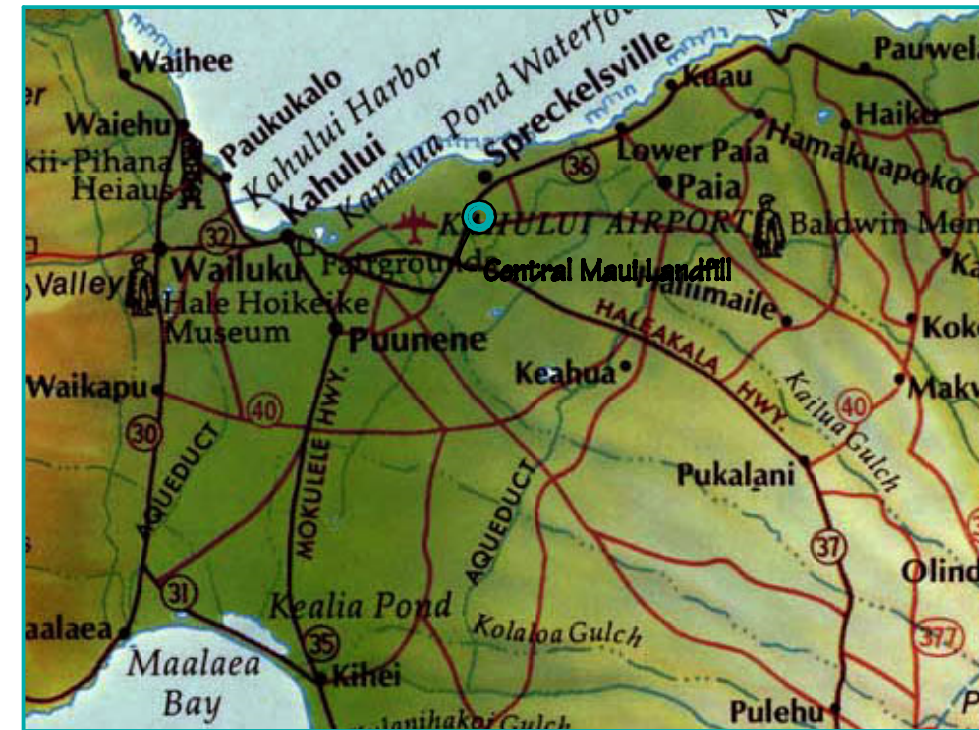
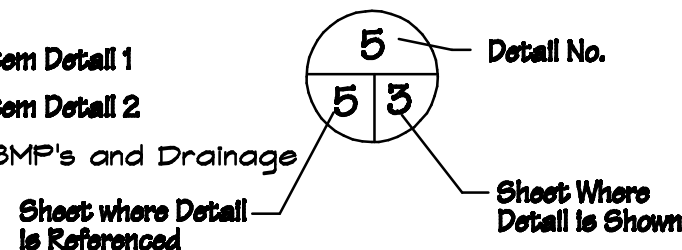
Date

Owner:

County of Maui
Department of Environmental Management
Solid Waste Division
2200 Main Street, Suite 225
Wailuku, Hawaii 96793

Sheet Number	Sheet Title
-	Cover Sheet
1	Site Map
2	Existing (Phases IV and V) with Proposed Phase V-B Extension and Phase VI Liner Grades
3	Phase V-B Liner Grades
4	Phase V-B Extension Subgrades and Temporary Access Road
4A	Cross-Sections V-BE1 through V-BE4
5	Phase V-B Extension LCRS and Liner Grades
6	Phase V-B Extension Protective Soil Grades
7	Phase V-B Extension Horizontal Gas Collectors
8	Phase V-B Extension Refuse Grades (Not in Contract)
9	Perimeter Access Road and Drainage Details
10	Liner Details 1
11	Liner Details 2
12	East Perimeter Drainage Plan & Profile
13	West Perimeter Drainage Plan & Profile
14	Horizontal Gas Collector Details
15	Leachate Sump Detail
16	Leachate Handling System Detail 1
17	Leachate Handling System Detail 2
18	80 feet Setback BMP's and Drainage Control Details

Detail Convention:

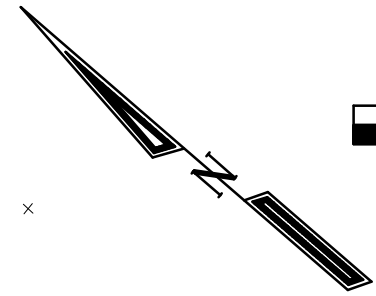
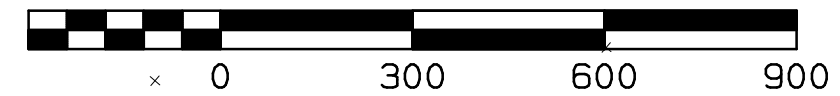


Vicinity Map

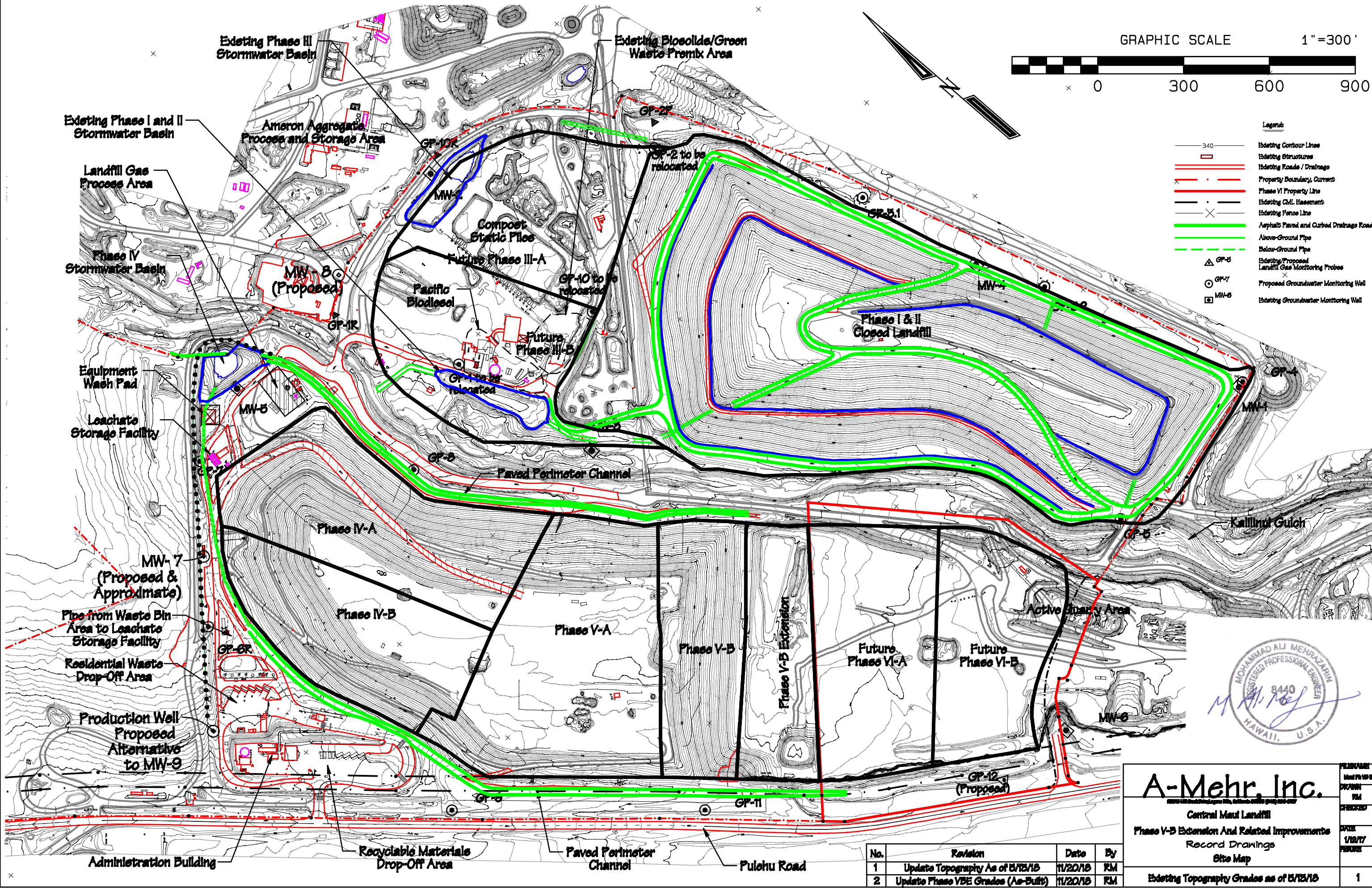
Approved by:

Director of
Environmental Management
2200 Main Street, Suite 100
Wailuku, Hawaii 96793

Date



- Legend:**
- 340 — Existing Contour Lines
 - ▭ Existing Structures
 - Existing Roads / Drainage
 - · - · - Property Boundary, Current
 - · - · - Existing C.M.I. Easement
 - × Existing Fence Line
 - Asphalt Paved and Curbed Drainage Road
 - Above-Ground Pipe
 - - - - Below-Ground Pipe
 - △ GP-5 Existing/Proposed Landfill Gas Monitoring Probe
 - GP-7 Proposed Groundwater Monitoring Well
 - MW-6 Existing Groundwater Monitoring Well



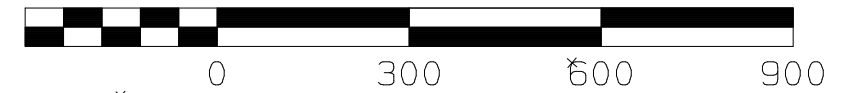
A-Mehr, Inc.
 2000 Lili'uokalani Drive, Suite 200, Honolulu, HI 96813
 (808) 531-1111

Central Maui Landfill
 Phase V-B Extension And Related Improvements
 Record Drawings
 Site Map

Existing Topography Grades as of 5/13/15

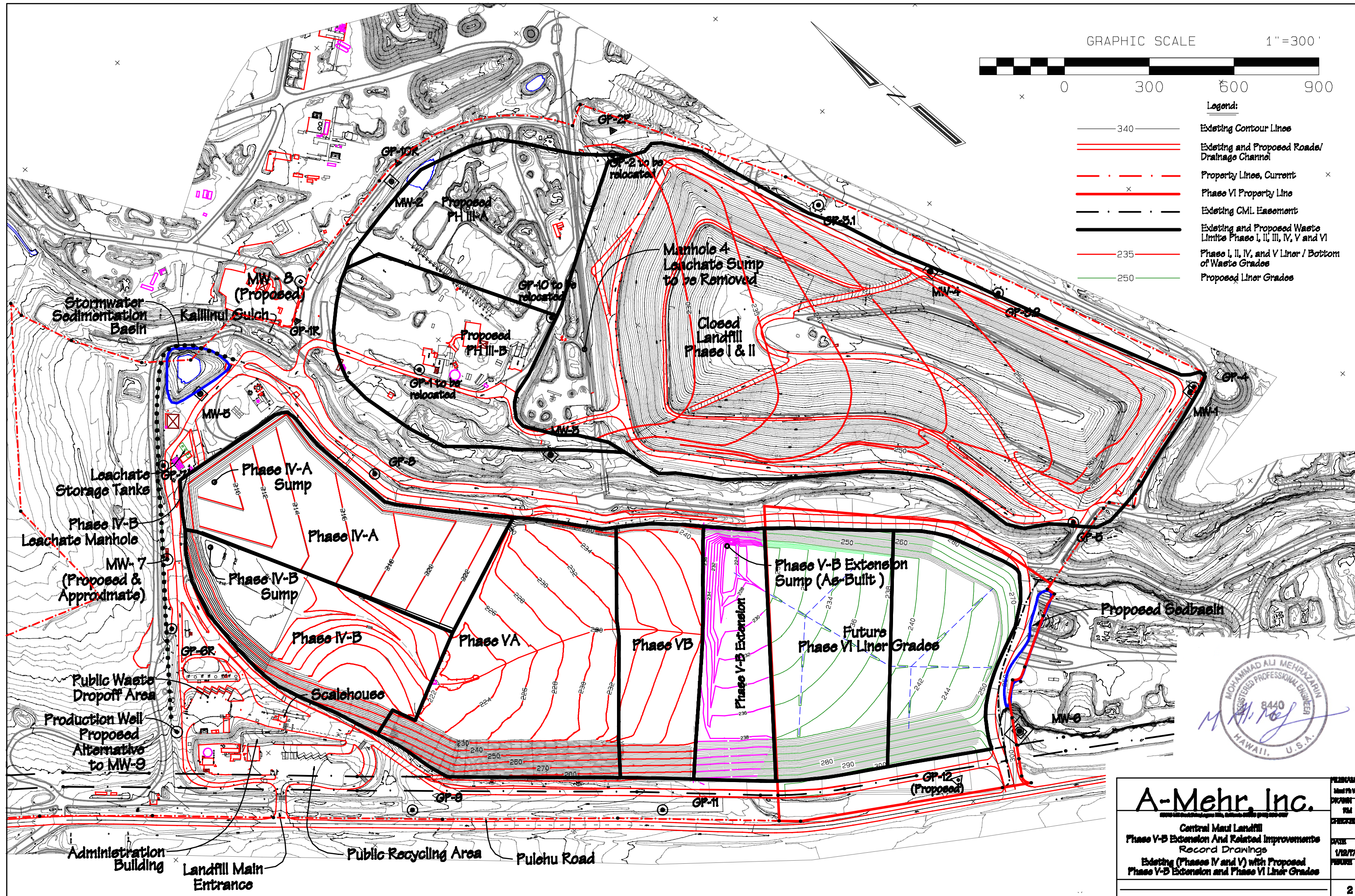
REVISION	Drawn By: RM
CHECKED	RM
DATE	1/12/17
FIGURE	1

No.	Revision	Date	By
1	Update Topography As of 5/13/15	11/20/15	RM
2	Update Phase VBE Grades (As-Built)	11/20/15	RM



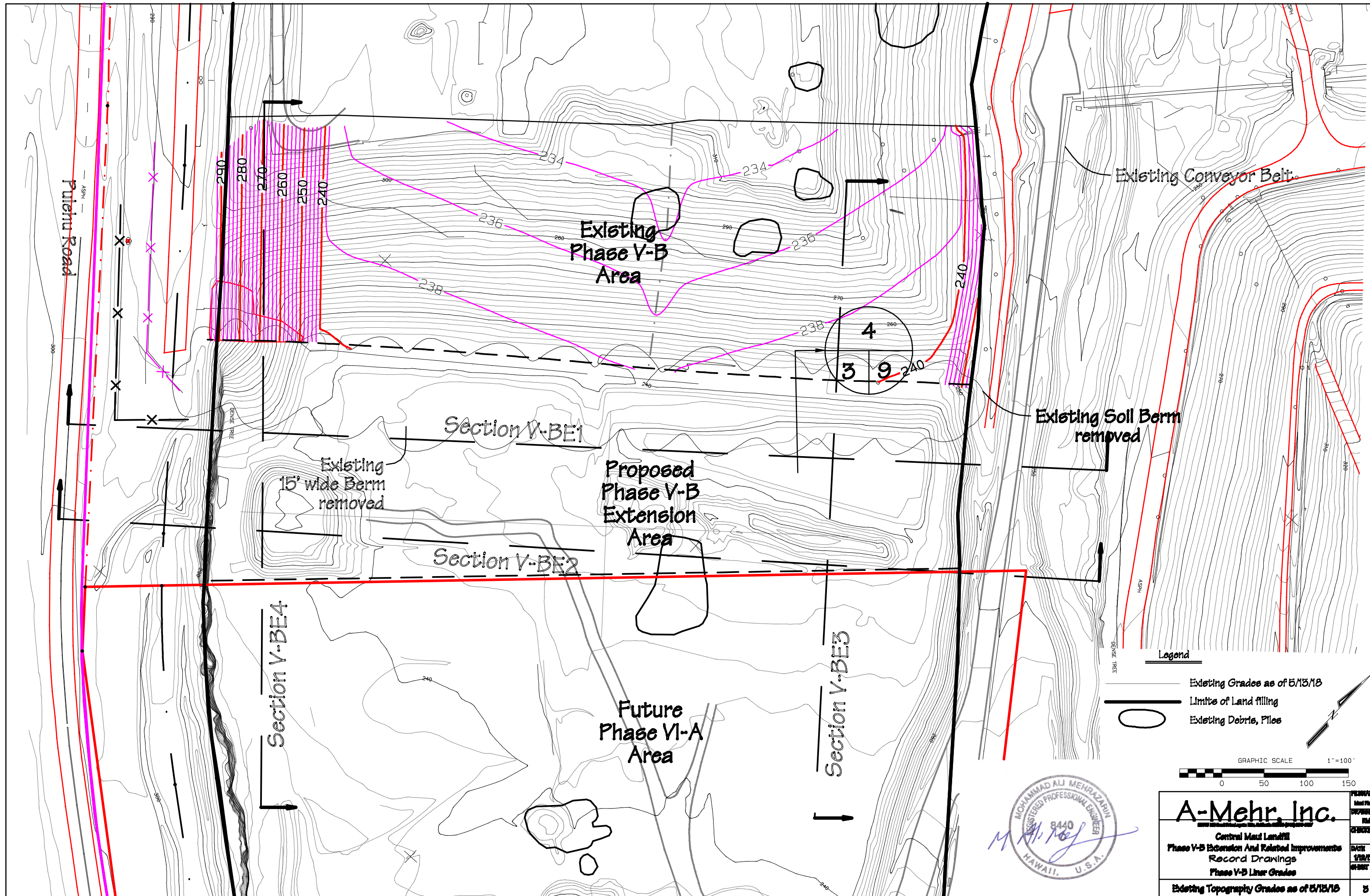
Legend:

- 340 Existing Contour Lines
- Existing and Proposed Road/ Drainage Channel
- Property Lines, Current
- Phase VI Property Line
- Existing CML Easement
- Existing and Proposed Waste Limits Phase I, II, III, IV, V and VI
- 235 Phase I, II, IV, and V Liner / Bottom of Waste Grades
- 250 Proposed Liner Grades



A-Mehr, Inc.
 2000 Lili'uokalani Drive, Suite 200, Honolulu, HI 96813
 Central Maui Landfill
 Phase V-B Extension And Related Improvements
 Record Drawings
 Existing (Phases IV and V) with Proposed
 Phase V-B Extension and Phase VI Liner Grades

REVISION
DATE
DRAWN
CHECKED
DATE
FIGURE
2



Legend

- Existing Grades as of 5/13/13
- Limits of Land filling
- Existing Debris, Piles

GRAPHIC SCALE 1" = 100'

0 50 100 150



A-Mehr, Inc.		PROJECT
Central Maui Landfill		DATE
Phase V-B Extension And Related Improvements		1/12/17
Record Drawings		SHEET
Phase V-B Liner Grades		5
Existing Topography Grades as of 5/13/13		

Existing 8' Chainlink Fence
(Constructed per Phase V-A Project)

Existing 30' Timber Fence
(Constructed per Phase V-B Project)

Active
Phase V-B

New Phase V-B Extension
Temporary 25'-Wide
Access Road

New Phase V-B Extension West Perimeter
Access Road / Drainage Extension (50' wide)
(Not Paved)

LCRS Trench & Pipe

Section V-BE1

LCRS Sump

Existing East Perimeter
Access Road / Drainage

New Phase V-B Ext. Extension of
East Perimeter Access Road / Drainage
(See Sheet 9, Detail 2)

Phase V-B Fence

Phase V-B
Extension
Subgrades
(As-Built)

Road/Drain ending
at Sta. 15+00

Section V-BE2

LCRS Trench & Pipe

Extended 8'
Chainlink Fence

K-Rail

Section V-BE4

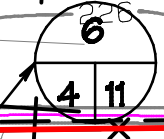
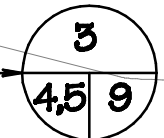
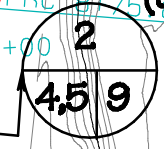
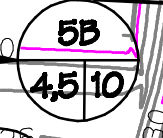
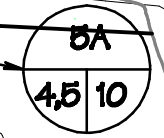
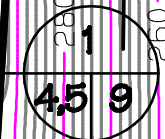
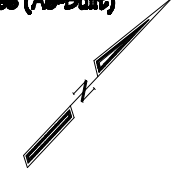
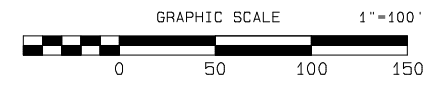
Section V-BE3

Future
Phase VI-A
Area

Future
Phase VI-B
Area

Legend

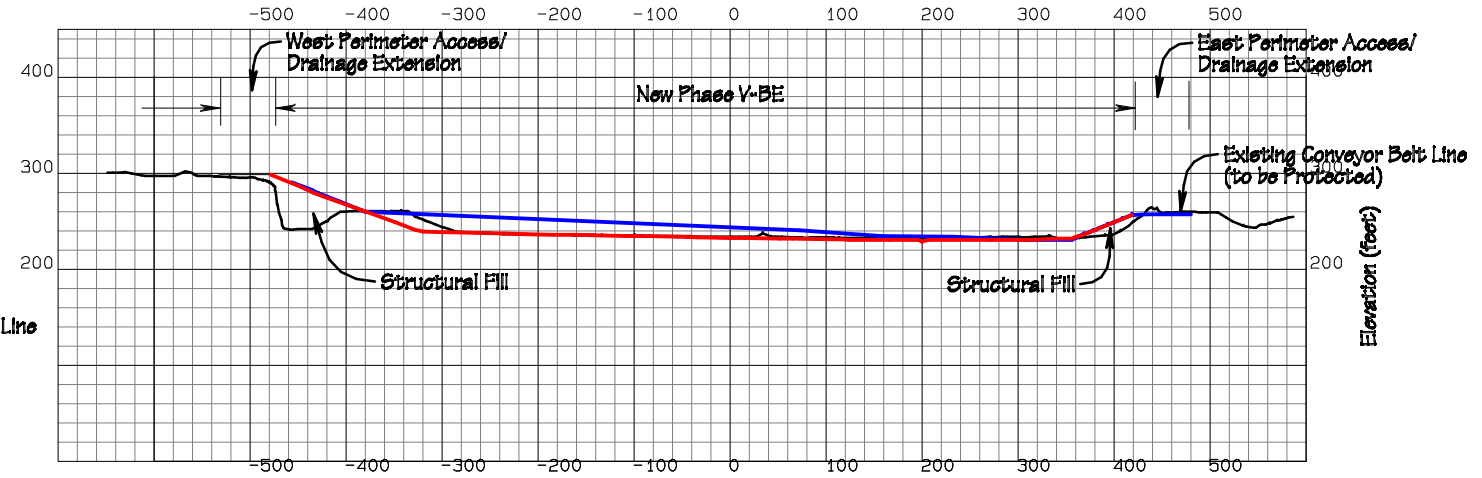
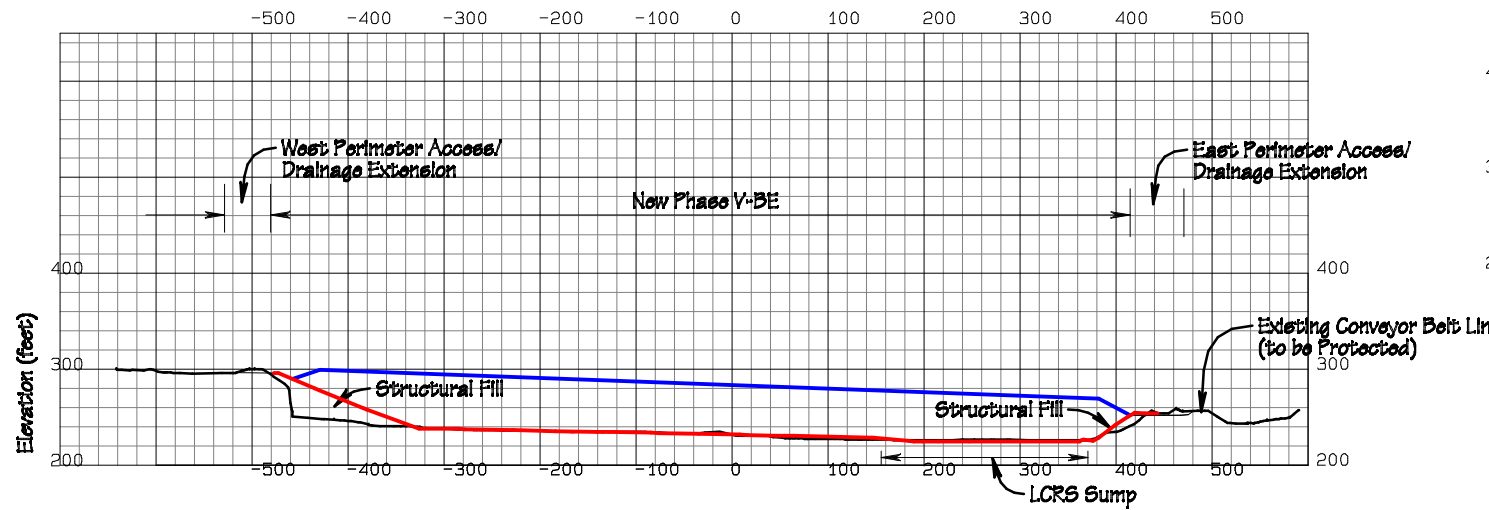
- Existing 8' Chain Link Fence (Phase VD)
- New / Extension 8' Chain Link Fence
- Subgrade and Excavation Grades (As-Built)



No.	Revision	Date	By
1	Revised Liner Grades	5/1/17	RM
2	update Topography Grades As of 5/12/18	11/21/18	RM
3	update Subgrade (As-Built)	11/21/18	RM

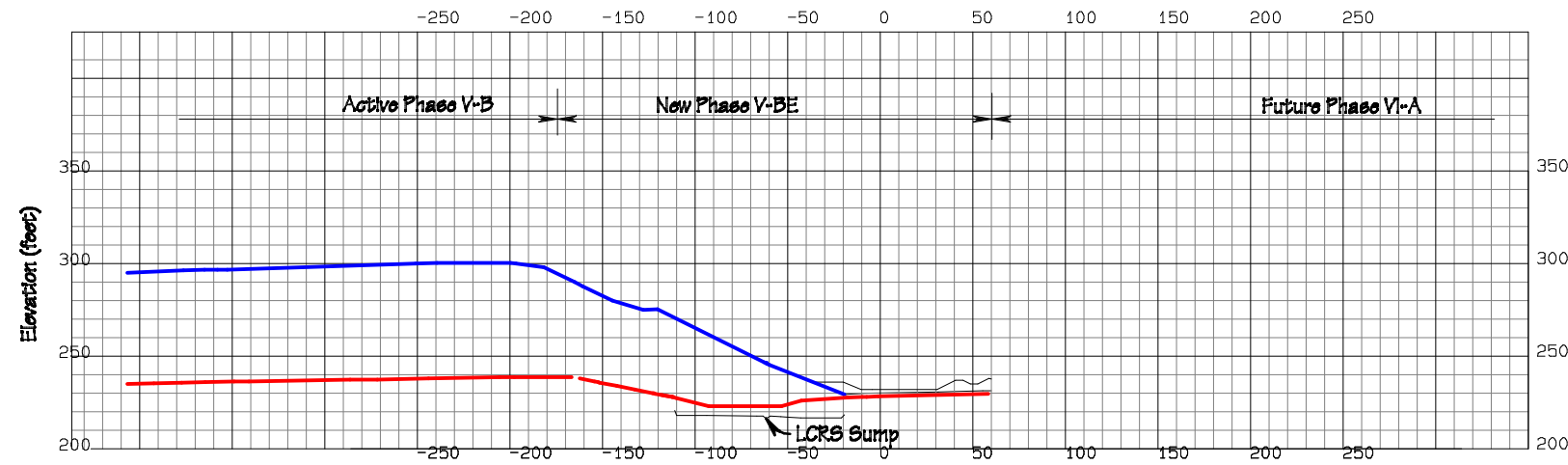
A-Mehr, Inc.
 Central Maui Landfill
 Phase V-B Extension And Related Improvements
 Record Drawings
 Phase V-B Extension Subgrades and
 Temporary Access Road

Checked: RM
 Date: 1/12/17
 Figure: 4

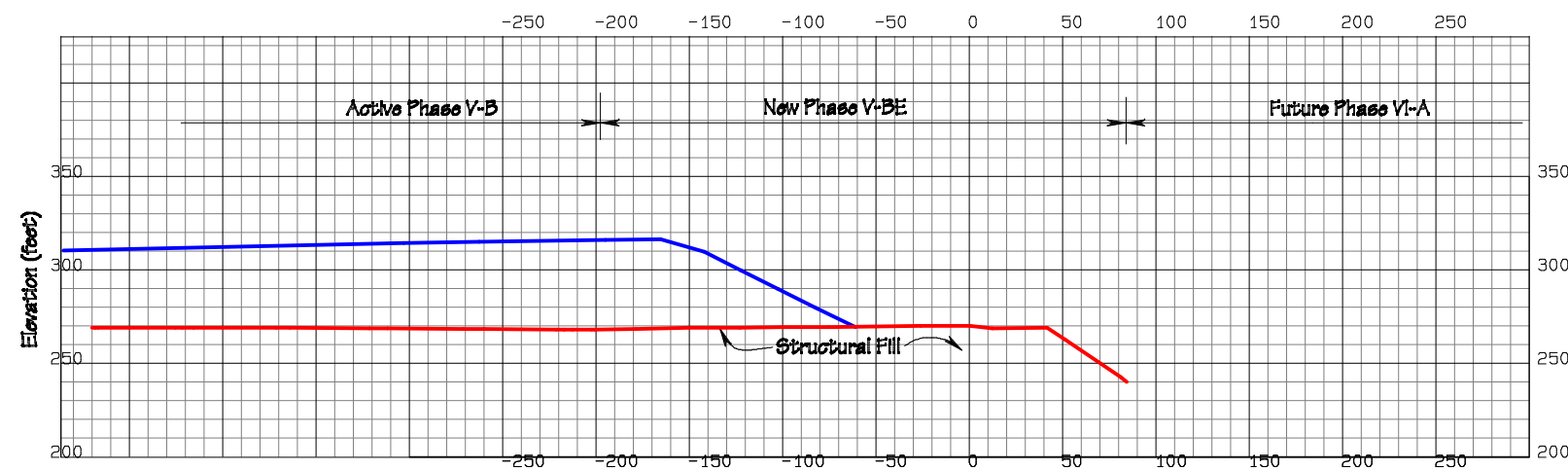


Cross-Section V-BE1

Cross-Section V-BE2



Cross-Section V-BE3 (East)



Cross-Section V-BE4 (West)



Legend

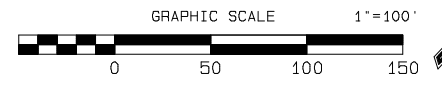
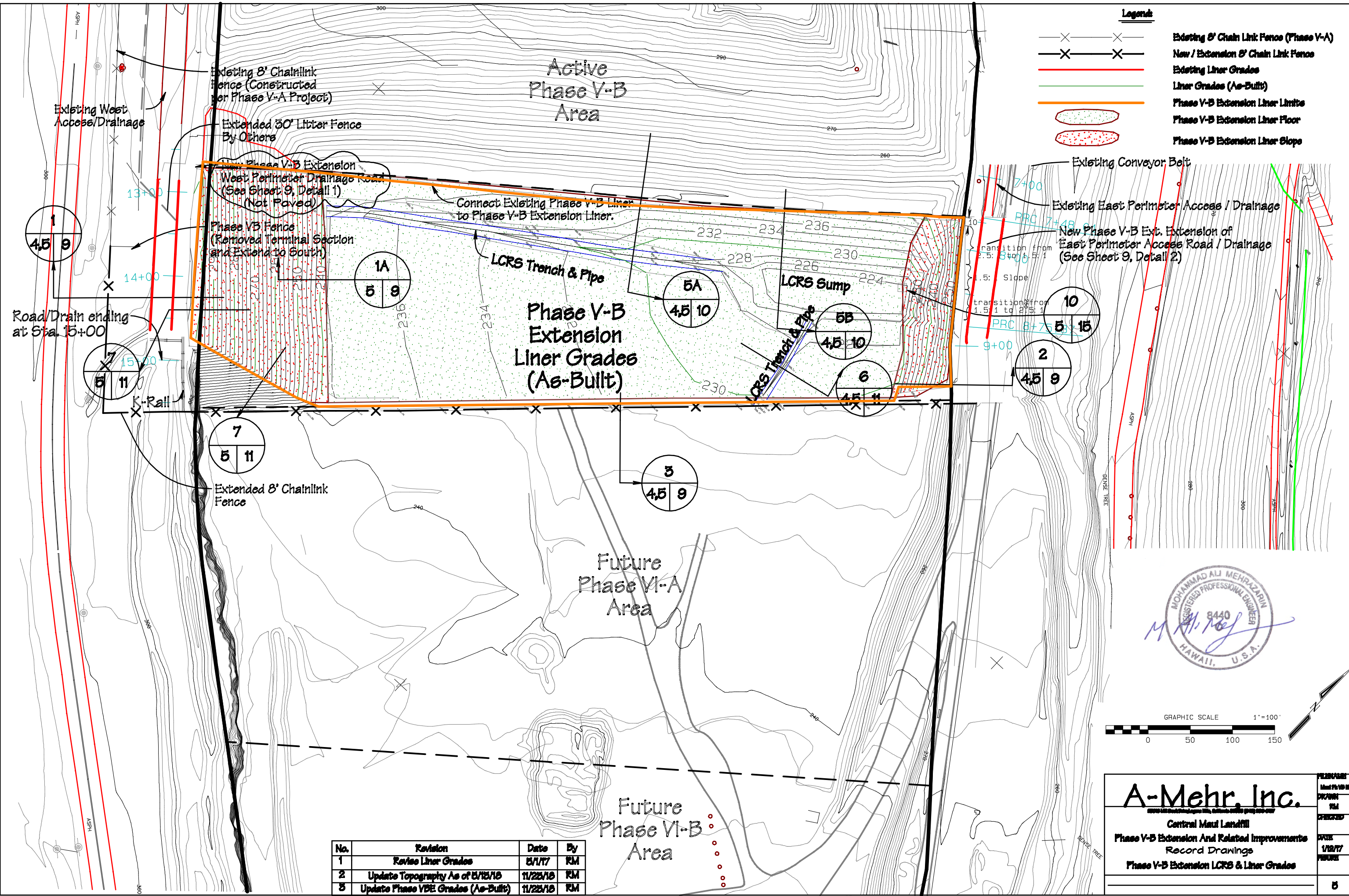
- 5/13/18 Topography Grades
- Liner Grades
- Final Refuse Grades

A-Mehr, Inc. <small>2000-2010 U.S. Patent & Trademark Office, All Rights Reserved (909) 949-0077</small> Central Maui Landfill Phase V-B Extension And Related Improvements Record Drawings Cross-Sections V-BE1 through V-BE4	<small>PREPARED</small> MAM/MSB
	<small>CHECKED</small> RM
	<small>DATE</small> 2/17/17
	<small>FIGURE</small> 4A

Active
Phase V-B
Area

Legend

- Existing 8' Chain Link Fence (Phase V-A)
- New / Extension 8' Chain Link Fence
- Existing Liner Grades
- Liner Grades (As-Built)
- Phase V-B Extension Liner Limits
- Phase V-B Extension Liner Floor
- Phase V-B Extension Liner Slope



No.	Revision	Date	By
1	Revise Liner Grades	5/1/17	RM
2	Update Topography As of 5/15/18	11/25/18	RM
3	Update Phase VBE Grades (As-Built)	11/25/18	RM

A-Mehr, Inc.
2000 US State Street, Suite 200, Honolulu, HI 96813

Central Maui Landfill
 Phase V-B Extension And Related Improvements
 Record Drawings
 Phase V-B Extension LCRS & Liner Grades

PREPARED: RM
 DRAWN: RM
 CHECKED: RM
 DATE: 1/21/17
 SHEETS: 5

Active
Phase V-B

HC-11E
LFG well

Existing Horizontal
Collector Tie-in (Typ.)

Header trench (Typ.)

HC-12E

LFG well

Extend buried 12" diameter SDR-17 HDPE
gas header pipe 25' to south. Terminate
with blind flange

New
Phase V-B
Extension

Limits of Stormwater
Basin liner

New Phase V-B Extension of
East Perimeter Access / Drainage

Soil Berm

New Phase V-B Extension of
West Perimeter Access / Drainage
(Not Paved)

Protective Soil layer
Grades 2 Feet above
Liner and LCRS Grades

Stormwater Basin
(lined area)

Future
Phase VI-A
Area

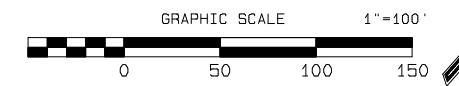
Future
Phase VI-B
Area

Legends

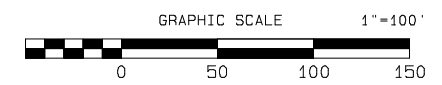
- Protective Soil Grades (Approximate)
- Liner Grades (As-Built)

Notes: Protective Soil Grades are approximate,
based on minimum depth of 3.0 feet above
liner grades as verified by CQA monitor in field.

See Sheet 15 for berm/basin details
11, 11A, 11B, 11C and 11D.



No.	Revision	Date	By
1	Add details 11, 11A, 11B, 11C and 11D	01/17/18	RM
A-Mehr, Inc.			
Central Maui Landfill			
Phase V-B Extension And Related Improvements Record Drawings			
Phase V-B Extension Protective Soil Grades			
			6



Legends:

- Protective Soil Grades
- Liner Grades (As-Built)
- D_e/W Toe of Slope

Notes:

1. Collectors C1 to C13 are Existing
2. Collectors C14 to C17 are Proposed

Controls

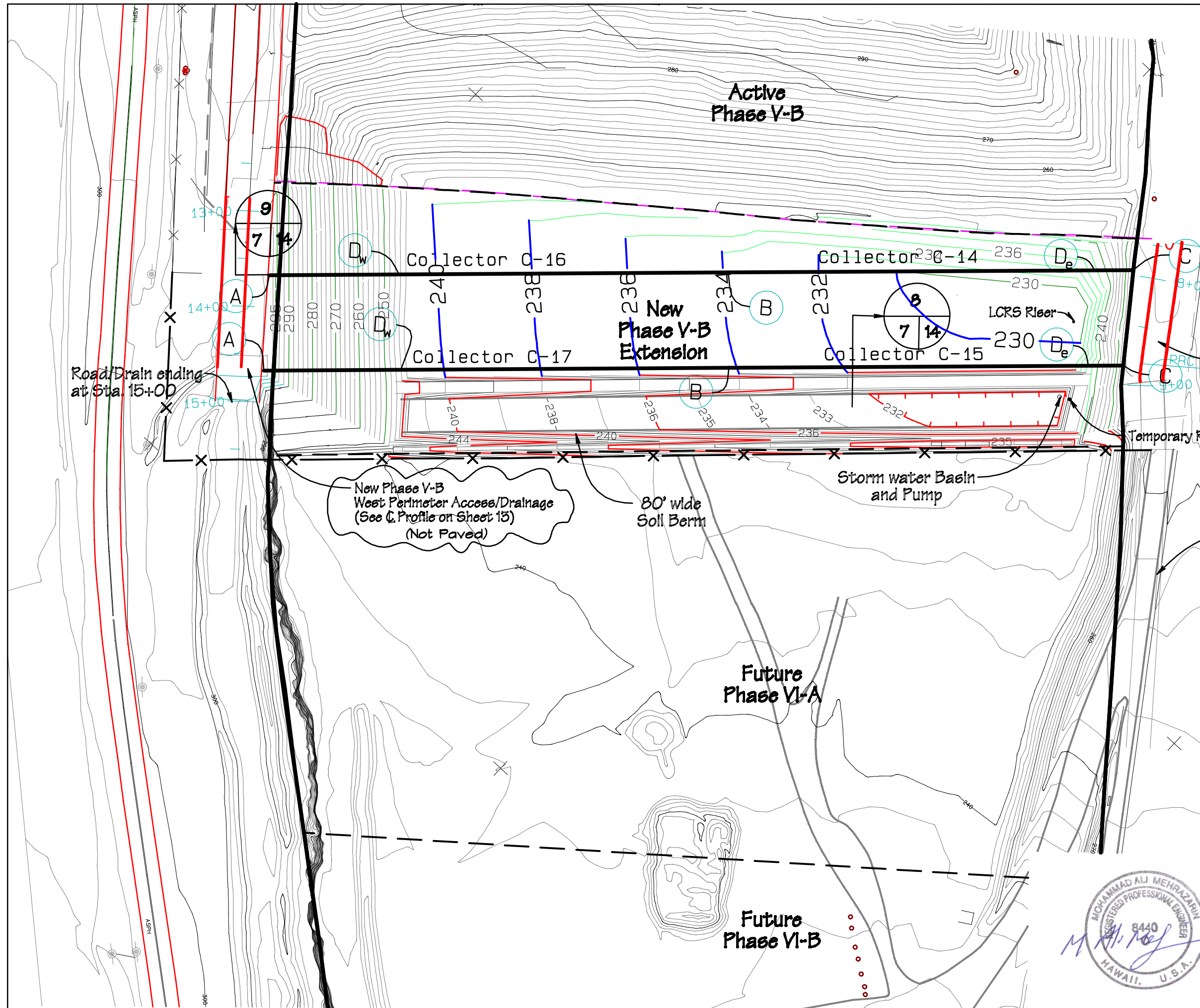
Collector	Point	Northing	Easting
C14 / C16	A	-15786.1443	-8429.4536
	D _w	-15695.0034	-8430.3042
	B	-15456.5723	-8178.6213
	D _e	-15193.4503	-7898.5256
	C	-15165.7905	-7869.0815
C15 / C17	A	-15863.4500	-8465.6921
	D _w	-15764.9890	-8360.8795
	B	-15529.4569	-8110.1535
	D _e	-15271.4161	-7835.4742
	C	-15246.1784	-7808.7225

No.	Revision	Date	By
1	Revise Proposed Gas Collectors	12/13/17	RM
2	Update Topography Grades As of 5/13/18	11/21/18	RM

A-Mehr, Inc.
2000 US Street, Suite 100, Honolulu, HI 96813

Central Maui Landfill
 Phase V-B Extension And Related Improvements
 Record Drawings
 Phase V-B Extension Horizontal Gas Collectors

PREPARED
 DRAWN
 CHECKED
 DATE
 1/12/17
 FIGURE
 7



Active
Phase V-B

New
Phase V-B
Extension

Future
Phase VI-A

Future
Phase VI-B

New Phase V-B
West Perimeter Access/Drainage
(See C Profile on Sheet 13)
(Not Paved)

80' wide
Soil Berm

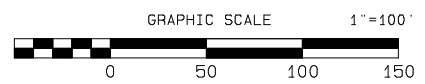
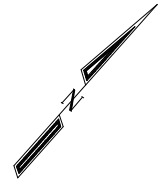
Storm water Basin
and Pump

Temporary Riser

Existing Conveyor Belt

Road/Drain ending
at Sta. 15+00

New East Perimeter Access/Drainage
(See C Profile on Sheet 12)



Active Phase V-A

Active Phase V-B

New Phase V-B Extension

Future Phase VI-A

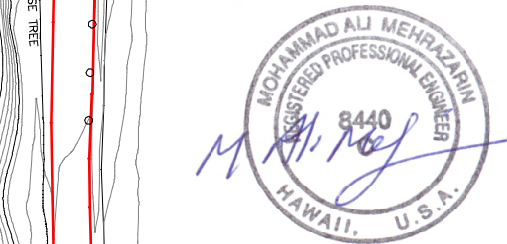
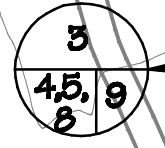
Soil Berm by Property Owner

Storm water Basin and Pump

Temporary Lined Area Basin Capacity = 280,000 Gallon

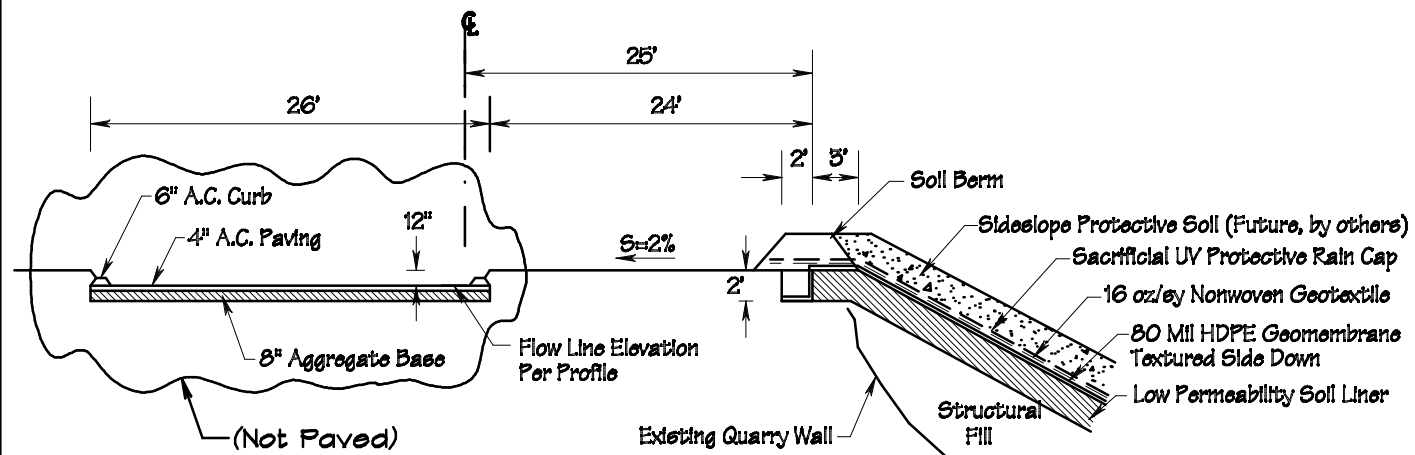
Temporary Riser

Temporary Basin Capacity 20,000 Gallon to 25,000 Gallon

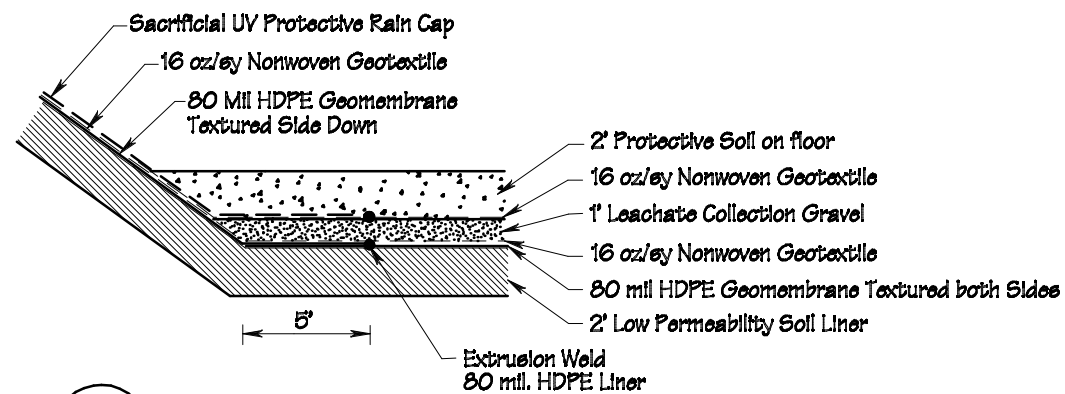


No.	Revision	Date	By
1	Revise Proposed Temporary Liner Termination	5/8/17	RM
2	Update Topography Grades As of 5/15/18	11/21/18	RM

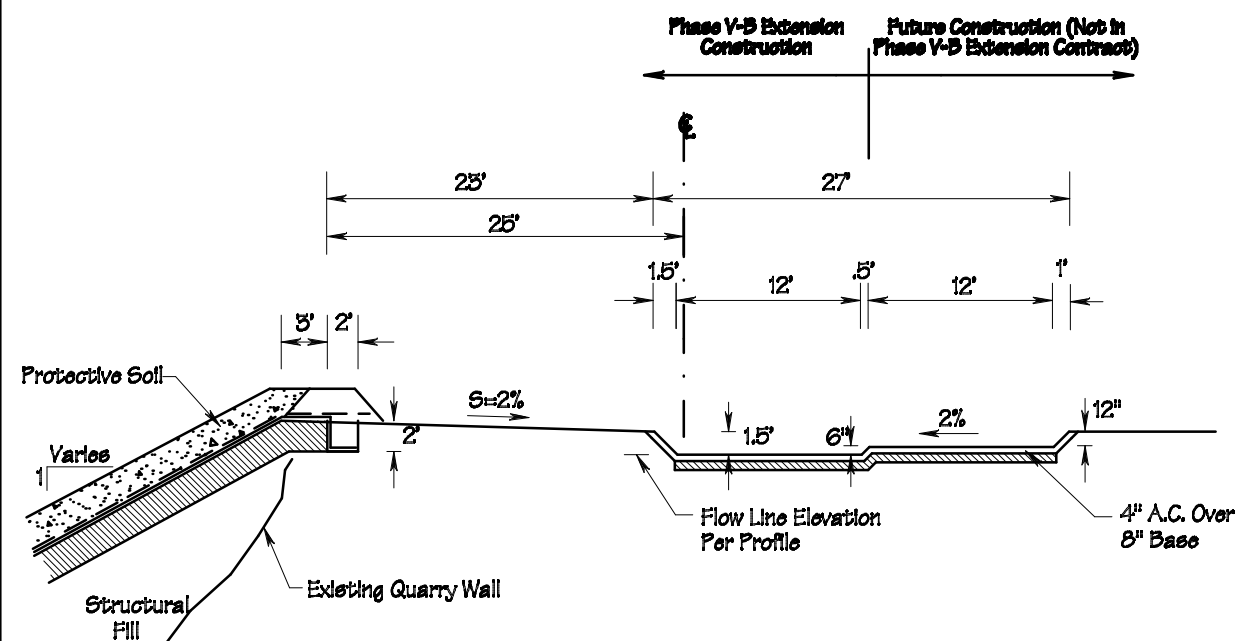
A-Mehr, Inc.		PREPARED
Central Maui Landfill		CHECKED
Phase V-B Extension And Related Improvements		DATE
Record Drawings		1/12/17
Phase V-B Extension Final Grades		FIGURE
(Not in Contract)		



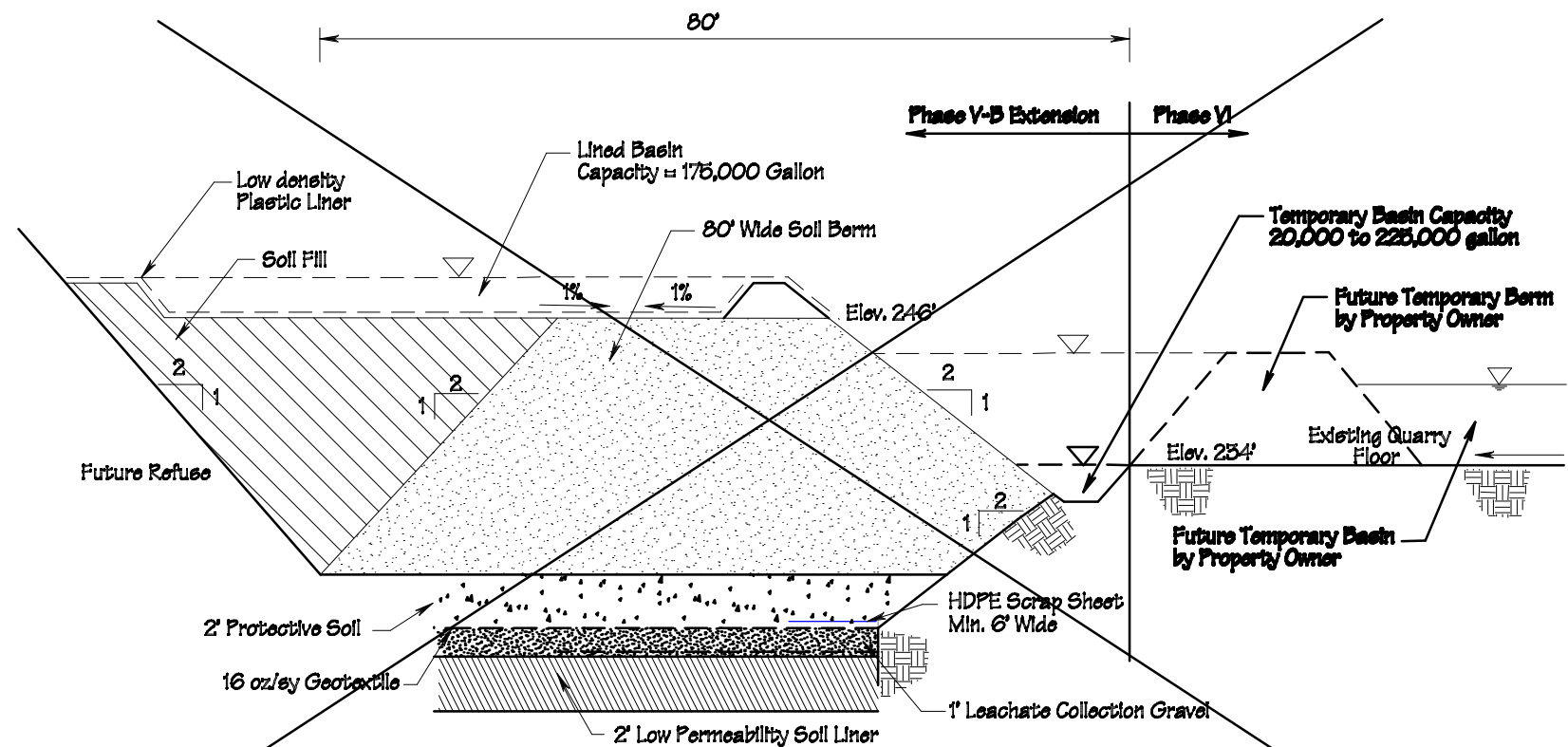
1
4.5 9
**West Sideslope Anchor Trench
And Perimeter Drainage Road**



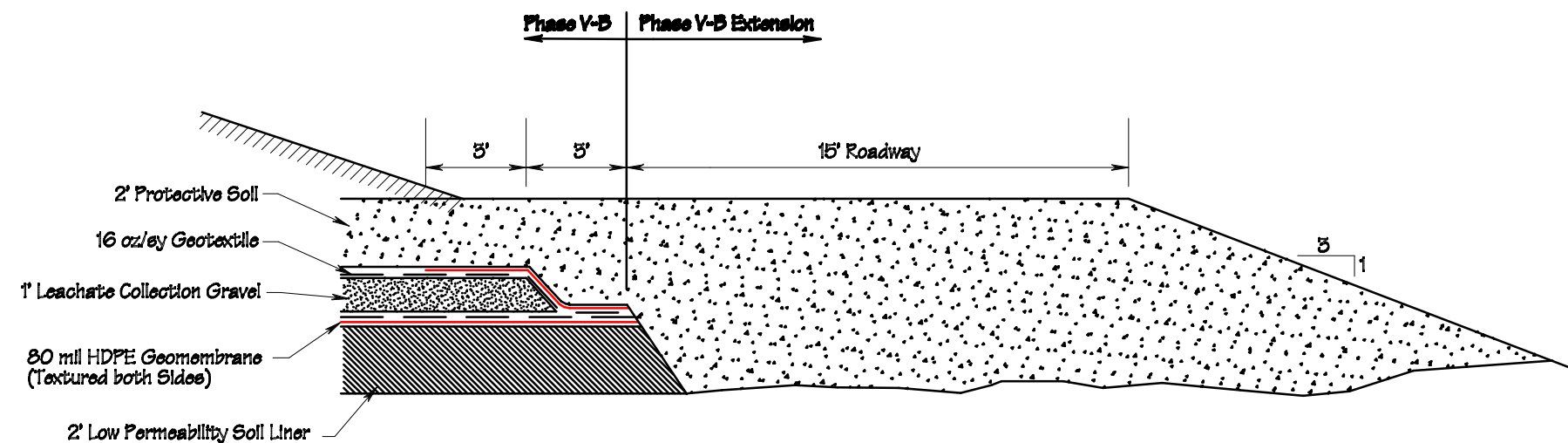
1A
5 9
Detail At Toe of Slope



2
4.5 9
East Sideslope and Perimeter Drainage Road



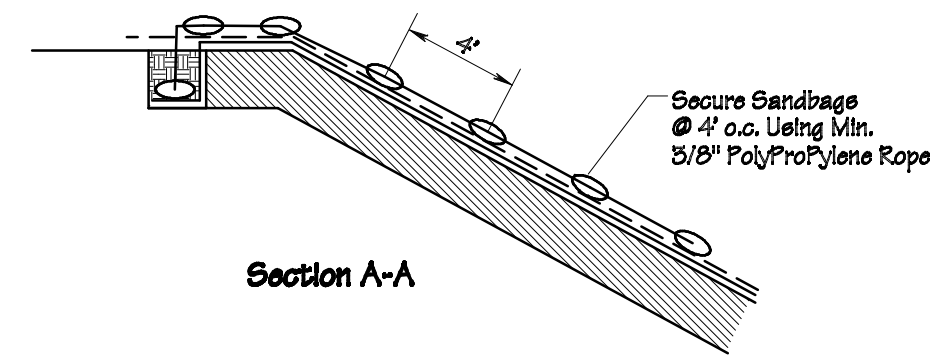
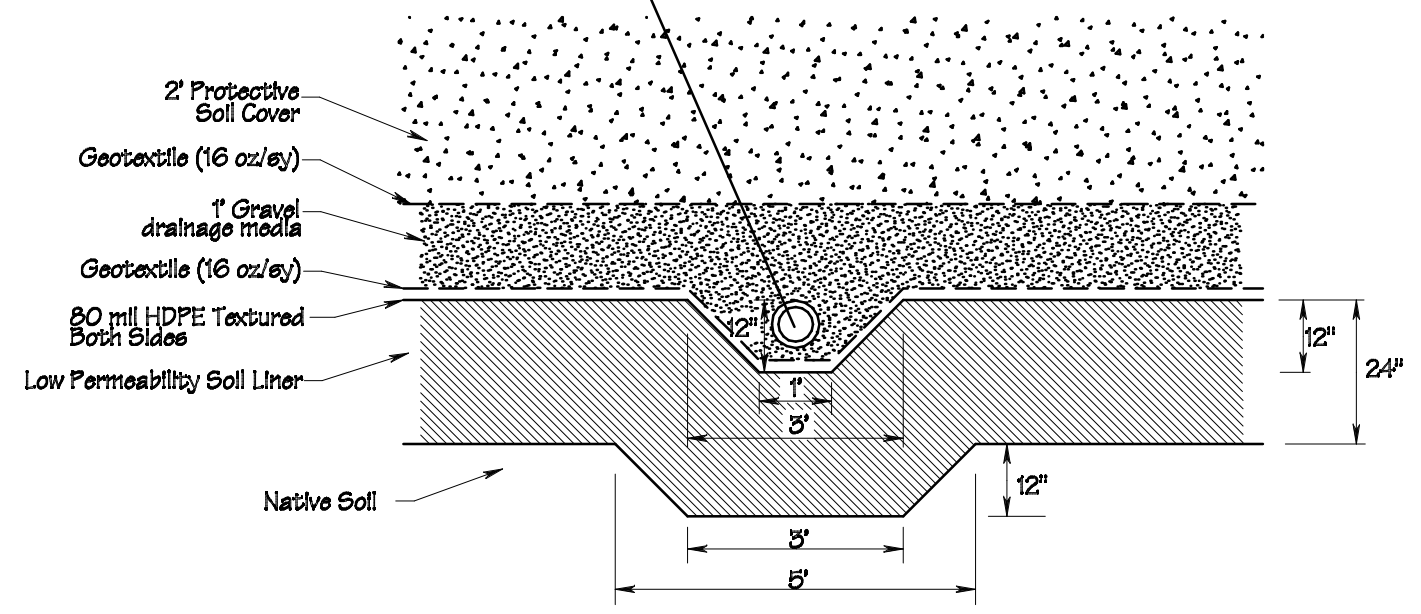
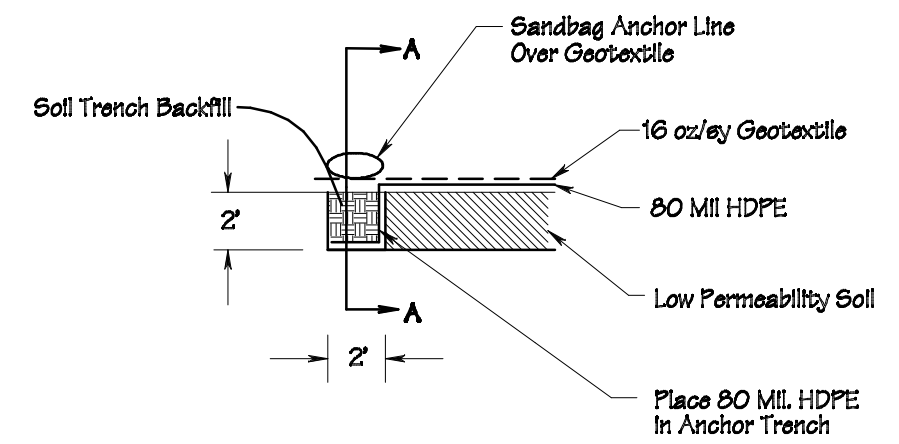
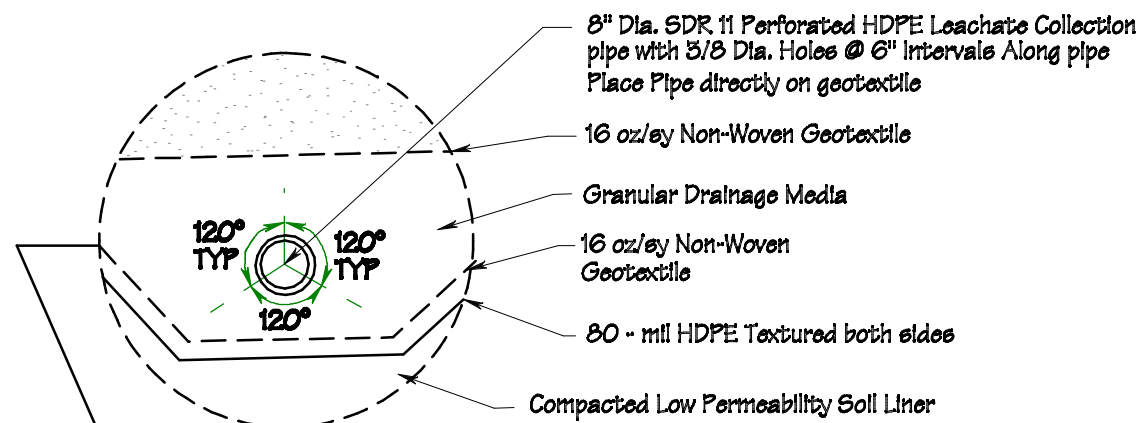
3
4.5 9
**Phase V-B Extension Temporary Liner Termination (Not used)
See Sheet 18**



4
5 9
**Phase V-B Temporary Liner Termination
And Separation Berm (As-Built)**



No.	Revision	Date	By
1	Revise Proposed Temporary Liner Termination	5/4/17	RM
A-Mehr, Inc. Central Maui Landfill Phase V-B Extension And Related Improvements Record Drawings Perimeter Access Road and Drainage Details			
			9

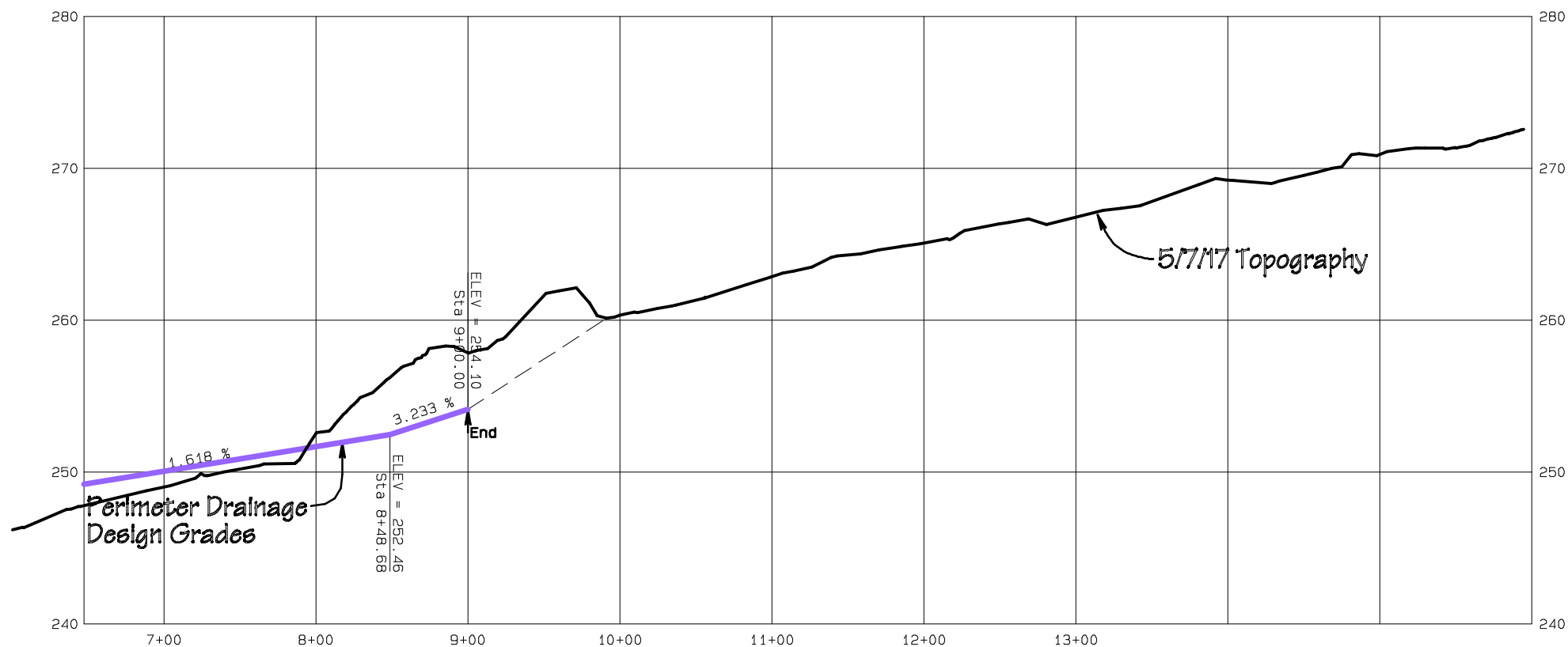
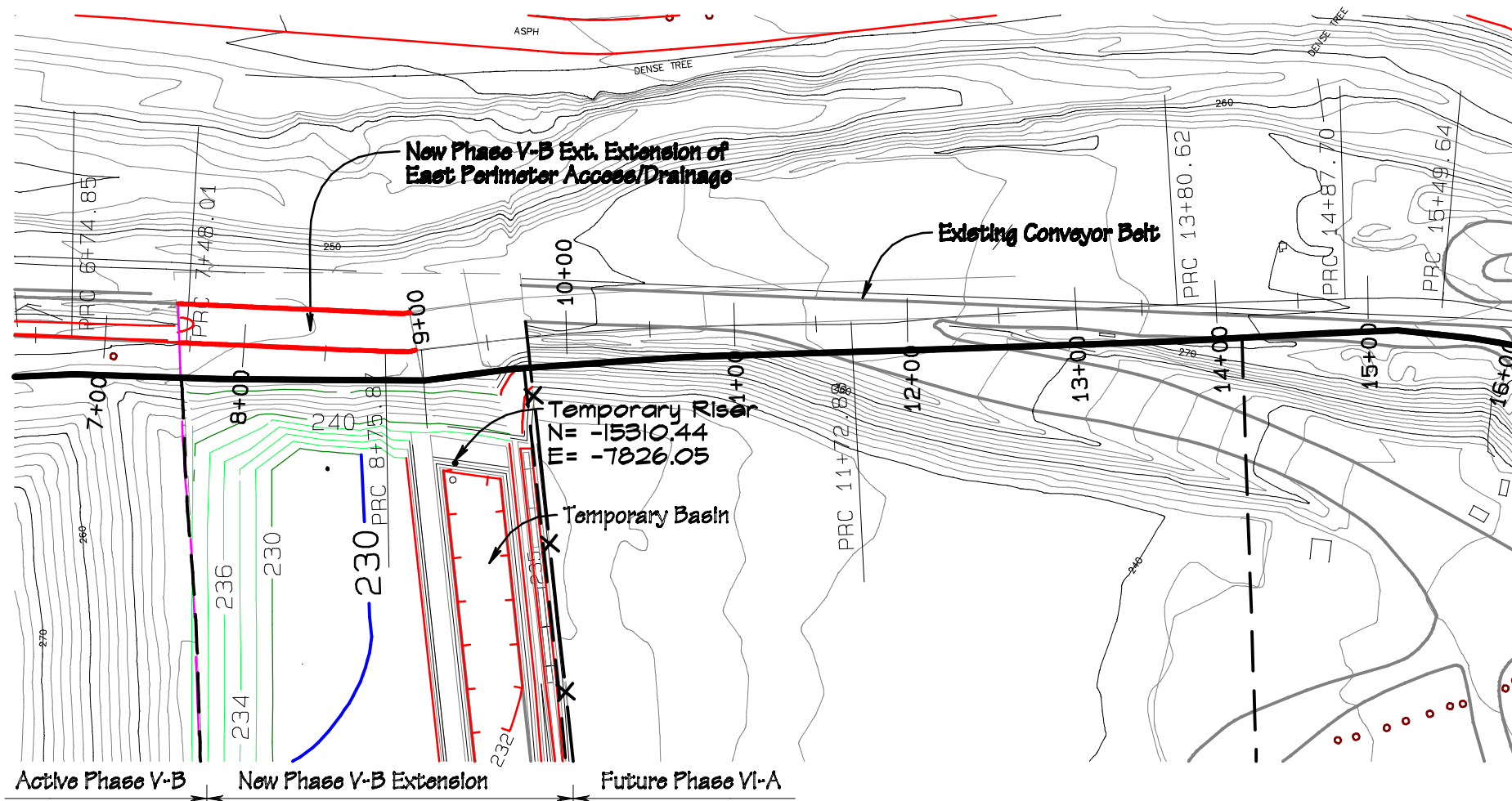


7
5 11 Temporary Liner Termination at Side Slope

6
4,5 11 LCRS Trench & Pipe



A-Mehr, Inc.		FILENAME
<small>2000-2010 Central Maui Landfill, LLC, All Rights Reserved (01/22/17)</small>		Mod job VS the
Central Maui Landfill		DRAWN
Phase V-B Extension And Related Improvements		RM
Record Drawings		CHECKED
Liner Details 2		DATE
		1/22/17
		FIGURE
		11



East Perimeter Drainage Plan & Profile



A-Mehr, Inc.		FILENAME
Central Maui Landfill		Manu-ph-VB-12a
Phase V-B Extension And Related Improvements		DRAWN
Record Drawings		RM
East Perimeter Drainage Plan & Profile		CHECKED
		DATE
		1/12/17
		FIGURE
		12