

Part III  
Attachment III-D  
Appendix III-D.5

# GEOTECHNICAL ANALYSES REPORT

Pescadito Environmental Resource Center  
MSW No. 2374  
Webb County, Texas

# PESCADITO

ENVIRONMENTAL RESOURCE CENTER

Initial Submittal MARCH 2015

Revised SEPTEMBER 2015

Revised August 2016

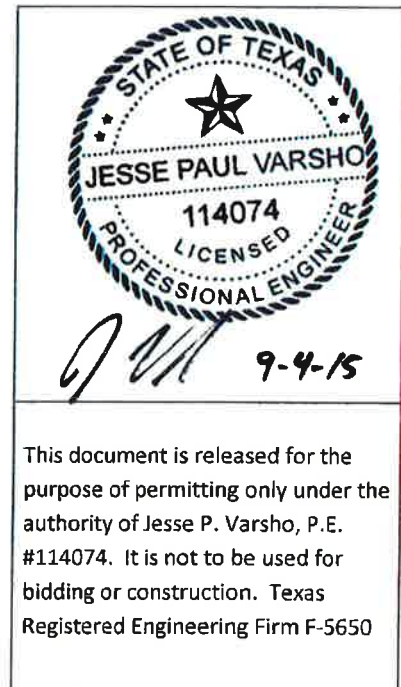
Prepared for:

Rancho Viejo Waste Management, LLC  
1116 Calle del Norte  
Laredo, TX 78041

Prepared by:



**CB&I Environmental & Infrastructure, Inc.**  
12005 Ford Rd, Suite 600  
Dallas, TX 75234



This document is released for the purpose of permitting only under the authority of Jesse P. Varsho, P.E. #114074. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650

This document is released for the purpose of permitting only under the authority of Michael W. Oden, P.E. #67165. **It has been updated to include new Appendix III-D.5-7 only.** No other revisions have been made. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650.

**Part III  
Attachment III-D  
Appendix III-D.5  
GEOTECHNICAL ANALYSES REPORT**

**TABLE OF CONTENTS**

**Introduction..... 1**

**Organization of Report..... 1**

**Slope Stability Analyses ..... 2**

Short-Term and Long-Term Shear Strength Under Static Conditions..... 2

Critical Cross Section ..... 2

Modeled Stability Scenarios ..... 3

Slope Stability Results ..... 3

**Foundation Bearing Capacity Analyses..... 4**

**Landfill Foundation Settlement, Waste Settlement, and Soil Liner Strain Analyses ..... 5**

Foundation Settlement and Soil Liner Strain ..... 5

Waste Settlement ..... 5

**Final Cover Stability Analysis ..... 6**

**Sideslope Liner Runout Analyses (with and without an Anchor Trench) ..... 6**

**APPENDICES**

Appendix III-D.5-1      Summary of Geotechnical Design Parameters

Appendix III-D.5-2      Slope Stability Analyses

Appendix III-D.5-3      Foundation Bearing Capacity Analyses

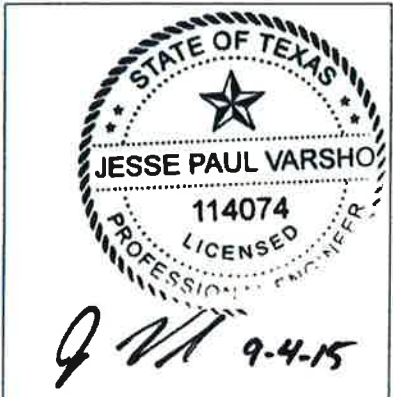
Appendix III-D.5-4      Landfill Foundation Settlement, Waste Settlement,  
and Soil Liner Strain Analyses

Appendix III-D.5-5      Final Cover Stability Analysis

Appendix III-D.5-6      Sideslope Liner Runout Analyses  
(with and without an Anchor Trench)

Appendix III-D.5-7      Slope Stability Analysis with Flexible Membrane Cover

This document is released for the purpose of permitting only under the authority of Michael W. Oden, P.E. #67165. **It has been updated to include new Appendix III-D.5-7 only.** No other revisions have been made. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650.

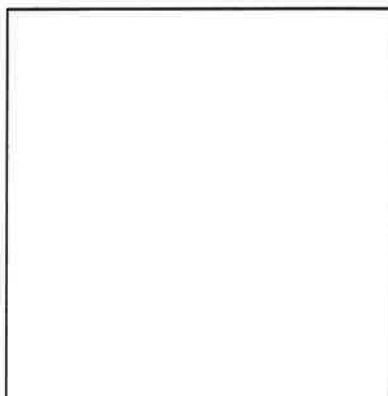


This document is released for the purpose of permitting only under the authority of Jesse P. Varsho, P.E. #114074. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650

## GEOTECHNICAL ANALYSES REPORT APPENDICES

- APPENDIX III-D.5-1 SUMMARY OF GEOTECHNICAL DESIGN PARAMETERS
- APPENDIX III-D.5-2 SLOPE STABILITY ANALYSES
- APPENDIX III-D.5-3 FOUNDATION BEARING CAPACITY ANALYSES
- APPENDIX III-D.5-4 LANDFILL FOUNDATION SETTLEMENT, WASTE SETTLEMENT, AND LINER STRAIN ANALYSES
- APPENDIX III-D.5-5 FINAL COVER STABILITY ANALYSIS
- APPENDIX III-D.5-6 SIDESLOPE LINER RUNOUT ANALYSES

APPENDIX III-D.5-7 FINAL COVER STABILITY ANALYSIS  
WITH FLEXIBLE MEMBRANE LINER



This document is released for the purpose of permitting only under the authority of Michael W. Oden, P.E. #67165. **It has been updated to include new Appendix III-D.5-7 only.** No other revisions have been made. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650.

