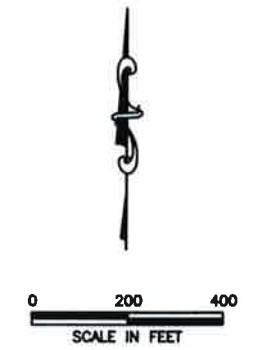
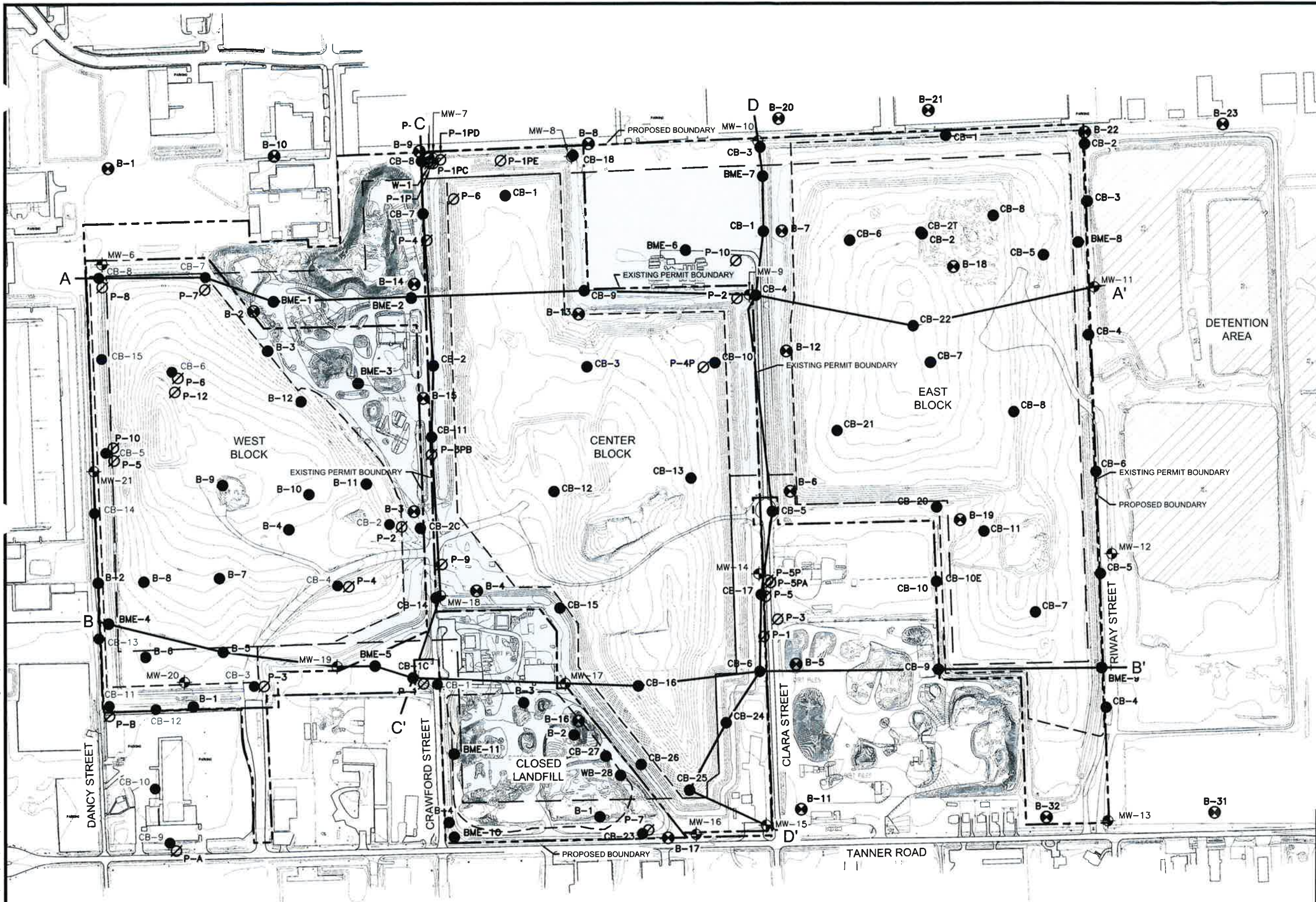


**HAWTHORN PARK LANDFILL  
APPENDIX III-4C**

Geologic Cross Section Location Map ..... III-4C-1  
Geologic Cross Sections A-A', B-B', C-C' and D-D' ..... III-4C-2 through III-4C-5

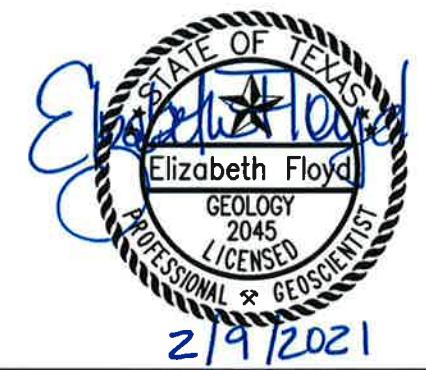


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- LEGEND**
- CURRENT PERMIT BOUNDARY
  - - - PROPOSED PERMIT BOUNDARY
  - CURRENT LIMIT OF WASTE
  - - - PROPOSED LIMIT OF WASTE
  - CB-8 SOIL BORING
  - ⊙ P-5 PIEZOMETER
  - ⊙ MW-8 MONITORING WELL
  - WASTE FOOTPRINT EXPANSION AREA (50 ACRES)

- NOTES:**
- EXISTING TOPOGRAPHIC MAP AND BORING LOCATIONS PROVIDED BY GOLDER ASSOCIATES.
  - LOCATIONS FOR BORINGS CB-1 THROUGH CB-8 DRILLED IN 1980 BY MCBRIDE-RATCLIFF AND ASSOCIATES, INC. WERE TAKEN FROM FIGURE 1 - PLAN OF BORINGS TAKEN FROM THE MSW-1448 PERMIT DOCUMENT.
  - LOCATIONS OF BORINGS B-1 THROUGH B-4 WERE TAKEN FROM PAGE A-1 BORING PLAN FROM THE 1977 SOUTHWESTERN LABORATORIES-SUBSURFACE INVESTIGATIONS REPORT.



**CROSS SECTION LOCATION MAP**  
**USA WASTE OF TEXAS LANDFILLS, INC.**  
**HAWTHORN PARK LANDFILL**  
**PERMIT AMENDMENT**

**BIGGS & MATHEWS**  
 ENVIRONMENTAL  
 CONSULTING ENGINEERS  
 MANSFIELD  
 DALLAS • WICHITA FALLS  
 817-563-1144

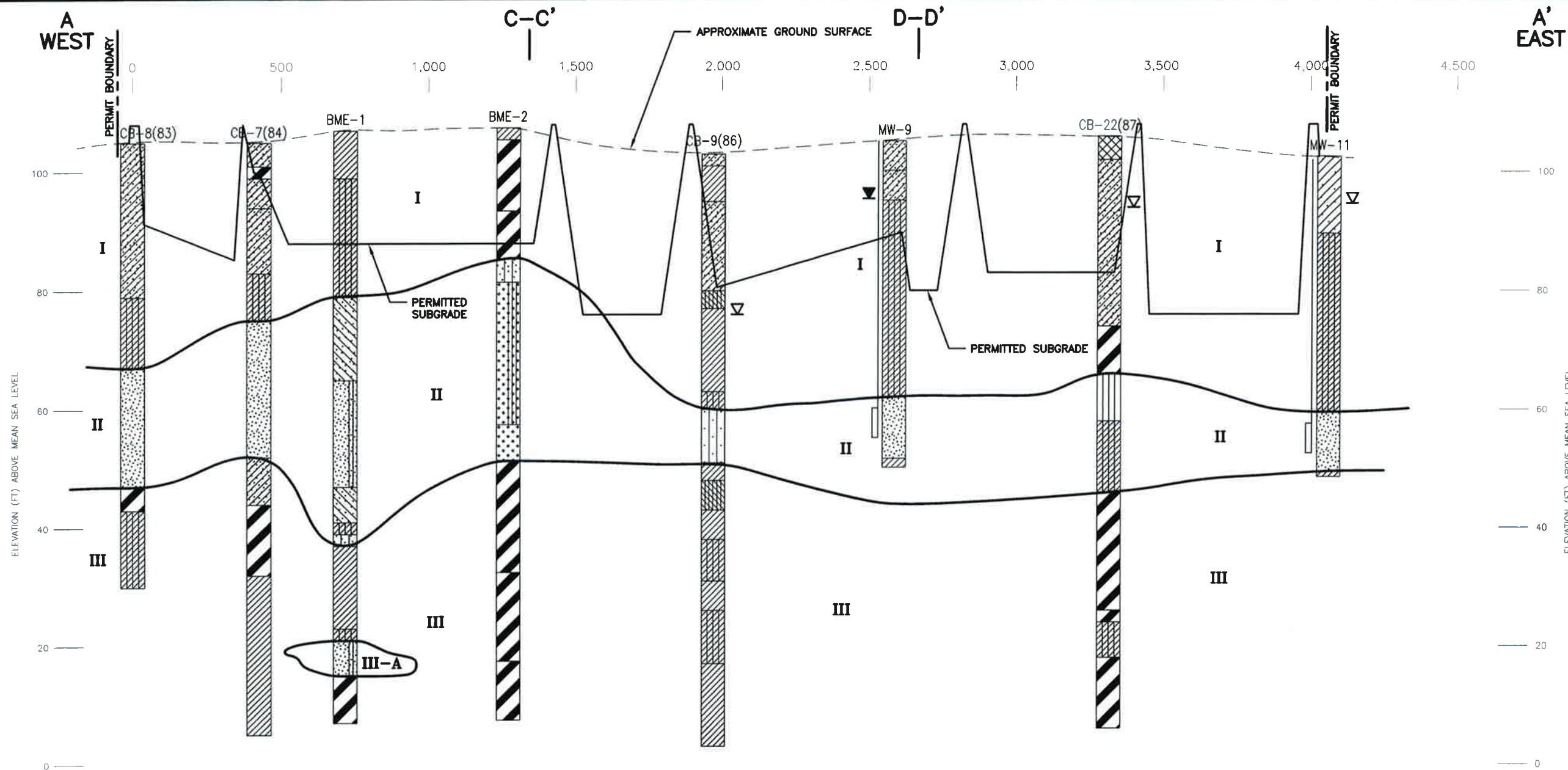
ISSUED FOR PERMITTING PURPOSES ONLY

REVISIONS				TBPG FIRM NO. F-256	TBPG FIRM NO. 50222	
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

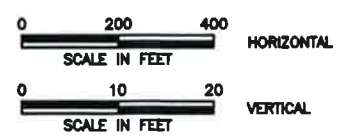
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DWN	SRC	SCALE	GRAPHIC	III-4C-1
CHK	ESF	DWG	III-4C-1_XSecLocPlan.dwg	



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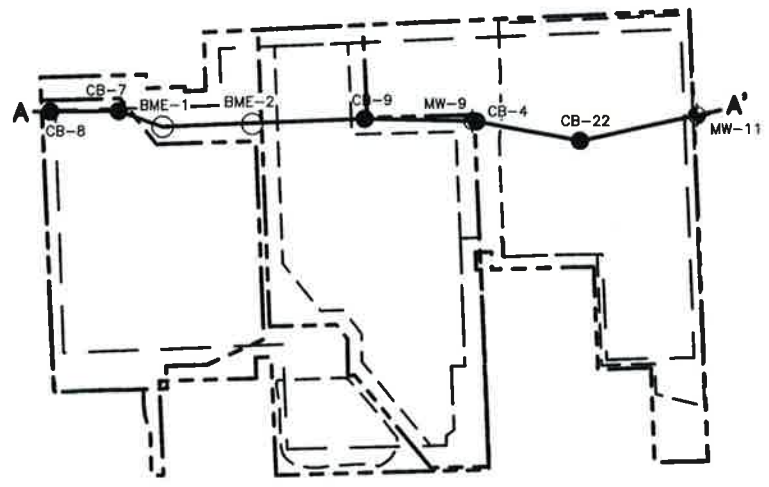


SECTION A-A' A



LEGEND

- Clay, Sandy
- Clay, Silty
- Clay (CH)
- Clay (CL)
- Fill
- Sand
- Sand, Clayey
- Sand, Silty
- Poorly graded sand with silt
- Silt
- Silt, Clayey
- Water level elevation observed during drilling
- Water level elevation observed on 12/17-18/2018



NOTES:

- CROSS SECTION A-A' IS GENERALLY IN THE SAME LOCATION AS THE PREVIOUS A-A' (INCLUDED IN APPENDIX E9). HOWEVER, THIS CROSS SECTION INCLUDES BORINGS DONE FOR THIS EXPANSION.
- SITE BASE GRADES PROVIDED BY GOLDER ASSOCIATES.



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**GEOLOGIC CROSS SECTION A - A'**

**USA WASTE OF TEXAS LANDFILLS, INC.**  
**HAWTHORN PARK LANDFILL**  
**PERMIT AMENDMENT**

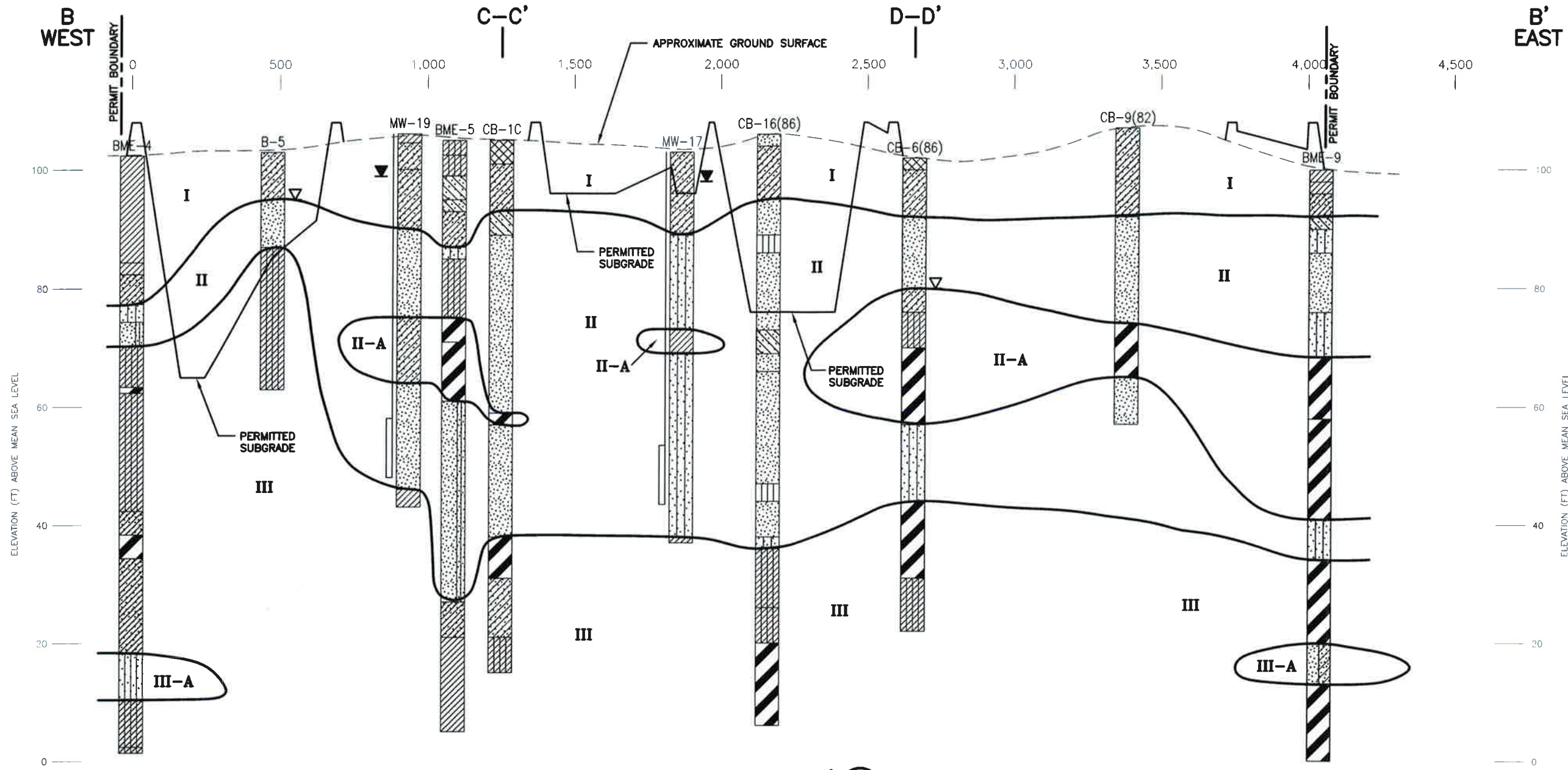


**BIGGS & MATHEWS**  
ENVIRONMENTAL  
CONSULTING ENGINEERS  
MANSFIELD  
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817-563-1144

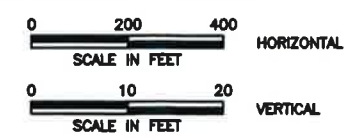
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REV	DATE	DESCRIPTION	DWN BY DES BY CHK BY APP BY
			CHK. JMS DWG : III-4C-2_SectionA-A.dwg

FIGURE  
**III-4C-2**

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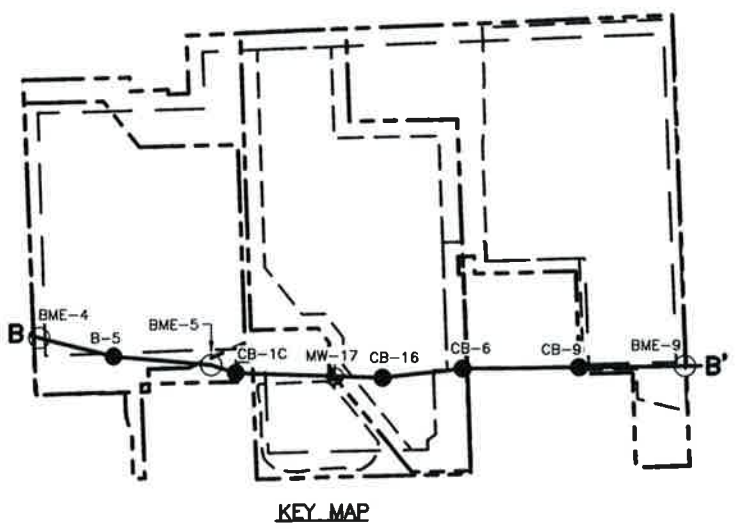


**SECTION B-B'**



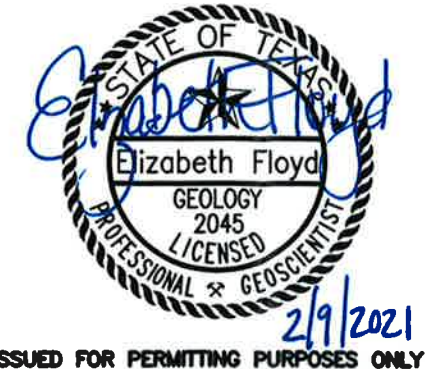
**LEGEND**

- Clay, Sandy
- Clay (CL)
- Sand, Silty
- Poorly graded sand with clay
- Sand, Clayey
- Clay (CL)
- Fill
- Water level elevation observed during drilling
- Water level elevation observed on 12/17-18/2018
- Sand
- Clay, Silty
- Poorly graded sand with silt



**NOTES:**

1. CROSS SECTION A-A' IS GENERALLY IN THE SAME LOCATION AS THE PREVIOUS B-B' (INCLUDED IN APPENDIX E9). HOWEVER, THIS CROSS SECTION INCLUDES BORINGS DONE FOR THIS EXPANSION.
2. SITE BASE GRADES PROVIDED BY GOLDER ASSOCIATES.



**GEOLOGIC CROSS SECTION B - B'**

**USA WASTE OF TEXAS LANDFILLS, INC.  
HAWTHORN PARK LANDFILL  
PERMIT AMENDMENT**



**BIGGS & MATHEWS  
ENVIRONMENTAL  
CONSULTING ENGINEERS  
MANSFIELD FALLS  
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817-563-1144**

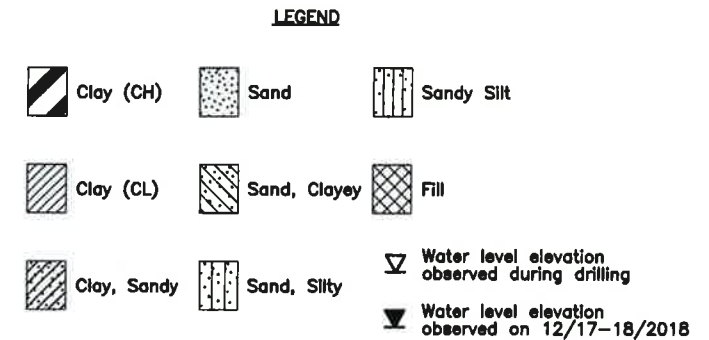
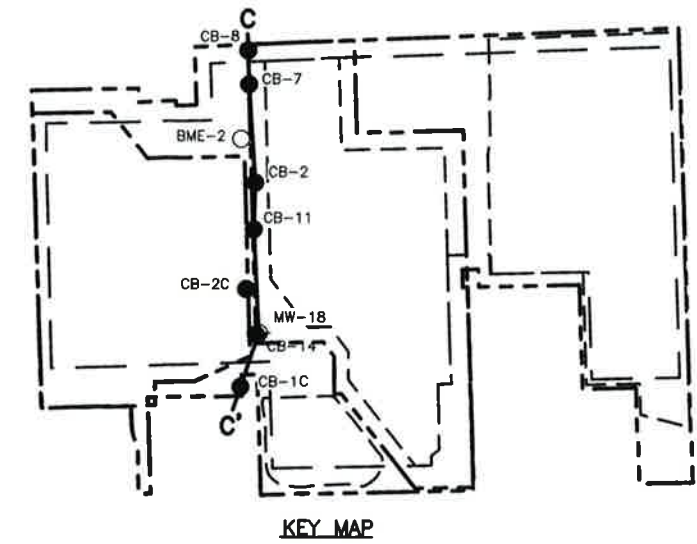
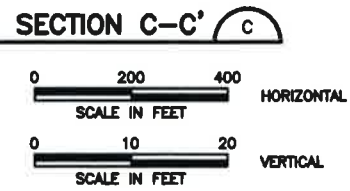
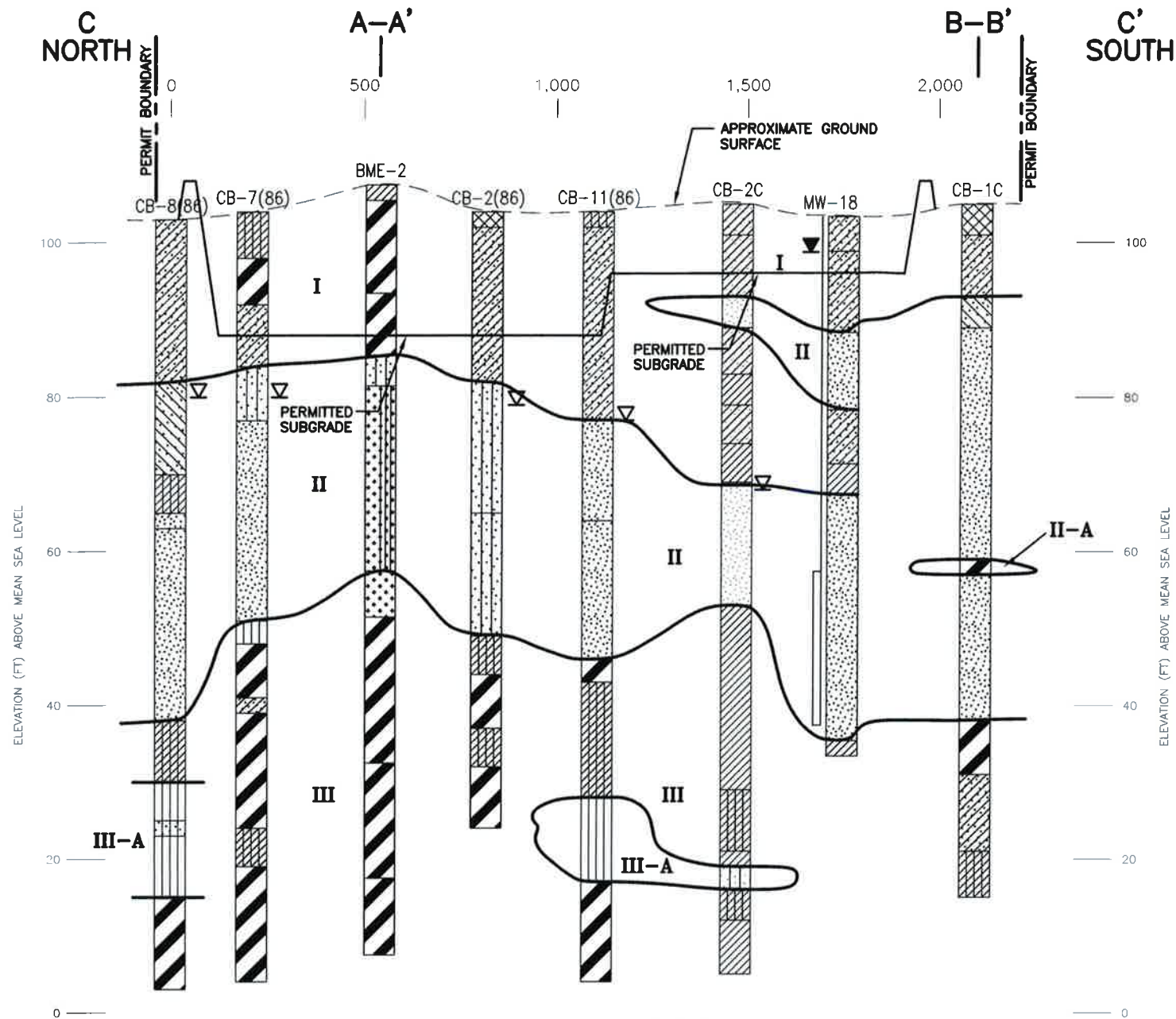
**ISSUED FOR PERMITTING PURPOSES ONLY**

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REV	DATE	DESCRIPTION	DWN BY DES BY CHK BY APP BY

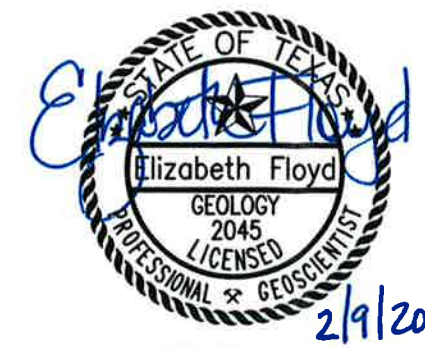
DSN. ESF	DATE : 01/2021	FIGURE
DWN. SRC	SCALE : GRAPHIC	<b>III-4C-3</b>
CHK. JMS	DWG : III-4C-3_SectionB-B.dwg	



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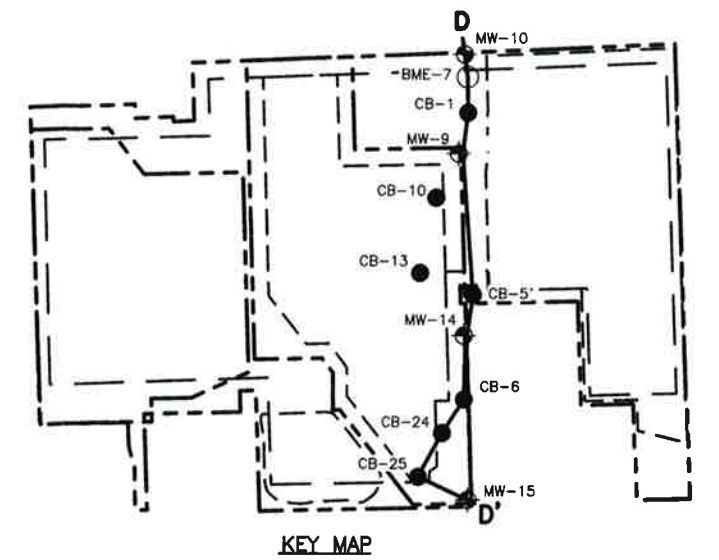
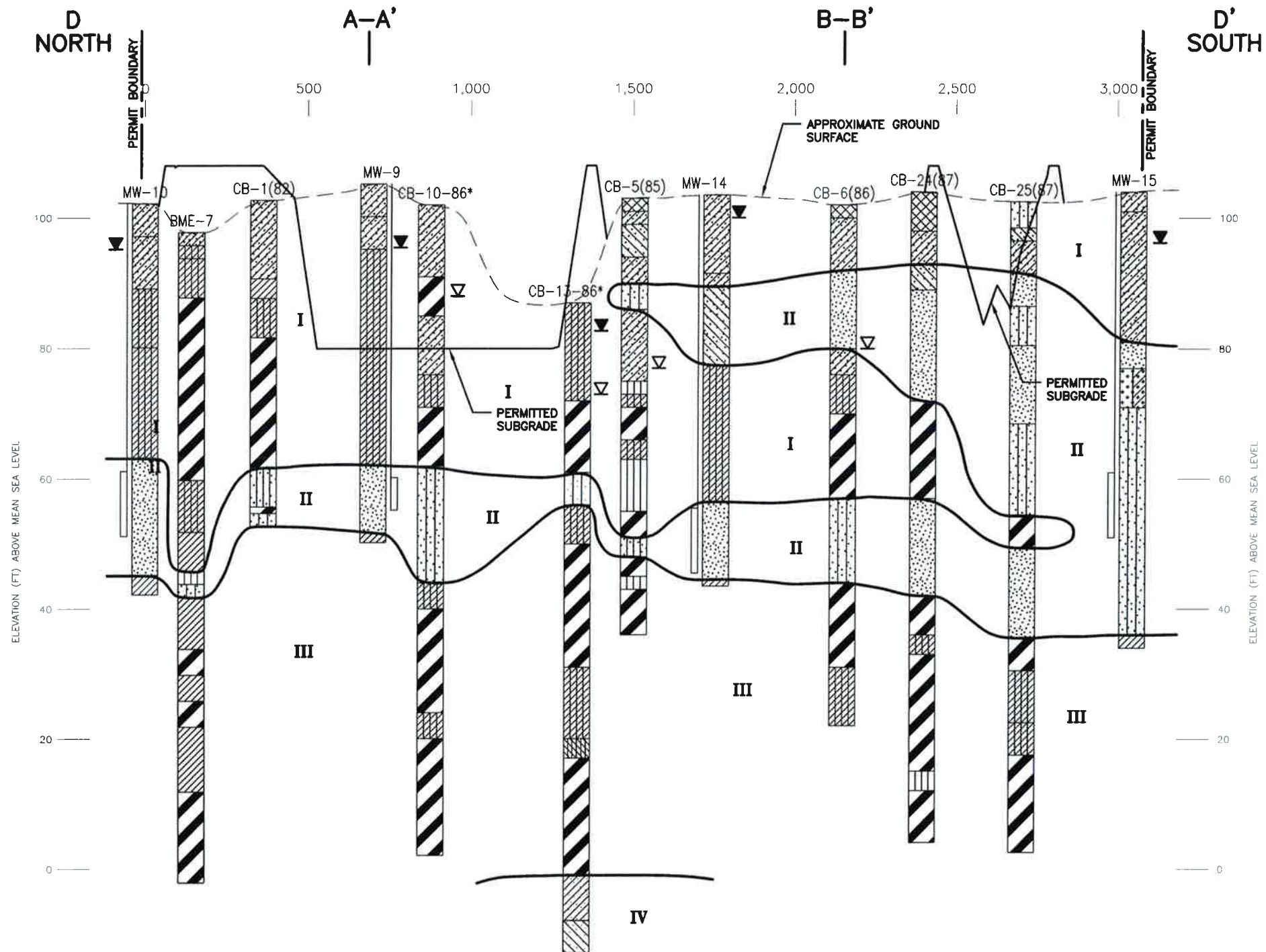
- NOTES:**
- CROSS SECTION A-A' IS GENERALLY IN THE SAME LOCATION AS THE PREVIOUS C-C' (INCLUDED IN APPENDIX E9). HOWEVER, THIS CROSS SECTION INCLUDES BORINGS DONE FOR THIS EXPANSION.
  - SITE BASE GRADES PROVIDED BY GOLDR ASSOCIATES.



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<b>GEOLOGIC CROSS SECTION C - C'</b>	
<b>USA WASTE OF TEXAS LANDFILLS, INC. HAWTHORN PARK LANDFILL PERMIT AMENDMENT</b>	
	BIGGS & MATHEWS ENVIRONMENTAL CONSULTING ENGINEERS MANSFIELD DALLAS • WICHITA FALLS 817-563-1144
REVISIONS	TBPE FIRM NO. F-256      TBPG FIRM NO. 50222
DSN. ESF      DATE : 01/2021	FIGURE
DWN. SRC      SCALE : GRAPHIC	<b>III-4C-4</b>
CHK. JMS      DWG : III-4C-4_SectionC-C.dwg	

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**LEGEND**

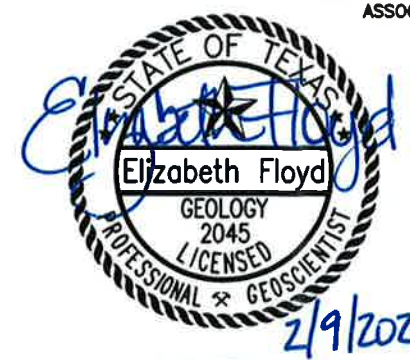
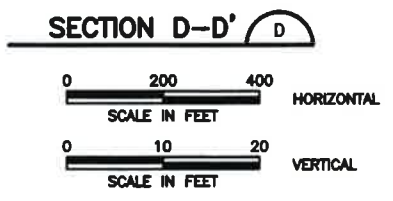
Clay (CH)	Clay, Silty	Well-graded Sand with Clay	Silt
Clay (CL)	Sand	Sand, Silty	Silt, Clayey
Clay, Sandy	Sand, Clayey	Sandy Silt	Fill

\* Borings CB-10-86 and CB-13-86 were projected onto the line of section.

▽ Water level elevation observed during drilling

▼ Water level elevation observed on 12/17-18/2018

- NOTES:**
- CROSS SECTION A-A' IS GENERALLY IN THE SAME LOCATION AS THE PREVIOUS D-D' (INCLUDED IN APPENDIX E9). HOWEVER, THIS CROSS SECTION INCLUDES BORINGS DONE FOR THIS EXPANSION.
  - SITE BASE GRADES PROVIDED BY GOLDER ASSOCIATES.



**GEOLOGIC CROSS SECTION D - D'**

**USA WASTE OF TEXAS LANDFILLS, INC.**  
**HAWTHORN PARK LANDFILL**  
**PERMIT AMENDMENT**

**BIGGS & MATHEWS**  
**ENVIRONMENTAL**  
**CONSULTING ENGINEERS**  
 MANSFIELD  
 DALLAS • WICHITA FALLS  
 817-563-1144

REVISIONS						TBPE FIRM NO. F-256	TBPG FIRM NO. 50222
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY	FIGURE
							III-4C-5

DSN : ESF DATE : 01/2021  
 DWN : SRC SCALE : GRAPHIC  
 CHK : JMS DWG : III-4C-5\_SectionD-D.dwg