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October 6, 2016

Mr. Dwight Russell, P.E.
Municipal Solid Waste Permits Section – MC 124
Texas Commission on Environmental Quality
12100 Park 35 Circle · Bldg. F
Austin, Texas 78753

Re: Pescadito Environmental Resource Center - Webb County
Municipal Solid Waste (MSW) Permit Application No. 2374
Technically Complete Permit Application Supplement Number 2

Dear Mr. Russell;

CB&I Environmental and Infrastructure, Inc. (CB&I) is providing the attached information to supplement the referenced permit application which was declared technically complete on March 11, 2016. We are providing these changes in order to make the application abundantly clear in light of our recent conversations. The specific modifications are as follows:

Part II

Figure 5 in Part II has been updated to show the current cell configuration. A revised cover page, table of contents and Figure 5 are provided for replacement in Part II.

Part III, Attachment III-B – GENERAL FACILITY DESIGN

The location of access control measures have been more fully explained in Section 1.0 of Attachment III-B and are shown on Figure III-B.1-2. Information demonstrating compliance with 330.331(e)(3) has also been added to Section 2.2 of Part III, Attachment III-B. Clarifying details have been added to Figure III-B.1-5 to illustrate runoff control measures at the liquid solidification basins. A revised cover page, table of contents and Pages 1, 5, 6 and 7 are provided for replacement in Attachment III-B. Page 7 is being included due to pagination issues resulting from the inserted text. A revised cover page, table of contents and Figures III-B.1-2 and III-B.1-5 are provided for replacement in Appendix III-B.1.

Part III, Attachment III-D – WASTE MANGEMENT UNIT DESIGN

Clarifying language has been added to Section 1.1 of Attachment III-D to indicate that a permit modification will be requested and approved for the 50,000 gallon storage tank for liquid waste prior to installation and use. A revised cover page, table of contents and Page 2 are provided for replacement in Attachment III-D.

The Leachate and Contaminated Water Plan (Appendix III-D.6) has been updated to indicate the maximum level of leachate will be the lowest elevation of the landfill floor adjacent to the sump. A revised cover page, table of contents and Page 5 are provided for replacement in Appendix III-D.6.

Part III, Attachment III-F - GROUNDWATER MONITORING PLAN

The point of compliance and associated groundwater monitoring wells along the southern boundary of the south unit has been adjusted to be within 500-feet of the waste management unit. The point of compliance and associated groundwater monitoring wells has been added along the southern boundary of the north unit. An installation schedule for the groundwater monitoring wells has been provided on Figure III-F.1-1 as suggested. A revised cover page, table of contents and Figures III-F.1-1 and III-F.1-2 are provided for replacement in Appendix III-F.1.

Part III, Attachment III-G – LANDFILL GAS MANAGEMENT PLAN

An installation schedule for the landfill gas probes has been provided on Figure III-G.1-1 as suggested. A revised cover page, table of contents and Figure III-G.1-1 are provided for replacement in Appendix III-G.1.

Part IV – SITE OPERATING PLAN

The use of treated water from the liquids processing facility at the active (working) face has been removed from the Site Operating Plan in two locations (Pages 41 and 54). The SOP has been clarified to indicate that solidified Class 1 liquids can only be disposed in approved Class 1 cells (Page 55). Additionally, clarifying language has been added to Page 2 of Attachment IV-B of Part IV to indicate that any alternate daily cover to be used requires TCEQ approval. A revised cover page, table of contents and Pages 41, 54, 55 and IV-B-2 are provided for replacement in Part IV.

Our submittal is formatted as follows:

- Attachment A contains a new signature page from the Part 1 form and a revised Master Table of Contents.
- Attachment B contains the original version of the changed pages.
- Attachment C contains a redline version of the changed pages.
- Attachment D contains three (3) copies of the original changed pages found in Attachment B.

The information provided in this submittal has also been sent to the Laredo Public Library and uploaded to the web site at www.pescaditoerc.com. We trust this information is clear and complete; however, should you need additional information, please let us know.

Sincerely,

CB&I Environmental and Infrastructure, Inc.

TBPE Firm F-5650



Michael W. Oden, P.E.

Project Manager

Attachments

- A – Part 1 Form Signature Page, Master Table of Contents
- B – Original Replacement pages
- C – Redline/Strikeout version of changed pages
- D – Three copies of changed pages (TCEQ only)

CC: Mr. Carlos Y. Benavides III
Mr. William W. Thompson
Mr. Geoffrey S. Connor

Attachment A
to October 2016 Supplement Letter (MSW 2374)

Part I Form Signature Page and
Revised Master Table of Contents

Signature Page

I, Carlos Y. Benavides, III, Manager
(Site Operator (Permittee's Authorized Signatory)) (Title)

certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature: *Carlos Y. Benavides III* Date: 10-5-2016

TO BE COMPLETED BY THE OPERATOR IF THE APPLICATION IS SIGNED BY AN AUTHORIZED REPRESENTATIVE FOR THE OPERATOR

I, _____, hereby designate _____
(Print or Type Operator Name) (Print or Type Representative Name)

as my representative and hereby authorize said representative to sign any application, submit additional information as may be requested by the Commission; and/or appear for me at any hearing or before the Texas Commission on Environmental Quality in conjunction with this request for a Texas Water Code or Texas Solid Waste Disposal Act permit. I further understand that I am responsible for the contents of this application, for oral statements given by my authorized representative in support of the application, and for compliance with the terms and conditions of any permit which might be issued based upon this application.

Printed or Typed Name of Operator or Principal Executive Officer

Signature

SUBSCRIBED AND SWORN to before me by the said Carlos Y. Benavides III

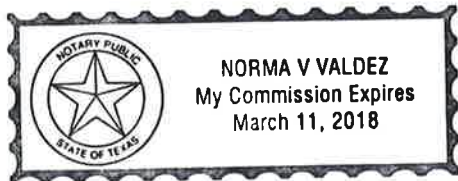
On this 5th day of October, 2016

My commission expires on the 11th day of March, 2018

Norma V. Valdez
Notary Public in and for
Webb

County, Texas

(Note: Application Must Bear Signature & Seal of Notary Public)



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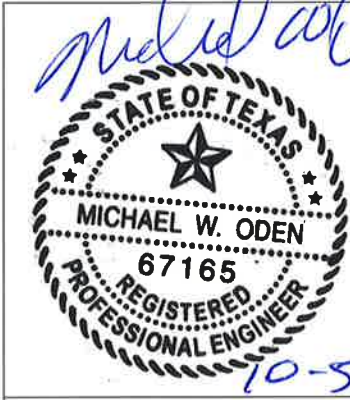
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10-5-2016

This document is released for the purpose of permitting only under the authority of Michael W. Oden, P.E. #67165. It is not to be used for bidding or construction. Texas Registered Engineering Firm F-5650.

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Monitoring System and Site Layout Plan

PART II
APPLICATION FOR PERMIT
TYPE I MUNICIPAL SOLID WASTE FACILITY
MSW PERMIT NO. 2374

PESCADITO ENVIRONMENTAL
RESOURCE CENTER

SOLID WASTE MANAGEMENT AND
DISPOSAL FACILITY
RANCHO VIEJO WASTE MANAGEMENT, LLC
LAREDO, WEBB COUNTY, TEXAS

Sections 1.1, 1.2, 2.1.4, 10.1—10.4, 11.1 –
Signed by H.C. Clark, P.G., Ph.D. on Feb. 7,
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Revised on June 12, 2014 by:



Shaw Environmental, Inc. (a CB&I company)
TBPE Firm Registration No. F-5650
and

H.C. Clark P.G., Ph.D. for Sections 1.2, 2.1.4 and 11.1



Revised July 25, 2014; April 20, 2015; September 2015; Technically Complete March 11, 2016

Modified October 2016 By:

CB&I Environmental and Infrastructure, Inc.
TBPE Firm Registration No. F-5650

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Sections 1.1, 1.2, 2.1.4, 10.1—10.4,
11.1 – Signed by H.C. Clark, P.G.,
Ph.D. on Feb. 7, 2012

Except for Sections 1.1, 1.2, 2.1.4,
10.1—10.4 and 11.1 – remaining
portions of Part II through February
17, 2012 revisions were signed/sealed
by James F. Neyens, P.E. on
February 24, 2012.

Revised June 12, 2014

H.C. Clark P.G., Ph.D. for Sections 1.2, 2.1.4 and 11.1

And

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- Figure 2 Wind Rose Map
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- Attachment A T&E Species and Wetlands Assessment
- Attachment B TxDOT Coordination
- Attachment C Texas Historical Commission Review
- Attachment D Cultural Resources Review
- Attachment E Local Agency Coordination
- Attachment F Federal Aviation Administration Coordination
- Attachment G 100-Year Floodplain Coordination
- Attachment H TPDES Certification
- Attachment I Oil Well Affidavit



Sections 1.1, 1.2, 2.1.4, 10.1—10.4,
11.1 – Signed by H.C. Clark, P.G.,
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Except for Sections 1.1, 1.2, 2.1.4,
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17, 2012 revisions were signed/sealed
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24, 2012.

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H.C. Clark P.G., Ph.D. for Sections 1.2, 2.1.4 and 11.1

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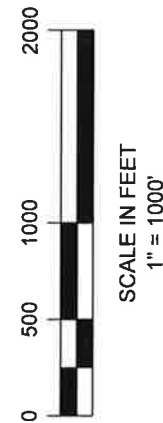
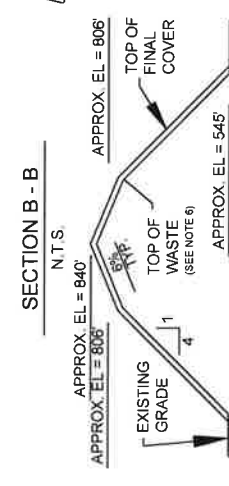
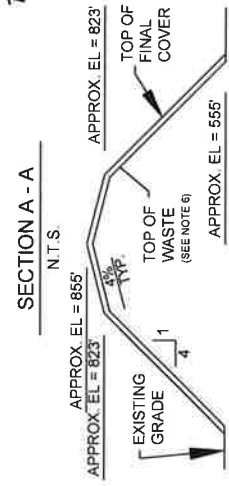
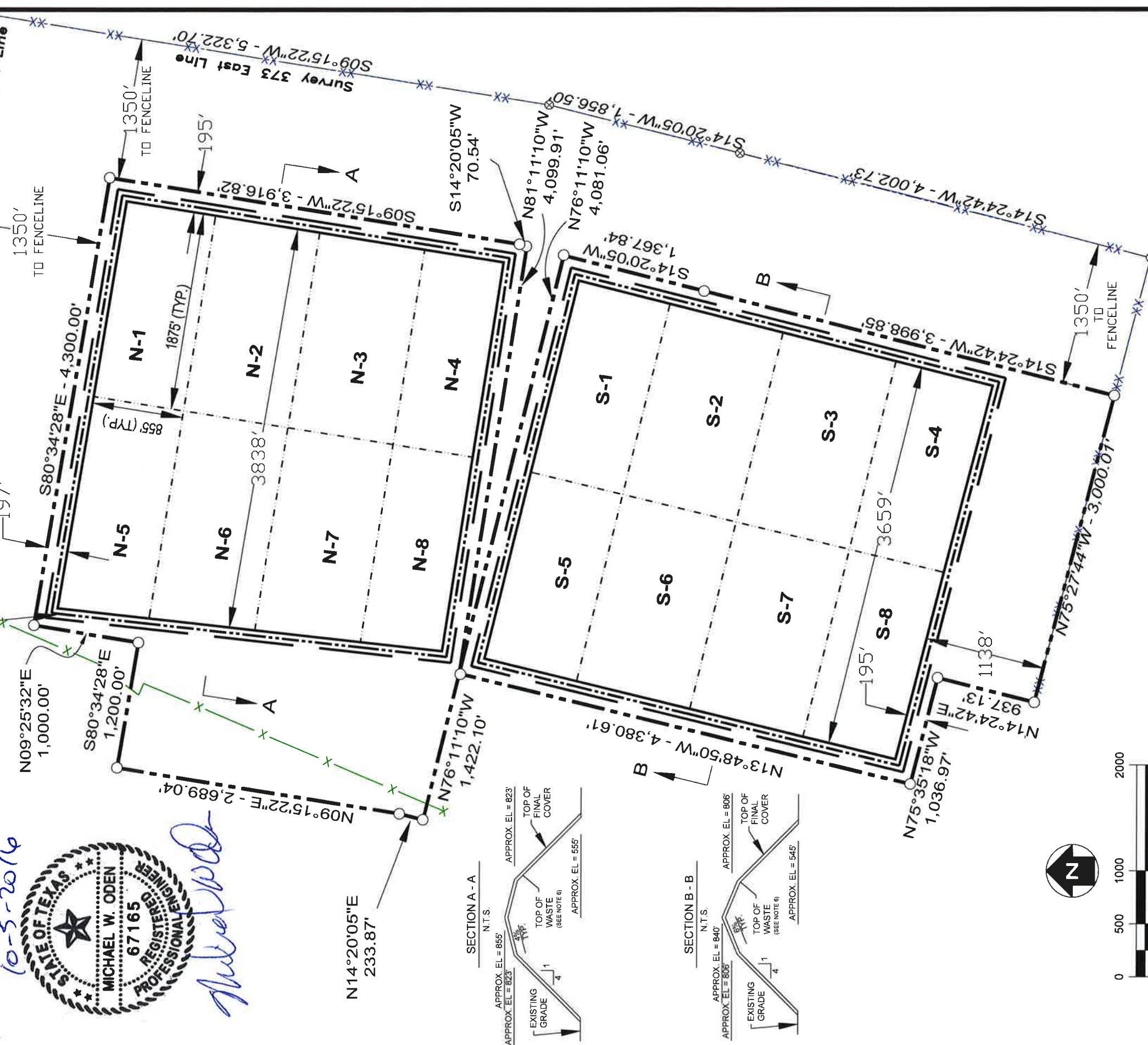
TBPE Firm F-5650

LOCATE DRAINAGE DITCHES,
DETENTION PONDS AND
PERIMETER MAINTENANCE ROAD
IN LANDFILL BUFFER ZONE

10-5-2016



Michael W. Oden



NOTES

1. FACILITY PERMIT AREA APPROXIMATELY 953 ACRES.
2. SOURCE: BOUNDARY AND IMPROVEMENT SURVEY, MEJIA ENGINEERING COMPANY (4/9/10 & 5/9/14).
3. CONSTRUCT SECURITY FENCE AND GATES ALONG FACILITY PERMIT BOUNDARY.
4. TRC ENVIRONMENTAL CORP. TBPE FIRM F-3775.
5. FACILITY PERMIT BOUNDARY REVISED BY CB&I (SHAW ENVIRONMENTAL, INC.) TBPE FIRM F-5650
6. LANDFILL ELEVATIONS ARE PRELIMINARY FOR TOP OF FINAL COVER. SUBTRACT 2.5' FOR TOP OF WASTE ELEVATION. (SEE APP. III - D.2)

LEGEND

- (A-1) LANDFILL CELL DESIGNATION
- GROUNDWATER MONITORING ZONE LOCATION
- LANDFILL GAS MONITORING ZONE LOCATION
- TYP. LANDFILL CELL BOUNDARY
- FACILITY PERMIT BOUNDARY LINE
- APPROXIMATE LANDFILL LIMIT
- FENCE
- PROPERTY LINE AND FENCE
- 8' HOG FENCE

THIS DRAWING HAS BEEN ADAPTED FROM "GENERAL LOCATION MAP" DEVELOPED BY TRC FOR THE PART 1 APPLICATION FOR PERMIT, TYPE 1 MUNICIPAL SOLID WASTE FACILITY, MSW PERMIT NO. 2374, PESCADITO ENVIRONMENTAL RESOURCE CENTER. THIS PERMIT APPLICATION WAS DEVELOPED ON BEHALF OF RANCHO VIEJO WASTE MANAGEMENT, LLC AND WAS SUBMITTED TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND DECLARED TECHNICALLY COMPLETE ON JULY 2, 2012. THE ORIGINAL DRAWING FILE IS DATED 2/14/2011 AND WAS STAMPED BY LICENSED PROFESSIONAL ENGINEER JAMES F. REYNOLDS, LICENSE NO. 52766 ON 9/14/2011. REVISIONS TO THE ORIGINAL DRAWINGS ARE SUMMARIZED IN THE REVISION NOTES.

REV 1 - 9/22/14 - REVISED FACILITY PERMIT BOUNDARY
REV 2 - 7/18/14 - ADDED SECTION B - B
REV 3 - 9/29/16 - REVISED CELL LAYOUT



**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS**

**FIGURE 5 - PART 2
MONITORING SYSTEM AND CELL LAYOUT PLAN**

DRAWN BY: MTE APPROVED BY: MWO PROJ. NO.: 148866 DATE: MAY 2014

Changed Pages

Part III, Attachment III-B

General Facility Design

**Part III
Attachment III-B**

GENERAL FACILITY DESIGN

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015
Revised September 2015
Technically Complete March 11, 2016
Modified October 2016**

**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
CB&I Environmental and
Infrastructure, Inc.**



**12005 Ford Rd, Suite 600
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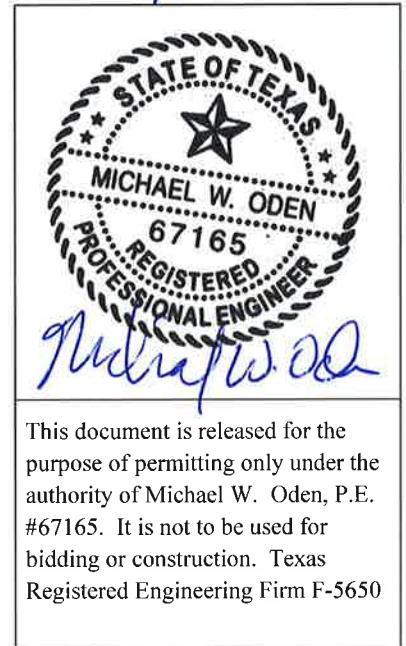
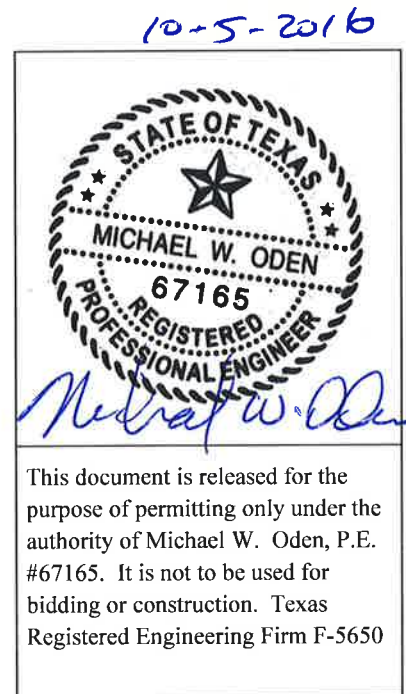


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Appendix III-B.1 Figures



1.0 FACILITY ACCESS

Public access to the Pescadito Environmental Resource Center (PERC) will be controlled through a means of existing fences, natural barriers and constructed fences around the perimeter of the facility approximately as shown on Figure III-B.1-2 in Appendix III-B.1. On the north and east, access is controlled by a natural barrier of 1,350 feet of land owned by Rancho Viejo Cattle Company followed by an existing 8-foot tall game fence. Should the natural barrier of 1,350-feet or existing 8-foot tall game fence prove to not be sufficient or if other uses or development occur in that area, a fence, as discussed below, will be constructed along the northern and eastern permit boundaries. Along the southern boundary, access is controlled by the detention pond and an existing 8-foot tall game fence which will remain in place. Along the western and southwestern boundaries, a fence, as discussed below, will be constructed and maintained for access control. Locations of gates are also shown on Figure III-B.1-2. If needed, the fence may be offset from the permit boundary in areas of dense vegetation or in areas that are difficult to access.

The fence and gates will prevent the entry of livestock, protect the public from exposure to potential health and safety hazards by discouraging unauthorized public access to the disposal and processing operations, and discourage unauthorized entry or uncontrolled disposal of solid waste or prohibited materials. Perimeter fencing consisting of barbed wire, woven wire, wooden fencing, plastic fencing, pipe fencing, or other suitable material will be provided at least four-feet tall.

An entrance gate constructed of suitable fencing materials will be located on the entrance road to the site. The entrance gate will be locked when the landfill is not accepting waste and all other gates will be locked when not in use. The perimeter fence and gates will be inspected monthly and maintenance will be performed as necessary. Should a breach be detected during inspection or at any other time, every reasonable effort will be made to make repairs within 24 hours of detection. Should repairs require more than 24 hours; temporary repairs will be performed within the time specified during notification to the TCEQ region office in Laredo. The TCEO region office will be notified of the breach within 24 hours of detection unless permanent repairs are made within eight hours of detection.

Public access to the PERC site is provided from State Highway 359 and is limited to the entrance road through the scale house area. Access control to the facility is provided by the perimeter fencing and gated site entrance. Entrance to the site is monitored by the scale house attendant during site operating hours. Outside waste acceptance hours, the entrance gate to the site will be locked.

Entry to the active portion of the site will be restricted to designated personnel, approved waste haulers, properly identified persons whose entry is authorized by site management, and regulatory (e.g., TCEQ, Webb County officials) personnel. Visitors may be allowed on the active area only when accompanied by a site representative. Signs will be located along the

Appendix III-D.3 – Landfill Design and Details.

A leachate collection system (LCS) has been designed with a geocomposite drainage layer, leachate collection trenches, and collection sumps and pumps to remove leachate from the landfill. The LCS design, layout and details are shown in Part III, Appendix III-D.3 and information regarding the design is included in Appendix III-D.6 - Leachate and Contaminated Water Management Plan.

The landfill development method for the facility is a combination of area excavation and fill followed by aerial fill to the landfill completion height. Landfill development will generally follow the sequence of development as shown on Figure III-B.1.2 in Appendix III-B.1, which will be generally in the order the cells are numbered, starting with the north disposal unit. Individual cells may be developed in multiple phases depending on the amount of solid waste anticipated to be received.

Waste accepted for disposal will be directed to the active working face. Waste will be unloaded at the active working face, spread in layers and thoroughly compacted. Daily cover of waste will be applied to control disease vectors, windblown waste, odors, fires, scavenging, and to promote runoff from the fill area. Daily cover consisting of a minimum of 6 inches of soil will be placed over wastes at the end of each working day for odor control. Alternate daily covers (ADC), such as tarps, foams and slurry mixtures or contaminated soil will also be used if specifically approved by the TCEQ. Details regarding the use of ADC are included in Part IV – Site Operating Plan.

The final cover side slopes will not be steeper than 4H:1V, and the aerial fill top slope will be approximately 6 percent. A water balance (or evapotranspiration cover) final cover will be constructed over the entire landfill. As shown in Part III, Appendix III-D.8 – Water Balance Alternate Final Cover Design, the final cover is generally described below with layers from top to bottom.

Vegetative layer	7 – inches of soil capable of sustaining vegetation
Infiltration layer	30 – inches of soil per the requirements of Appendix III-D.8
Intermediate cover	12-inches of on-site soils

Final cover placement will generally follow the sequence of development of the landfill cells as shown on the Figures in Appendix III-B.1 and will be ongoing as areas of the site are filled to capacity. Cells will be closed according to the closure plan provided in Part III, Attachment III-H - Closure Plan.

2.2 Class 1 Industrial Waste

Class 1 industrial waste, both liquid and solid, may be accepted at the facility. Class 1 wastes are defined at 30 TAC 330.3(21) as “*Class 1 wastes--Any industrial solid waste or mixture of industrial solid wastes that because of its concentration, or physical or chemical characteristics is toxic, corrosive, flammable, a strong sensitizer or irritant, a generator of sudden pressure by decomposition, heat, or other means, or may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or disposed of or otherwise managed, as further defined in §335.505 of this title (relating to Class 1 Waste Determination)*”.

Pursuant to 330.331(e)(3) a landfill unit that accepts Class 1 waste must be located in areas allowed by 30 TAC 335.584(b)(1) and (2) (relating to Location Restrictions). The PERC facility meets the requirements of 335.584(b)(1) in that the soil materials beneath the facility are only rarely of the listed coarse-grained Unified Soil Classifications discussed in that section. In fact, some 95% of the soils are classified as CH or CL with hydraulic conductivities much less than 1×10^{-5} cm/sec as discussed in Part III, Appendix III-E.0, III-E.2, III-E.3 and III-E.5. With regard to 332.584(b)(1)(A), the average annual evaporation exceeds the average annual precipitation by much more than 40-inches (See Part II, Section 1.4). With regard to 335.584(b)(1)(B), where coarse-grained classification soils are actually present, they occur as isolated lenses and are not sufficiently thick or laterally continuous to provide a significant pathway for waste migration and therefore the site is exempt from the requirements of 335.584(b)(1) as illustrated in the Geology Report (Part III, Attachment III-E). Further, even the most permeable, coarse-grained lenses were barely into the 1×10^{-5} cm/sec range.

With regard to 335.584(b)(2), the Geology Report (Part III, Attachment III-E) shows that the regional aquifer is protected by hundreds of feet of clays. Much more than the minimum of ten feet of material exists with a hydraulic conductivity no greater than 1×10^{-7} centimeters per second (cm/sec) vertically down toward the aquifer; therefore the site is in compliance with 335.584(b)(2).

Class 1 waste will be identified at the scale house and directed to either to the liquid solidification area or the appropriate class 1 waste disposal cell. Once solidified, class 1 liquid waste will be transported and disposed in a class I disposal cell.

The amount of class 1 industrial waste received will be limited to 20% of the incoming wastes, not including the class 1 amount, received in the previous or current year.

Class 1 waste disposal cells will have a composite liner including three feet of compacted clay with a maximum hydraulic conductivity of 1×10^{-7} cm/ sec. All cells are designated as potential

class 1 cells. Class 1 waste disposal will be limited to an elevation below the perimeter berm.

Other wastes, such as MSW, special waste, RACM, class 2 and 3 industrial waste may be disposed above the class 1 waste provided four feet of clay-rich soil is compacted on top of the class 1 waste prior to subsequent filling above.

2.3 Liquid Solidification

Liquids to be managed at the facility such as off-specification liquids, grease trap waste, grit trap waste, sludges that do not pass the paint filter test, etc., will be identified at the scale house and directed to the liquid solidification area. The solidification basin will either be placed above a lined disposal cell or will contain a separate lined area beneath as shown on Figure III-B.1-5. Liquids will be delivered to the basins and discharged. Bulking agents such as on-site soil, sawdust, kiln dust, coal combustion residuals, auto-fluff or other inert materials with absorptive capacity will be mixed with the liquids until the resulting mixture passes the paint filter test and any other requirements outlined for the specific material. Once the liquids have been solidified, it will be transported and disposed in the appropriate waste disposal unit.

Odor control will provide at the Liquid solidification areas through rapid processing of any odorous liquids received, the large buffers provided at the facility and distance to nearby receptors. Other measures that may be employed include the use of misters utilizing odor neutralizing compounds, pending approval of a permit modification. Should these measures not prove adequate and odors are confirmed to be migrating off site, liquid wastes that have an offending odor will not be accepted.

2.4 RACM

Regulated asbestos-containing material (RACM) may be accepted for disposal at the facility as defined in 40 Code of Federal Regulations Part 61 in accordance with the provisions of 30 TAC §330.171(c)(3). PERC is providing written notification to the executive director of the intent of the facility to accept RACM. The landfill, in accordance with §330.171(c)(3)(A), dedicates all of the landfill units (or cells) to potentially receive RACM. When RACM is accepted, a separate RACM unloading and disposal area will be provided. The exact area to be used will be consistent with the expected rate of incoming material, while allowing for safe and efficient operation of vehicles and equipment. After unloading, the RACM waste will be covered with a minimum of three feet of other solid waste or one foot of earthen material. If the deposited RACM is covered with other solid waste, daily cover consisting of a minimum of six inches of soil will be placed over the deposited wastes at the end of each working day. Specific instructions on the acceptance and handling of RACM are provided in Part IV – Site Operating Plan.

2.5 Large Item and Tire Storage Areas

A storage area for large items, white goods and tires may be provided near the active working face, or may be provided at a location near the citizen's convenience center. Large items and

Changed Pages

Part III, Appendix III-B.1

General Facility Design Figures

**Part III
Attachment III-B
Appendix III-B.1**

GENERAL FACILITY DESIGN FIGURES

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015
Revised September 2015
Revised November 2015
Technically Complete March 11, 2016
Modified October 2016**


**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
CB&I Environmental and
Infrastructure, Inc.**



**12005 Ford Rd, Suite 600
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10-5-2016



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The image shows a circular professional engineer seal for Michael W. Oden, a registered professional engineer in the State of Texas with license number 67165. The seal features a five-pointed star in the center and the text "STATE OF TEXAS" at the top and "REGISTERED PROFESSIONAL ENGINEER" at the bottom. A handwritten signature in blue ink is written across the bottom of the seal. The date "10-5-2016" is handwritten in blue ink above the seal.

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III-B.1-2 Waste Disposal, Processing and Storage Plan.....2

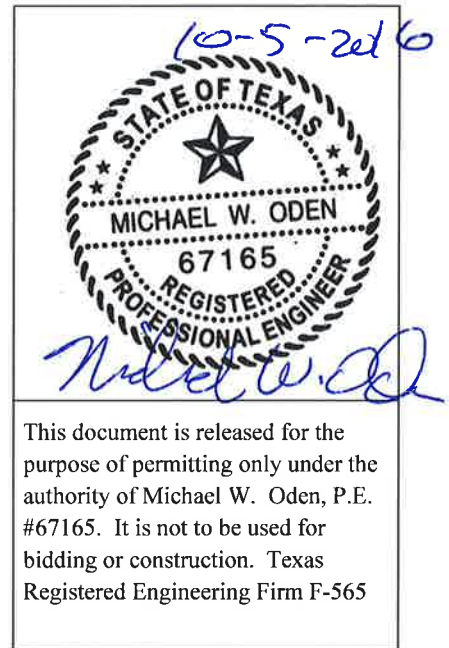
III-B.1-3 Entrance Facilities3

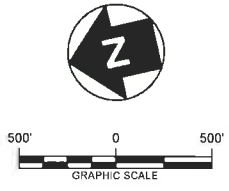
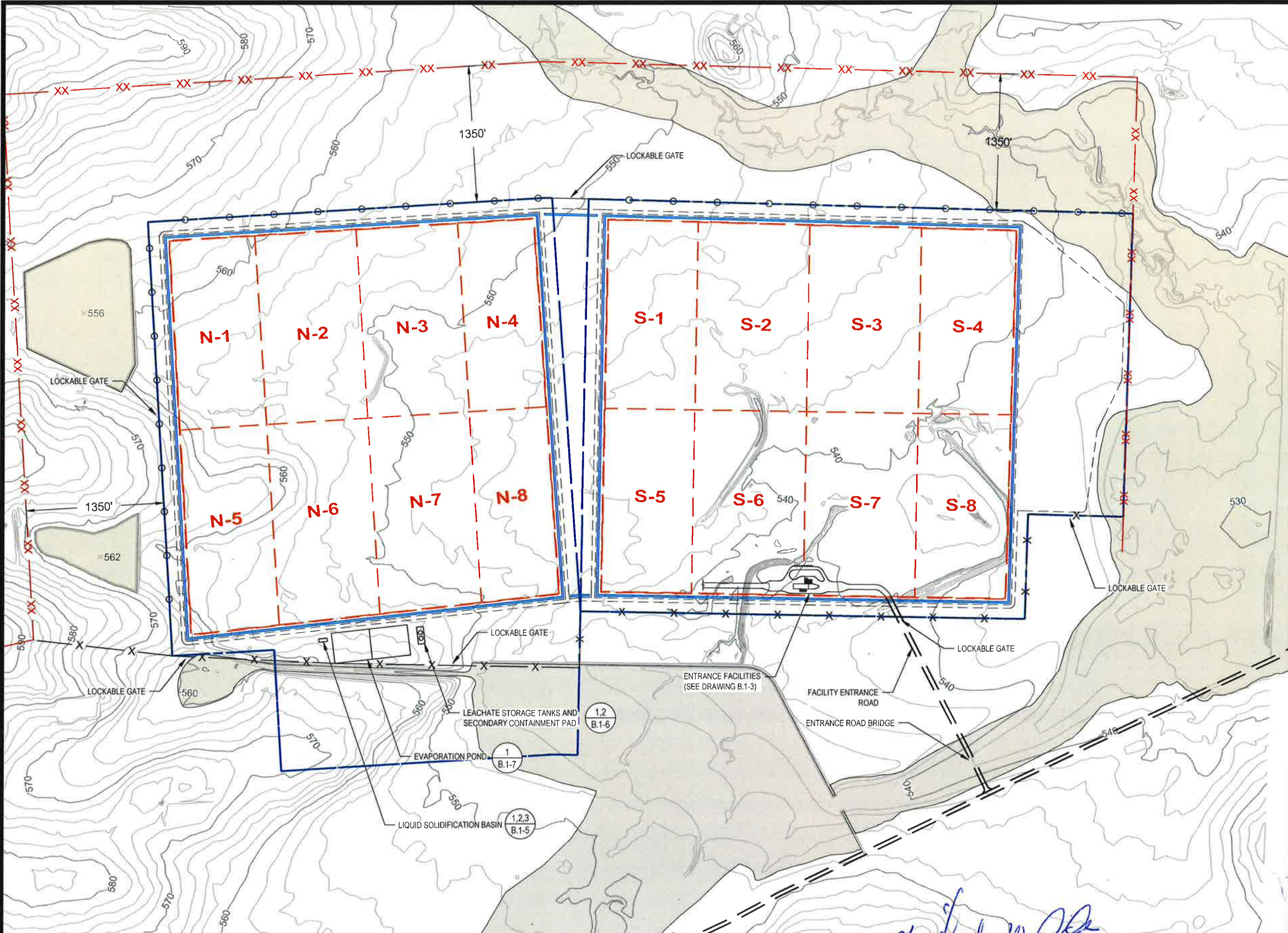
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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- PERIMETER STORMWATER DITCH
- CLOMR 100-YEAR FLOODPLAIN
- XX EXISTING GAME FENCE
- X ACCESS CONTROL FENCE
- FUTURE FENCE (IF NEEDED)

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. BOUNDARY AND IMPROVEMENT SURVEY DEVELOPED BY MEJIA ENGINEERING COMPANY ON AUGUST 15, 2011 AND JUNE 9, 2014.
3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
4. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
5. FACILITIES WILL BE ADDED AS THE NEED DICTATES.

REV. NO.	DATE	DESCRIPTION
1	10/2016	ADDED FENCE AND GATE LOCATIONS

CB&I Environmental & Infrastructure, Inc.
TBPE FIRM F-5650

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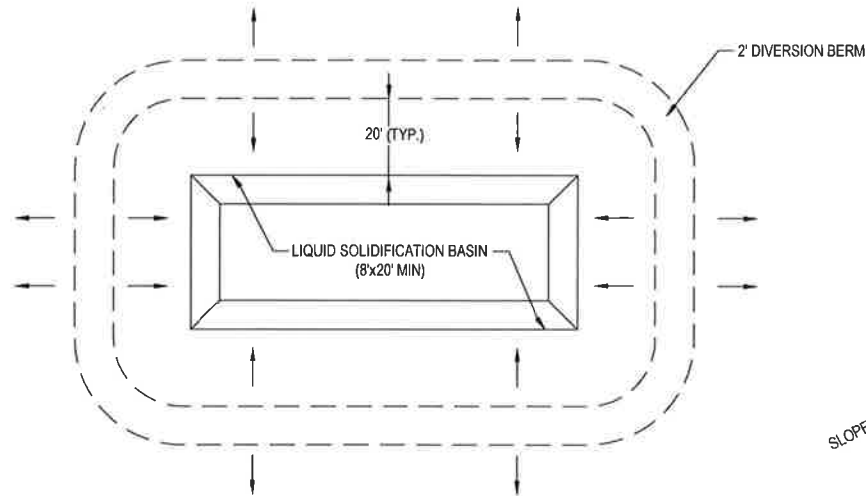
Michael W. Oden
10-5-2016

**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374**

WASTE DISPOSAL, PROCESSING, AND STORAGE PLAN

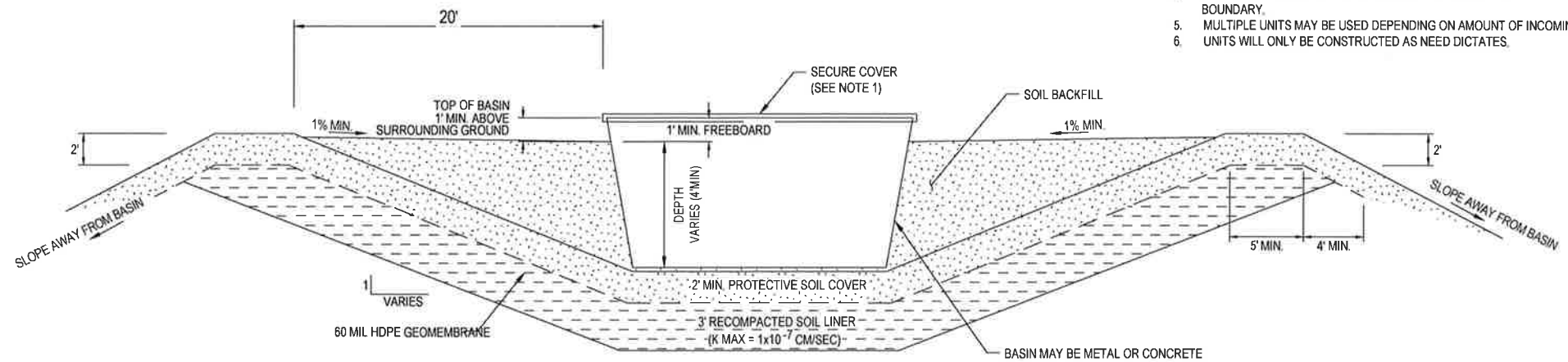
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CHECKED BY: RDS	
APPROVED BY: MWO	2 OF 6 SHEETS

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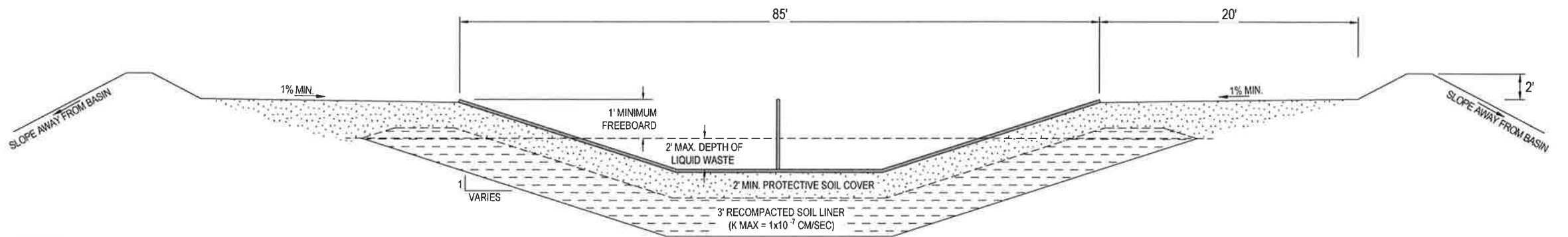
1
B.1-5
TEMPORARY LIQUID SOLIDIFICATION BASIN PLAN VIEW
NOT TO SCALE

- NOTE:
1. STORMWATER TO BE DIRECTED AWAY FROM DIVERSION BERM
 2. THIS PLAN IS CONCEPTUAL. ACTUAL DIMENSIONS OF THE BASIN WILL VARY.



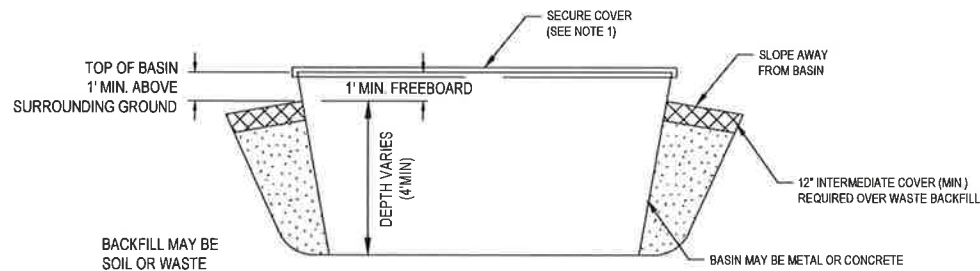
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B.1-5
TYPICAL CROSS SECTION TEMPORARY BASIN LOCATED OUTSIDE OF WASTE CELL
NOT TO SCALE

- NOTE:
1. A SECURE COVER WILL BE PLACED OVER THE TEMPORARY CONTAINER ANY TIME PROCESSED OR UNPROCESSED WASTE REMAINS IN THE CONTAINER OVERNIGHT
 2. THIS SECTION IS CONCEPTUAL, ACTUAL DIMENSIONS OF THE BASIN WILL VARY. THE BASIN SHALL BE AT A MINIMUM: 8 FEET WIDE, 20 FEET LONG, AND 5 FEET DEEP (4 FEET PLUS 1 FOOT FREEBOARD). THE NUMBER OF BASINS WILL VARY DEPENDING ON WASTE RECEIPTS.
 3. 2' OR 3' RECOMPACTED SOIL LINER AND 60 MIL HDPE GEOCOMPOSITE LINER AND 2' SOIL PROTECTIVE COVER TO BE CONSTRUCTED IN ACCORDANCE WITH APPENDIX III-D.7 (LINER QUALITY CONTROL PLAN)
 4. THIS BASIN CONFIGURATION AND CONSTRUCTION WILL BE UTILIZED OUTSIDE OF EXISTING WASTE BUT WITHIN PERMIT BOUNDARY.
 5. MULTIPLE UNITS MAY BE USED DEPENDING ON AMOUNT OF INCOMING WASTE.
 6. UNITS WILL ONLY BE CONSTRUCTED AS NEED DICTATES.



4
B.1-5
TYPICAL CROSS SECTION PERMANENT LIQUID SOLIDIFICATION BASIN
NOT TO SCALE

- NOTE:
1. PERMANENT BASIN MAY BE CONSTRUCTED IN PHASES AS WASTE RECEIPTS DICTATE.



2
B.1-5
TYPICAL CROSS SECTION TEMPORARY BASIN LOCATED OVER LINED CELL
NOT TO SCALE

- NOTE:
1. A SECURE COVER WILL BE PLACED OVER THE TEMPORARY CONTAINER ANY TIME PROCESSED OR UNPROCESSED WASTE REMAINS IN THE CONTAINER OVERNIGHT
 2. THIS SECTION IS CONCEPTUAL, ACTUAL DIMENSIONS OF THE BASIN WILL VARY. THE NUMBER OF BASINS WILL VARY DEPENDING ON WASTE RECEIPTS.
 3. THIS BASIN CONFIGURATION MAY ONLY BE PLACED IN EXISTING WASTE OVER THE EXISTING COMPOSITE LINED CELLS

REV. NO.	DATE	DESCRIPTION
2	10/2016	REVISED LIQUID SOLIDIFICATION BASIN DETAILS
1	9/2015	NOD 1



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Michael W. Oden
10-5-2016

**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374**

LIQUID SOLIDIFICATION BASIN PLAN AND DETAILS

PROJ. NO.:	148866	DATE:	APRIL 2015
DESIGNED BY:	-	DRAWING NO.	III
DRAWN BY:	MTE		B.1-5
CHECKED BY:	RDS		5 OF 6 SHEETS
APPROVED BY:	MWO		

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Part III, Attachment III-D

Waste Management Unit Design

**Part III
Attachment III-D**

WASTE MANAGEMENT UNIT DESIGN

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015
Revised September 2015
Revised November 2015
Technically Complete March 11, 2016
Modified October 2016

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

Prepared by:
**CB&I Environmental and
Infrastructure, Inc.**



12005 Ford Rd, Suite 600
Dallas, TX 75234




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- III-D.1 – Site Layout
- III-D.2 – Landfill Cross Sections
- III-D.3 – Landfill Design and Details
- III-D.4 – Landfill Operation and Site Life
- III-D.5 – Geotechnical Analyses
- III-D.6 – Leachate and Contaminated Water Plan
- III-D.7 – Liner Quality Control Plan
- III-D.8 – Alternate Final Cover Demonstration
- III-D.9 – Final Cover Quality Control Plan



10-5-2016

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facility in stages as the demand for this service increases. Initially, smaller units will be constructed as shown in Appendix III-B.1. In all cases, the required freeboard of one foot for the 25-year 24-hour rainfall event will be maintained. Run-on will be prevented by constructing berms around the facility, or by elevating the basin(s) above the surrounding ground level.

If the mixing basin(s) are filled to the maximum level (to within one-foot of the top – see Figure III-B.1-5 in Appendix III-B.1), no additional liquids will be added until they are emptied. However, PERC may provide a metal or fiberglass storage tank for a maximum of one day of acceptance (50,000 gallons) to account for temporary delays in the bulking process. Secondary containment will be provided around the tank, if used, by one of the following methods:

- Placing the tank over a lined area of the landfill
- Constructing a secondary containment of compacted soil liner with a maximum permeability of 1×10^{-7} cm/sec. Construction will be documented using methods specified in the LQCP (Appendix III-D.7) with only one permeability test required
- Utilizing a dual-walled tank

A permit modification will be requested and approved prior to installation and use of the tank.

1.2 Large Item and Tire Storage Areas

A storage area for large items, white goods and tires may be provided near the citizen's convenience center or near the active working face for items delivered in enclosed vehicles or in mixed loads. Large items and white goods include ovens, dishwashers, freezers, air conditioners, and other large items, typically containing a large metal content. Should large items, white goods or tires be received in mixed loads, they will be removed from the active face if it is determined to be safe to do so and staged near the active working face, or removed to the designated area near the citizen's convenience center. The large items, white goods and tires will be transferred into roll-off containers, or similar storage device until transported to an off-site recycler. The containers will be covered to prevent the accumulation of rainfall inside the containers and to prevent the generation of contaminated water. The minimization of contaminated water will also limit the potential for generating odors within the storage areas. These items will be recycled to prevent a nuisance and to preclude discharge, but will not be stored in excess of 180 days. Large items and white goods that are not recycled will be disposed of at the working face. Tires will not be disposed unless they are split or quartered prior to disposal.

The procedure for acceptance, storage, processing and ultimate disposal is presented in Part IV – Site Operating Plan for PERC. Specific details regarding these areas can be found on drawings in Appendix III-D.1.

Changed Pages

Part III, Appendix III-D.6

Leachate and Contaminated Water Plan

**Part III
Attachment III-D
Appendix III - D.6**

LEACHATE AND CONTAMINATED WATER PLAN

**Pescadito Environmental Resource Center
MSW-2374
Webb County, Texas**

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015
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Technically Complete March 11, 2016
Modified October 2016**

**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
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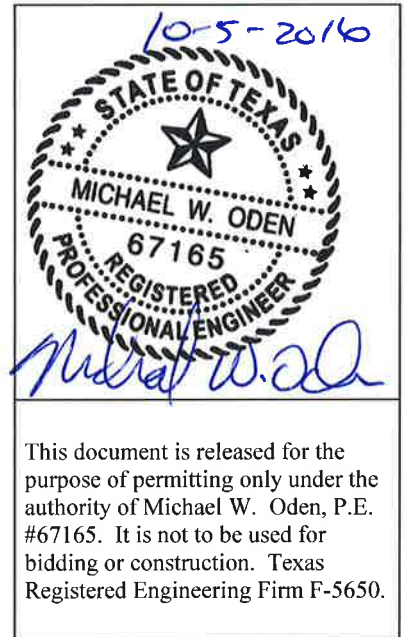


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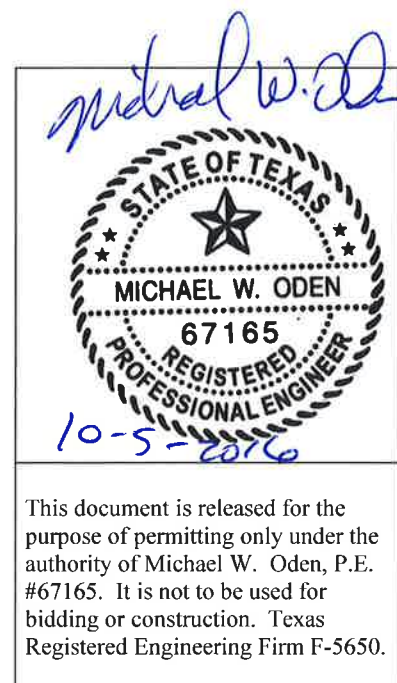
ATTACHMENTS

Attachment A to Appendix III-D.6: Contaminated Water/Leachate Collection System Design Analysis

1. Loads on the Leachate Collection System
2. Ring Deflection of Leachate Pipe
3. Structural Capacity of the Leachate Collection System
4. Compressed Thickness and Hydraulic Conductivity of the Geonet
5. Help Model Analysis
6. Leachate Collection System Flow Rates
7. Geotextile Permittivity
8. Leachate Collection System Design
9. Leachate Tank Size

Attachment B to Appendix D.6: HELP Model Outputs

1. Summary Table of HELP Model Runs
2. Open Conditions
 - a. Leachate Collection System Scenario A
 - b. Leachate Collection System Scenario B
 - c. Leachate Collection System Scenario C
 - d. Leachate Collection System Scenario D
3. Intermediate Conditions
4. Closed Conditions
5. Introduced Contaminated Water Analysis
 - a. Open Conditions – 20 Foot Waste Column
 - b. Intermediate Conditions – 50 Foot Waste Column
 - c. Intermediate Conditions – 100 Foot Waste Column



3.4 Leachate Pump and Riser System

Extraction of leachate from the collection sumps will be accomplished by submersible pumps, which can be operated either manually or automatically. Leachate levels in the collection sumps, will be monitored to maintain a head buildup of no greater than the lowest point of the landfill floor adjacent to the sump in each cell.

Sump riser pipes will be located directly up the sideslopes from the sumps at the disposal area perimeter. Risers will be 18-inch diameter HDPE pipe and provide a means for lowering submersible pumps down the 3:1 sideslope incline into the collection sumps. The lower portion of the riser within the sump is perforated (1/2-inch diameter holes), which will allow leachate to flow to the pumps.

The depth of leachate on the liner will be measured using electronic transducers mounted on the leachate pump. Leachate pumps will be sized appropriately to ensure that leachate levels can be maintained at a depth no greater than the lowest point of the landfill floor adjacent to the sump in each cell, without short-cycling. Pumps will be automatically controlled using liquid level sensors installed at appropriate elevations to activate the pump when the leachate level is ten inches above the top of the sump, and deactivate the pump when the leachate level is six inches, or less above the bottom of the sump.

3.5 Conveyance

Leachate will be transferred to storage tanks or disposal locations by tanker truck or pipeline. Leachate may be withdrawn from the collection sumps or lines, or storage tanks/ponds into tanker trucks. Spill containment for truck hose connection and loading will be provided by a portable trough or similar spill containment. Protection will be provided at hose connection locations. Contaminated water will be transported to an authorized and permitted facility, or to the on-site evaporation pond, for treatment and disposal.

3.6 Leachate Storage

Leachate will be stored on-site in two on-site leachate storage tanks or evaporation pond prior to transport to a permitted treatment facility. The leachate storage facility will have adequate secondary containment in the event of a tank failure. Secondary containment will be sized to

Changed Pages

Part III, Appendix III-F.1

Groundwater Monitoring Plan Figures

Part III
Attachment III-F
Appendix III-F.1

GROUNDWATER MONITORING PLAN FIGURES

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

PESCADITO
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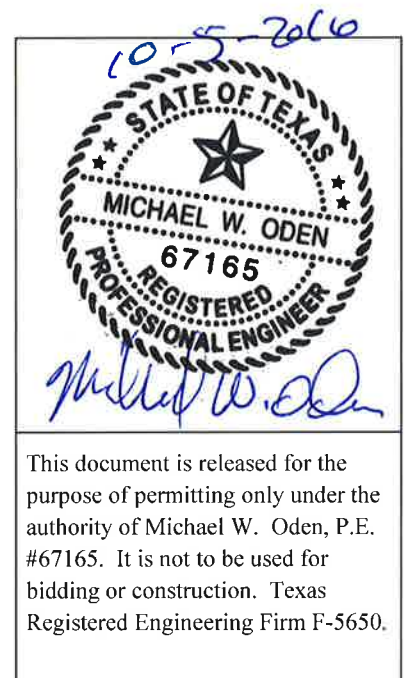
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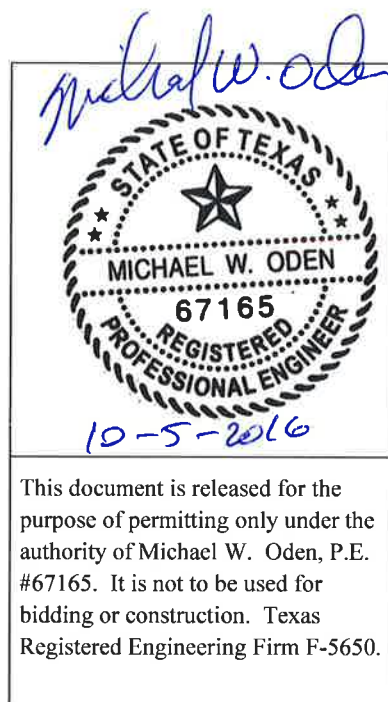
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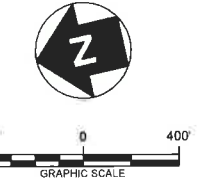
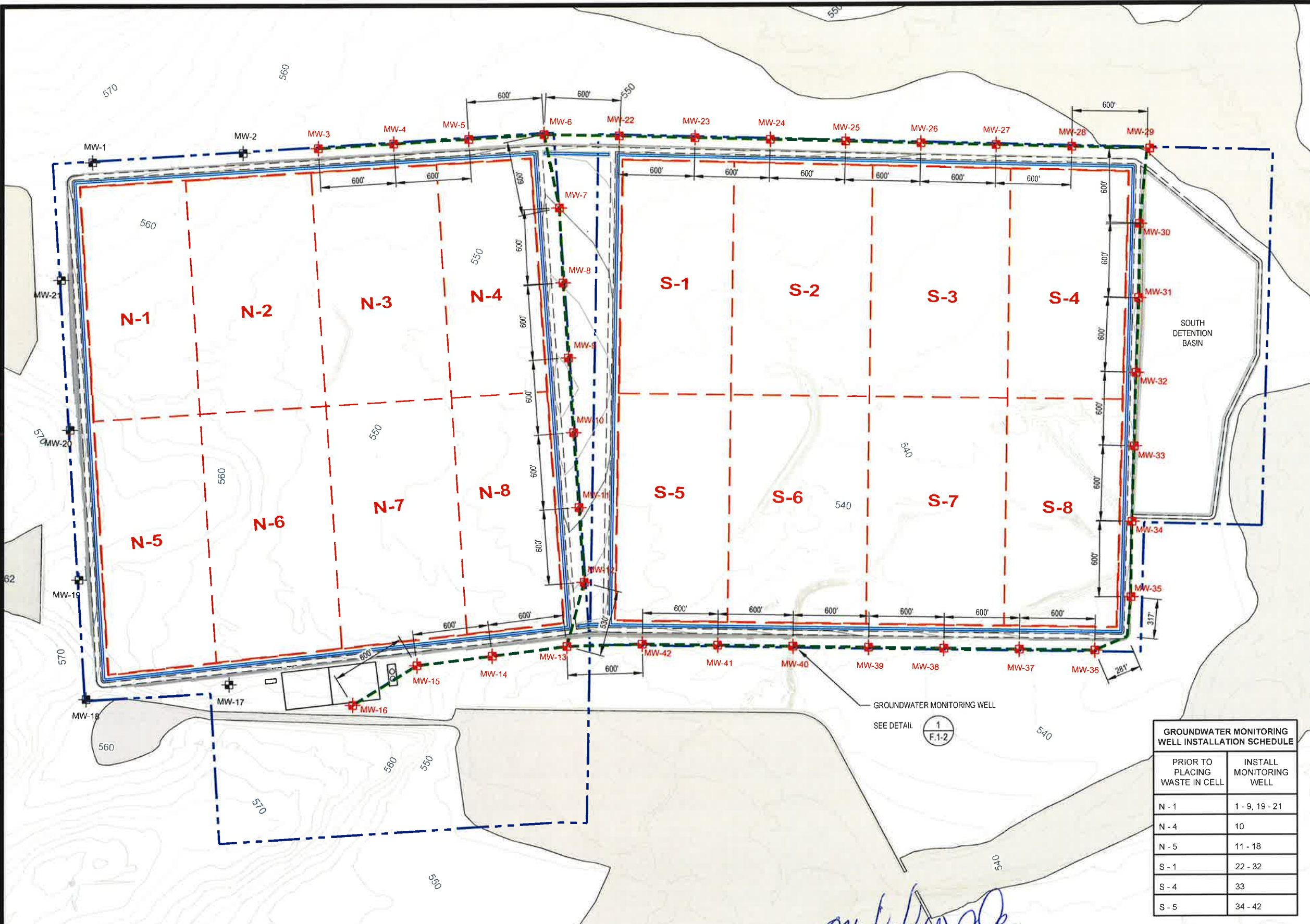


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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER DITCH
- PERIMETER ACCESS ROAD
- + MW-1 GROUNDWATER MONITORING WELL (UPGRADIENT)
- + MW-10 GROUNDWATER MONITORING WELL (DOWNGRADIENT)
- CLOMR 100-YEAR FLOODPLAIN
- POINT OF COMPLIANCE (P.O.C.)

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
4. MW-3 TO MW-42 ARE DOWNGRADIENT ALONG P.O.C.
5. MW-1, MW-2, AND MW-17 TO MW-21 ARE UPGRADIENT.

GROUNDWATER MONITORING WELL INSTALLATION SCHEDULE	
PRIOR TO PLACING WASTE IN CELL	INSTALL MONITORING WELL
N - 1	1 - 9, 19 - 21
N - 4	10
N - 5	11 - 18
S - 1	22 - 32
S - 4	33
S - 5	34 - 42

GROUNDWATER MONITORING WELL
SEE DETAIL 1
F.1-2

REV. NO.	DATE	DESCRIPTION
3	10/2016	REVISED WELL LAYOUT / ADDED INSTALLATION SCHEDULE
2	11/2015	NOD 2
1	9/2015	NOD 1

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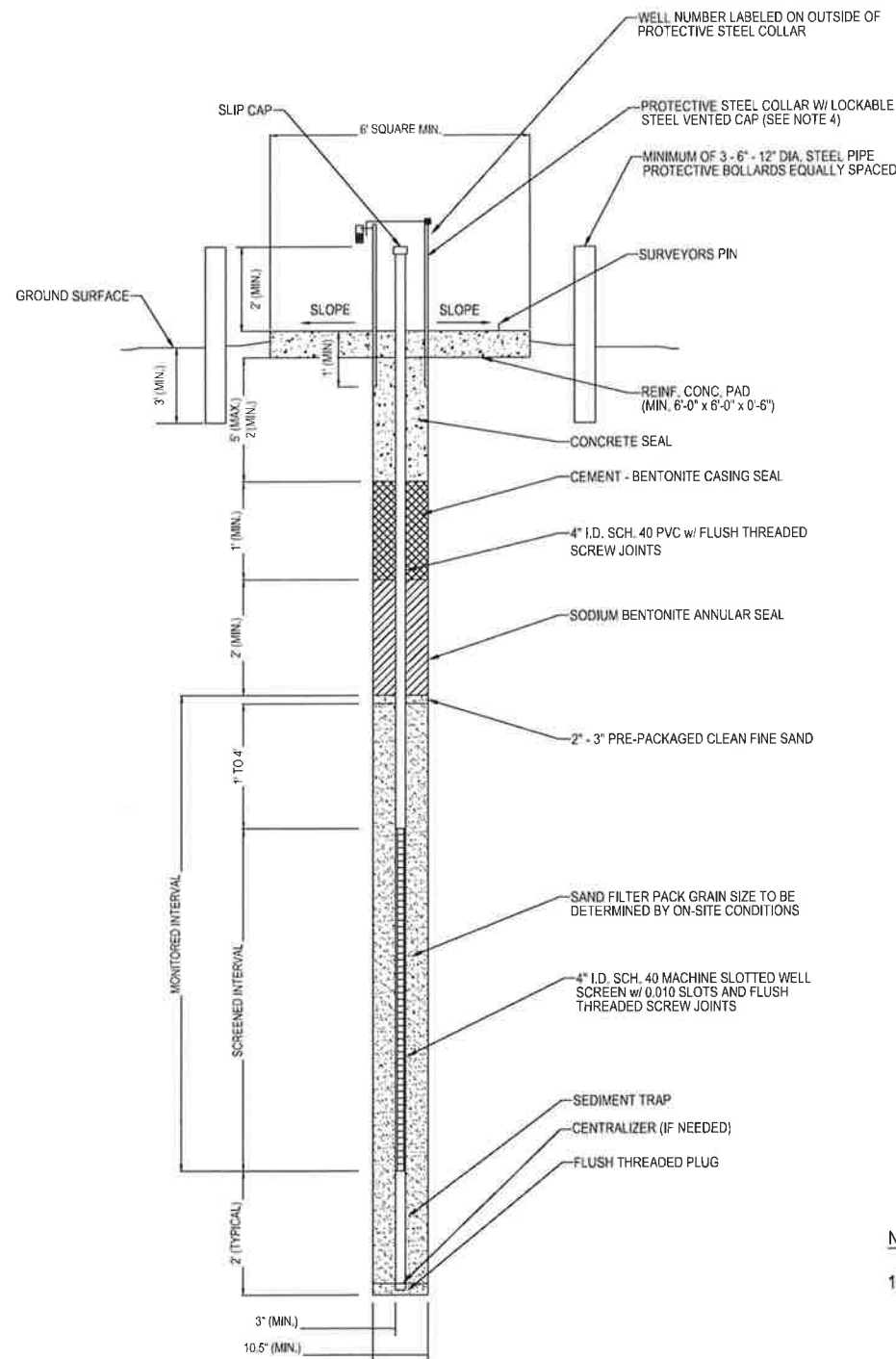
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 10-5-2016

**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374**

GROUNDWATER MONITORING SYSTEM PLAN

PROJ. NO.: 148866	DATE: APRIL 2015
DESIGNED BY: -	DRAWING NO. III
DRAWN BY: MTE	F.1-1
CHECKED BY: RDS	1 OF 2 SHEETS
APPROVED BY: MWO	



1
F.1-2

TYPICAL GROUNDWATER MONITORING WELL

NOT TO SCALE

NOTES:

1. MONITORING WELL INSTALLATION SHALL CONFORM TO METHODS AND MATERIALS DESCRIBED IN APPLICABLE REGULATIONS OF TCEQ.
2. PTFE TAPE OR O-RINGS ON ALL JOINTS.
3. MONITORED INTERVAL TO BE FROM 9' BELOW GROUND SURFACE TO THE DEEPEST SUMP EXCAVATION ELEVATION NEAREST TO THE WELL, ASSUMING THREE FOOT LINER.
4. PROTECTIVE COLLAR AND CAP MAY BE STEEL OR ALUMINUM.

GROUNDWATER MONITORING WELL SUMMARY TABLE

Well Name	Northing	Eastng	Ground Surface Elevation (ft MSL)	Nearest Sump	Bottom Sump Elevation (ft. MSL)	Liner Excavation Elevation (see note 3)
MW-01	17098886.69	773881.16	565.91	N-1	456	453
MW-02	17097702.31	773688.14	559.21	N-2	456	453
MW-03	17097110.12	773591.63	556.43	N-3	451	448
MW-04	17096518.07	773494.27	554.75	N-3	451	448
MW-05	17095926.02	773396.92	552.54	N-4	451	448
MW-06	17095334.01	773299.35	550.91	N-4	451	448
MW-07	17095345.76	772700.03	549.22	N-4	451	448
MW-08	17095450.61	772109.12	548.00	N-4	451	448
MW-09	17095542.55	771516.21	545.83	N-4	451	448
MW-10	17095634.48	770923.29	544.73	N-8	451	448
MW-11	17095726.42	770330.38	544.33	N-8	451	448
MW-12	17095818.35	769737.46	544.74	N-8	451	448
MW-13	17096067.47	769269.65	543.99	N-8	451	448
MW-14	17096664.67	769327.57	547.69	N-8	451	448
MW-15	17097261.87	769385.49	552.73	N-7	451	448
MW-16	17097829.62	769191.05	558.02	N-7	451	448
MW-17	17098750.56	769569.69	556.70	N-6	451	448
MW-18	17099883.71	769707.17	563.37	N-5	456	453
MW-19	17099726.98	770651.32	560.31	N-5	456	453
MW-20	17099530.46	771835.12	566.08	N-5	456	453
MW-21	17099333.94	773018.92	559.58	N-1	456	453
MW-22	17094751.01	773153.82	549.51	S-1	446	443
MW-23	17094169.73	773005.28	548.77	S-1	446	443
MW-24	17093587.87	772856.59	548.00	S-2	441	438
MW-25	17093007.29	772707.40	546.58	S-2	441	438
MW-26	17092426.17	772558.07	545.54	S-3	441	438
MW-27	17091845.05	772408.73	544.09	S-3	441	438
MW-28	17091263.93	772259.40	542.59	S-4	436	433
MW-29	17090661.89	772104.69	540.87	S-4	436	433
MW-30	17090877.12	771537.08	541.47	S-4	436	433
MW-31	17091016.01	770960.70	540.00	S-4	436	433
MW-32	17091168.38	770382.58	538.20	S-4	436	433
MW-33	17091313.94	769813.46	536.14	S-8	436	433
MW-34	17091466.27	769229.95	537.85	S-8	436	433
MW-35	17091608.70	768644.15	537.87	S-8	436	433
MW-36	17091984.47	768293.13	537.94	S-8	436	433
MW-37	17092567.11	768436.39	540.44	S-8	436	433
MW-38	17093149.76	768579.65	541.99	S-7	441	438
MW-39	17093732.41	768722.91	541.54	S-7	441	438
MW-40	17094315.05	768866.17	547.36	S-6	441	438
MW-41	17094897.70	769009.43	540.00	S-5	446	443
MW-42	17095480.34	769152.69	541.99	S-5	446	443

REV. NO.	DATE	DESCRIPTION
3	10/2016	REVISED MONITORING WELL SYSTEM
2	12/2015	NOD 2 SUPPLEMENT
1	11/2015	NOD 2

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10-5-2016

PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374

TYPICAL GROUNDWATER MONITORING WELL DETAIL

PROJ. NO.:	148866	DATE:	APRIL 2015
DESIGNED BY:	-	DRAWING NO.:	III
DRAWN BY:	MTE		F.1-2
CHECKED BY:	RDS		
APPROVED BY:	MWO		2 OF 2 SHEETS

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Part III, Appendix III-G.1

Landfill Gas Management Plan Figures

**Part III
Attachment III-G
Appendix III-G.1**

LANDFILL GAS MANAGEMENT PLAN FIGURES

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015
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Technically Complete March 11, 2016
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**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
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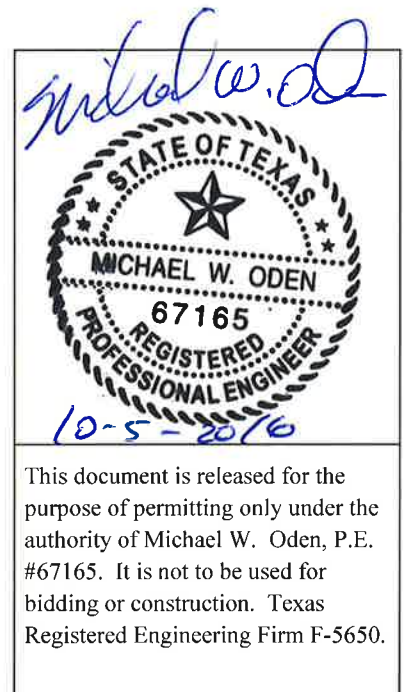



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III-G.1-1 Landfill Gas Monitoring Plan.....1

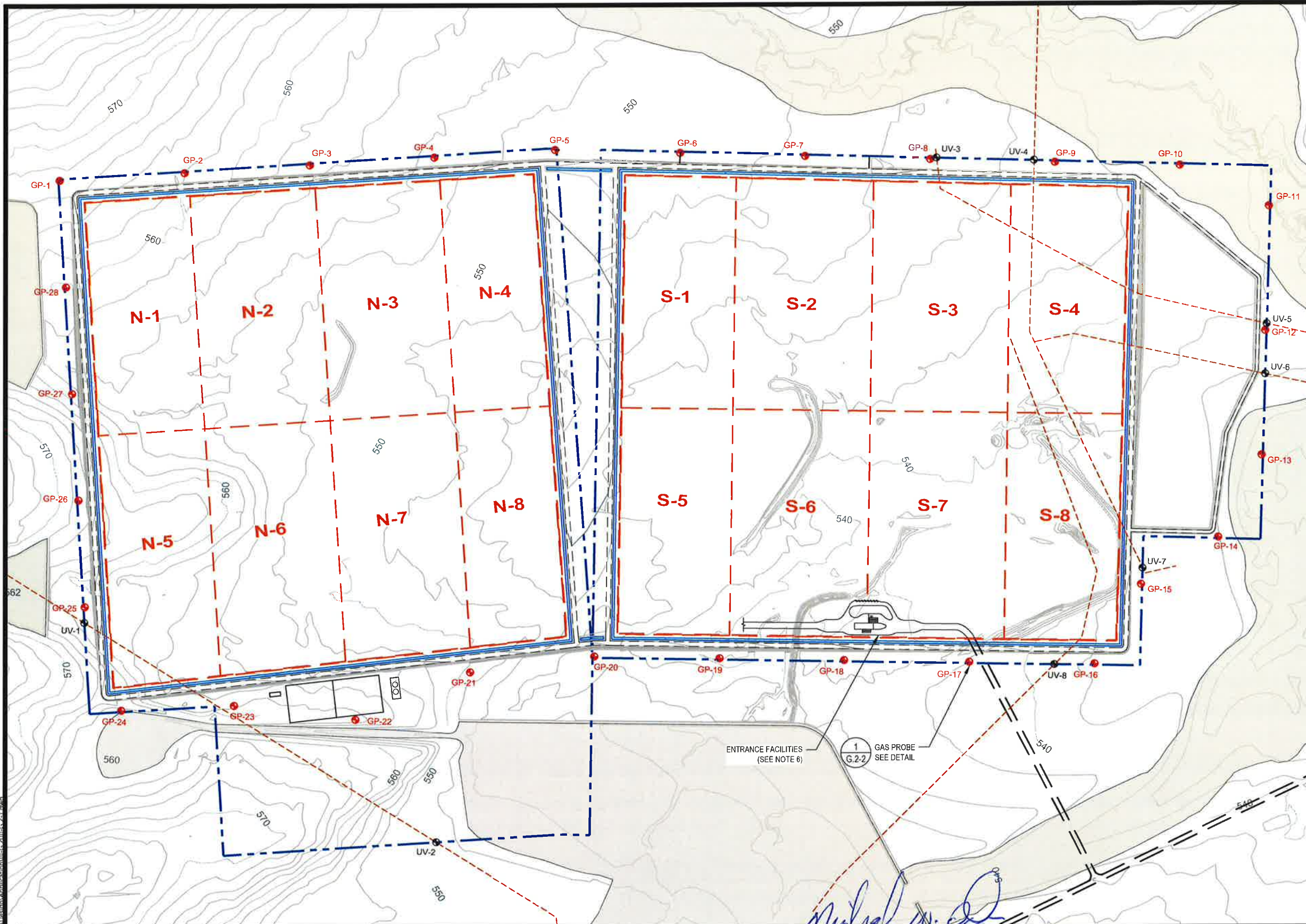
III-G.1-2 Typical Gas Probe and Utility Vent2

10-5-2016



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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER DITCH
- PERIMETER ACCESS ROAD
- PIPELINE EASEMENT CENTERLINE
- GP-1 GAS PROBE LOCATION
- UV-1 UTILITY VENT LOCATION
- CLOMR 100-YEAR FLOODPLAIN

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
4. FOR UTILITY VENT SEE DETAIL 2 OF DRAWING G-2-2. UTILITY VENTS TO BE INSTALLED AT PROPERTY LINE WHEN WASTE IS WITHIN 1,000 FEET, UNLESS PIPELINE HAS BEEN ABANDONED AND REMOVED.
5. GAS PROBES WILL BE INSTALLED AS CELLS ARE CONSTRUCTED SO THAT A PROBE EXISTS AT LEAST 1000 FEET FROM WASTE.
6. SCALE HOUSE TO HAVE PERMANENT MONITOR.

LANDFILL GAS PROBE INSTALLATION SCHEDULE	
PRIOR TO PLACING WASTE IN CELL	INSTALL PROBE / VENT
N - 1	GP-1, 2, 3, 25, 26, 27, 28
N - 2	GP-4
N - 3	GP-5
N - 4	GP-6
N - 5	GP-22, 23, 24; UV-1, 2
N - 6	GP-21
N - 7	GP-20
N - 8	GP-19
S - 1	GP-7, 8; UV-3
S - 2	GP-9; UV-4
S - 3	GP-10
S - 4	GP-11, 12, 13; UV-5, 6
S - 5	GP-18
S - 6	GP-17
S - 7	GP-16; UV-8
S - 8	GP-14, 15; UV-7

ENTRANCE FACILITIES (SEE NOTE 6)

1 G-2-2 GAS PROBE SEE DETAIL



10-5-2016

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**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374**

LANDFILL GAS MONITORING PLAN

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DESIGNED BY:	-	DRAWING NO.:	III
DRAWN BY:	MTE		G.1-1
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APPROVED BY:	MWO		

REV. NO.	DATE	DESCRIPTION
1	10/2016	ADDED CELL LAYOUT AND INSTALLATION SCHEDULE

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Part IV

Site Operating Plan

Part IV

SITE OPERATING PLAN

Pescadito Environmental Resource Center

MSW-2374

Webb County, Texas

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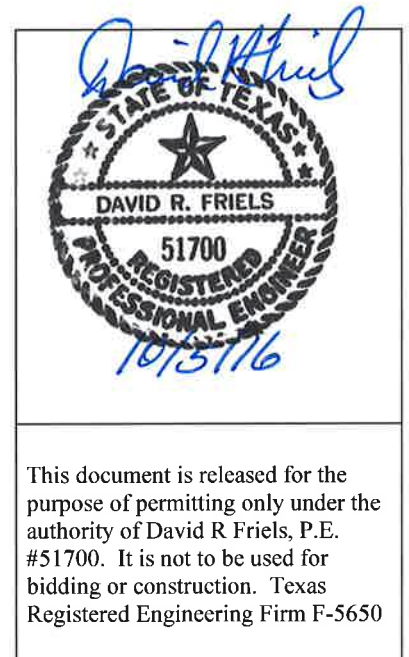
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Rancho Viejo Waste Management, LLC
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Prepared by:
CB&I Environmental and
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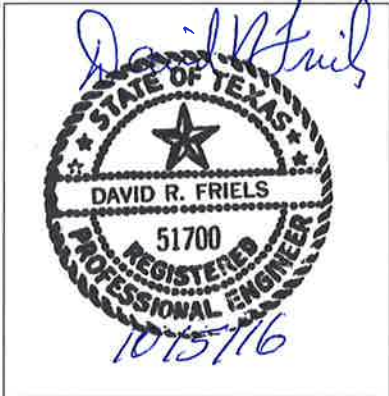
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19.0 SITE ACCESS ROADS §330.153 and 330.237

All-weather roads within the site will be constructed with compacted flexible base or other appropriate surfaces over a compacted subgrade to facilitate vehicle traffic and access to the unloading areas and to reduce accumulation of mud on the tires of waste hauling trucks. Additionally, the private road, which is the site access road that extends from Jordon Road to the facility entrance will have an all-weather surface of adequate thickness to support the waste traffic. During wet weather the “all weather” surfaced site access roads and the approximately 3 miles of access road to the site from Jordon Road will allow the vehicles to throw off the mud from their tires prior to entering public roadway. Should mud and associated debris be tracked onto Jordon road, the materials will be removed at least once daily typically by using the water truck and/or motor grader.

Litter and other debris will be picked up from the site access roads and along the first 2 miles of the access road to the site (measured from the gate) and transported to the working face for disposal on a daily basis. (Refer to Sections 12 and 15).

Dust development will be minimized through proper operating procedures. Haul roads will be sprayed using a water truck to control dust as necessary. Water for dust control will be obtained from detention ponds or a water well. If necessary, commercial dust-control may be sprayed on the road surfaces to retard the spread of dust.

On-site roads will be maintained on a regular basis. Access roadways will be re-graded to minimize depressions, ruts, and potholes when they would interfere with access to the unloading area. Typically, re-grading will be required after significant rain events and will be performed while the materials are sufficiently moist to facilitate grading and re-compaction. Road repair materials such as cold mix asphalt, stone, or gravel will be stockpiled on site for use as necessary.

minimum, the RACM will be placed at least 20 feet away from exterior final side slopes, and at least 10 feet below final grade. During unloading and placement of RACM in the waste fill, care will be exercised to prevent breaking open the bags or containers. One foot of soil cover or 3 feet of asbestos-free municipal solid waste will be placed over the RACM immediately after it is placed in the landfill unit. RACM that has been designated as Class 1 industrial solid waste, and that arrives at the facility will be disposed of in accordance with §330.171(c) or in accordance with this section of the SOP. Upon closure of the facility, a notation indicating that the site accepted RACM will be placed in the deed record. This notation will indicate where the RACM was disposed of on the property by showing its location on a site diagram. A copy of this documentation will be provided to the TCEQ.

- Non-regulated asbestos-containing materials (non-RACM) may be accepted for disposal provided the wastes are placed on the active working face and covered. Under no circumstances shall any material containing non-RACM be placed on any surface or roadway that is subject to vehicular traffic or disposed of by any other means by which the material could be crumbled into a friable state.
- Municipal hazardous waste from conditionally exempt small quantity generators provided the amount of waste does not exceed 220 pounds per month per generator.
- Nonhazardous liquids from municipal sources providing the material is classified as Class 1 (nonhazardous), Class 2, or Class 3 may be accepted consistent with this section and the procedures outlined in the “Liquid Waste Solidification Operations” in Attachment IV-B. Liquids in tank trucks or vacuum trucks are discharged in the liquid waste stabilization unit in the liquid processing area and processed until the residual material passes the paint filter tests as described in the “Liquid Waste Solidification Operations” in the Appendix B. Once sufficient water has evaporated or the material has otherwise been dried to the point that the residual material will pass a paint filter test, the residual

material may be disposed of in the landfill. Solidified Class 1 liquids will only be placed in a cell approved for Class 1 waste.

TCEQ approval will be requested on a case by case basis through the use of the 0152 Form (or other forms prescribed by the TCEQ) for any liquids listed in Subsection 27.1 of the Site Operating Plan (SOP) or that are not exempt from prior approval either in Subsection 27.2 of the permit SOP, or §330.171(c) or (d).

1.3 Liquid Waste Solidification Process

Liquids in tank trucks or vacuum trucks will be discharged directly into one of the separate bulk liquid solidification units of the facility. The solidification facility will have at least two dividers creating three or more separate processing units. The usage of each unit will vary depending on the daily volumes of each type of liquid. Approved Class 2 liquid waste that is received may be comingled and solidified with the grease trap waste, grit trap waste, or septage. Class 1 liquids will not be comingled with other liquids but will be processed separately. Approved waste liquids may be added to a unit where liquids are being processed; however, the processing time limit is based on the date and time the first load of liquids were discharged into the unit. Operations will be rotated among the different units, which will allow liquids to be processed in one unit while the other unit is being cleaned out and prepared to receive more liquid waste.

Solidification will be accomplished using soil, fly ash, cement, auto shredded fluff, or other acceptable non-waste solids as needed. Processing will continue until the processed material will pass a Paint Filter Test (§330.171(c)(7)). Paint filter testing will be conducted at a minimum of one test per solidified batch. The time required for solidification of a batch of liquid waste is based on volume, bulking agent used, and odor control requirements, but solidification will be accomplished no less than weekly for liquids other than grease trap waste, grit trap waste, or septage.

Material that has been dried or solidified to the point that the residual material will pass a paint filter test may be disposed of in the landfill. Processed material from municipal/commercial sources and industrial sources classified as Class 2 or 3 may also be used as alternate daily cover (ADC), provided prior authorization is received from the TCEQ and the ADC is used in accordance with Section 25.2 of this SOP.

Attachment C
to October 2016 Supplement Letter (MSW 2374)

Redline Version of Changed Pages

Redline/Strikeout Version

Part II, Figure 5

Monitoring System and Site Layout Plan

PART II
APPLICATION FOR PERMIT
TYPE I MUNICIPAL SOLID WASTE FACILITY
MSW PERMIT NO. 2374

PESCADITO ENVIRONMENTAL
RESOURCE CENTER

SOLID WASTE MANAGEMENT AND
DISPOSAL FACILITY
RANCHO VIEJO WASTE MANAGEMENT, LLC
LAREDO, WEBB COUNTY, TEXAS

Sections 1.1, 1.2, 2.1.4, 10.1—10.4, 11.1 –
Signed by H.C. Clark, P.G., Ph.D. on Feb. 7,
2012

Except for Sections 1.1, 1.2, 2.1.4,
10.1—10.4 and 11.1 – remaining
portions of Part II through February 17,
2012 revisions were signed/sealed by
James F. Neyens, P.E. on February 24,
2012.

**Originally
Prepared By:**

TRC Environmental Corporation
TBPE Firm Registration No. 3775

March 28, 2011; Revised May 20, 2011; Revised September 14, 2011; Revised December 14, 2011; Revised February 17, 2012

Revised on June 12, 2014 by:



Shaw Environmental, Inc. (a CB&I company)
TBPE Firm Registration No. F-5650
and

H.C. Clark P.G., Ph.D. for Sections 1.2, 2.1.4 and 11.1

Revised July 25, 2014; April 20, 2015; ~~and~~ September 2015; Technically Complete March 11, 2016

Modified October 2016 By:

CB&I Environmental and Infrastructure, Inc.
TBPE Firm Registration No. F-5650

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Sections 1.1, 1.2, 2.1.4, 10.1—10.4,
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Revised June 12, 2014

H.C. Clark P.G., Ph.D. for Sections 1.2, 2.1.4 and 11.1

And

CB&I (Shaw Environmental, Inc.) for other revised pages

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Attachment H	TPDES Certification
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Sections 1.1, 1.2, 2.1.4, 10.1—10.4,
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H.C. Clark P.G., Ph.D. for Sections 1.2, 2.1.4 and 11.1

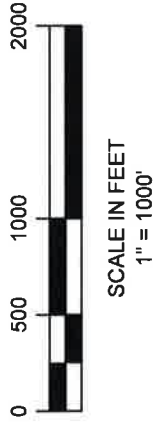
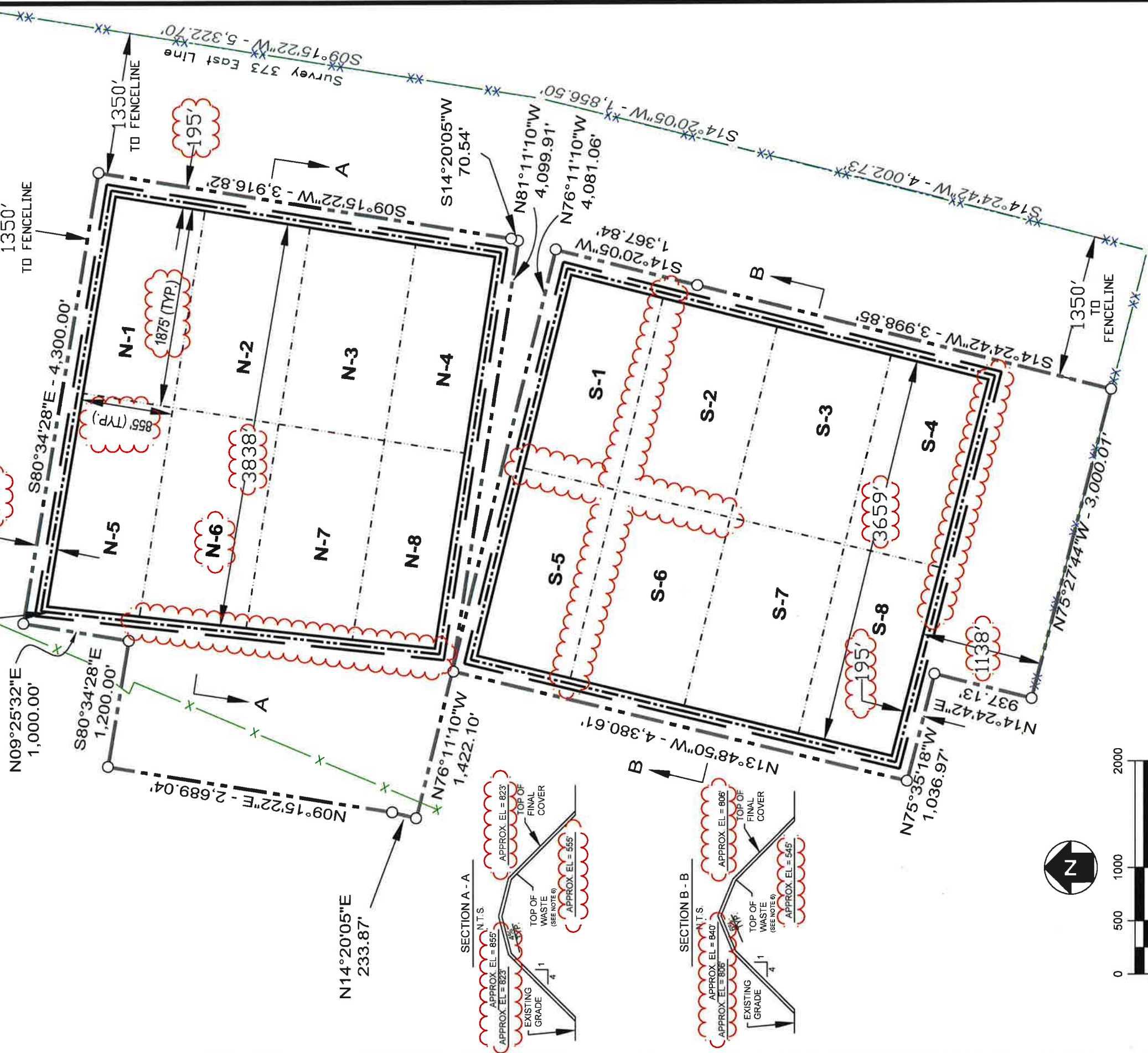
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LOCATE DRAINAGE DITCHES,
DETENTION PONDS AND
PERIMETER MAINTENANCE ROAD
IN LANDFILL BUFFER ZONE



NOTES

1. FACILITY PERMIT AREA APPROXIMATELY 953 ACRES.
2. SOURCE: BOUNDARY AND IMPROVEMENT SURVEY, MEJIA ENGINEERING COMPANY (4/9/10 & 5/9/14).
3. CONSTRUCT SECURITY FENCE AND GATES ALONG FACILITY PERMIT BOUNDARY.
4. TRC ENVIRONMENTAL CORP. TBPE FIRM F-3775.
5. FACILITY PERMIT BOUNDARY REVISED BY CB&I (SHAW ENVIRONMENTAL, INC.) TBPE FIRM F-5650
6. LANDFILL ELEVATIONS ARE PRELIMINARY FOR TOP OF FINAL COVER. **SUBTRACT 2.5' FOR TOP OF WASTE ELEVATION. (SEE APP. III - D.2.)**

LEGEND

- (A-1) LANDFILL CELL DESIGNATION
- GROUNDWATER MONITORING ZONE LOCATION
- LANDFILL GAS MONITORING ZONE LOCATION
- - - TYP. LANDFILL CELL BOUNDARY
- FACILITY PERMIT BOUNDARY LINE
- APPROXIMATE LANDFILL LIMIT
- PROPERTY LINE AND FENCE
- 8' HOG FENCE

THIS DRAWING HAS BEEN ADAPTED FROM "GENERAL LOCATION MAP" DEVELOPED BY TRC FOR THE PART 1 APPLICATION FOR PERMIT, TYPE 1 MUNICIPAL SOLID WASTE FACILITY, MSW PERMIT NO. 2374, PESCADITO ENVIRONMENTAL RESOURCE CENTER. THIS PERMIT APPLICATION WAS DEVELOPED ON BEHALF OF RANCHO VIEJO WASTE MANAGEMENT, LLC AND WAS SUBMITTED TO THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY AND DECLARED TECHNICALLY COMPLETE ON JULY 2, 2012. THE ORIGINAL DRAWING FILE IS DATED 2/14/2011 AND WAS STAMPED BY LICENSED PROFESSIONAL ENGINEER JAMES F. NEVENS, LICENSE NO. 52766 ON 9/14/2011. REVISIONS TO THE ORIGINAL DRAWINGS ARE SUMMARIZED IN THE REVISION NOTES

REV 1 - 5/29/14 - REVISED FACILITY PERMIT BOUNDARY

REV 2 - 7/18/14 - ADDED SECTION B - B

REV 3 - 9/29/16 - REVISED CELL LAYOUT



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CB&I Environmental & Infrastructure, Inc.

**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS**

**FIGURE 5 - PART 2
MONITORING SYSTEM AND CELL LAYOUT PLAN**

DRAWN BY: MTE APPROVED BY: MWO PROJ. NO.: 148866 DATE: MAY 2014

Redline/Strikeout Version
Part III, Attachment III-B
General Facility Design

Part III
Attachment III-B

GENERAL FACILITY DESIGN

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015
Revised September 2015
Technically Complete March 11, 2016
Modified October 2016

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Appendix III-B.1 Figures

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1.0 FACILITY ACCESS

Public access to the Pescadito Environmental Resource Center (PERC) will be controlled through a means of existing fences, natural barriers and constructed fences around the perimeter of the facility approximately as shown on Figure III-B.1-2 in Appendix III-B.1. On the north and east, access is controlled by a natural barrier of 1,350 feet of land owned by Rancho Viejo Cattle Company followed by an existing 8-foot tall game fence. Should the natural barrier of 1,350-feet or existing 8-foot tall game fence prove to not be sufficient or if other uses or development occur in that area, a fence, as discussed below, will be constructed along the northern and eastern permit boundaries. Along the southern boundary, access is controlled by the detention pond and an existing 8-foot tall game fence which will remain in place. Along the western and southwestern boundaries, a fence, as discussed below, will be constructed and maintained for access control. Locations of gates are also shown on Figure III-B.1-2.~~by a perimeter fence located along the permit boundary and locking gates at the site entrance and other locations as needed for access to the remainder of the site.~~ If needed, the ~~perimeter~~ fence may be offset from the permit boundary in areas of dense vegetation or in areas that are difficult to access.

The fence and gates will prevent the entry of livestock, protect the public from exposure to potential health and safety hazards by discouraging unauthorized public access to the disposal and processing operations, and discourage unauthorized entry or uncontrolled disposal of solid waste or prohibited materials. Perimeter fencing consisting of barbed wire, woven wire, wooden fencing, plastic fencing, pipe fencing, or other suitable material will be provided at least four-feet tall.

An entrance gate constructed of suitable fencing materials will be located on the entrance road to the site. The entrance gate will be locked when the landfill is not accepting waste and all other gates will be locked when not in use. The perimeter fence and gates will be inspected monthly and maintenance will be performed as necessary. Should a breach be detected during inspection or at any other time, every reasonable effort will be made to make repairs within 24 hours of detection. Should repairs require more than 24 hours; temporary repairs will be performed within the time specified during notification to the TCEQ region office in Laredo. The TCEO region office will be notified of the breach within 24 hours of detection unless permanent repairs are made within eight hours of detection.

Public access to the PERC site is provided from State Highway 359 and is limited to the entrance road through the scale house area. Access control to the facility is provided by the perimeter fencing and gated site entrance. Entrance to the site is monitored by the scale house attendant during site operating hours. Outside waste acceptance hours, the entrance gate to the site will be locked.

Entry to the active portion of the site will be restricted to designated personnel, approved waste haulers, properly identified persons whose entry is authorized by site management, and regulatory (e.g., TCEQ, Webb County officials) personnel. Visitors may be allowed on the active area only when accompanied by a site representative. Signs will be located along the

Appendix III-D.3 – Landfill Design and Details.

A leachate collection system (LCS) has been designed with a geocomposite drainage layer, leachate collection trenches, and collection sumps and pumps to remove leachate from the landfill. The LCS design, layout and details are shown in Part III, Appendix III-D.3 and information regarding the design is included in Appendix III-D.6 - Leachate and Contaminated Water Management Plan.

The landfill development method for the facility is a combination of area excavation and fill followed by aerial fill to the landfill completion height. Landfill development will generally follow the sequence of development as shown on Figure III-B.1.2 in Appendix III-B.1, which will be generally in the order the cells are numbered, starting with the north disposal unit. Individual cells may be developed in multiple phases depending on the amount of solid waste anticipated to be received.

Waste accepted for disposal will be directed to the active working face. Waste will be unloaded at the active working face, spread in layers and thoroughly compacted. Daily cover of waste will be applied to control disease vectors, windblown waste, odors, fires, scavenging, and to promote runoff from the fill area. Daily cover consisting of a minimum of 6 inches of soil will be placed over wastes at the end of each working day for odor control. Alternate daily covers (ADC), such as tarps, foams and slurry mixtures or contaminated soil will also be used if specifically approved by the TCEQ. Details regarding the use of ADC are included in Part IV – Site Operating Plan.

The final cover side slopes will not be steeper than 4H:1V, and the aerial fill top slope will be approximately 6 percent. A water balance (or evapotranspiration cover) final cover will be constructed over the entire landfill. As shown in Part III, Appendix III-D.8 – Water Balance Alternate Final Cover Design, the final cover is generally described below with layers from top to bottom.

Vegetative layer	7 – inches of soil capable of sustaining vegetation
------------------	---

Infiltration layer	30 – inches of soil per the requirements of Appendix III-D.8
Intermediate cover	12-inches of on-site soils

Final cover placement will generally follow the sequence of development of the landfill cells as shown on the Figures in Appendix III-B.1 and will be ongoing as areas of the site are filled to capacity. Cells will be closed according to the closure plan provided in Part III, Attachment III-H - Closure Plan.

2.2 Class 1 Industrial Waste

Class 1 industrial waste, both liquid and solid, may be accepted at the facility. Class 1 wastes are defined at 30 TAC 330.3(21) as “*Class 1 wastes--Any industrial solid waste or mixture of industrial solid wastes that because of its concentration, or physical or chemical characteristics is toxic, corrosive, flammable, a strong sensitizer or irritant, a generator of sudden pressure by decomposition, heat, or other means, or may pose a substantial present or potential danger to human health or the environment when improperly processed, stored, transported, or disposed of or otherwise managed, as further defined in §335.505 of this title (relating to Class 1 Waste Determination)*”.

Pursuant to 330.331(e)(3) a landfill unit that accepts Class 1 waste must be located in areas allowed by 30 TAC 335.584(b)(1) and (2) (relating to Location Restrictions). The PERC facility meets the requirements of 335.584(b)(1) in that the soil materials beneath the facility are only rarely of the listed coarse-grained Unified Soil Classifications discussed in that section. In fact, some 95% of the soils are classified as CH or CL with hydraulic conductivities much less than 1×10^{-5} cm/sec as discussed in Part III, Appendix III-E.0, III-E.2, III-E.3 and III-E.5. With regard to 332.584(b)(1)(A), the average annual evaporation exceeds the average annual precipitation by much more than 40-inches (See Part II, Section 1.4). With regard to 335.584(b)(1)(B), where coarse-grained classification soils are actually present, they occur as isolated lenses and are not sufficiently thick or laterally continuous to provide a significant pathway for waste migration and therefore the site is exempt from the requirements of 335.584(b)(1) as illustrated in the Geology Report (Part III, Attachment III-E). Further, even the most permeable, coarse-grained lenses were barely into the 1×10^{-5} cm/sec range.

With regard to 335.584(b)(2), the Geology Report (Part III, Attachment III-E) shows that the regional aquifer is protected by hundreds of feet of clays. Much more than the minimum of ten feet of material exists with a hydraulic conductivity no greater than 1×10^{-7} centimeters per second (cm/sec) vertically down toward the aquifer; therefore the site is in compliance with 335.584(b)(2).

Class 1 waste will be identified at the scale house and directed to either to the liquid solidification area or the appropriate class 1 waste disposal cell. Once solidified, class 1 liquid waste will be transported and

disposed in a class I disposal cell.

The amount of class 1 industrial waste received will be limited to 20% of the incoming wastes, not including the class 1 amount, received in the previous or current year.

Class 1 waste disposal cells will have a composite liner including three feet of compacted clay with a maximum hydraulic conductivity of 1×10^{-7} cm/ sec. All cells are designated as potential class 1 cells. Class 1 waste disposal will be limited to an elevation below the perimeter berm.

Other wastes, such as MSW, special waste, RACM, class 2 and 3 industrial waste may be disposed above the class 1 waste provided four feet of clay-rich soil is compacted on top of the class 1 waste prior to subsequent filling above.

2.3 Liquid Solidification

Liquids to be managed at the facility such as off-specification liquids, grease trap waste, grit trap waste, sludges that do not pass the paint filter test, etc., will be identified at the scale house and directed to the liquid solidification area. The solidification basin will either be placed above a lined disposal cell or will contain a separate lined area beneath as shown on Figure III-B.1-5. Liquids will be delivered to the basins and discharged. Bulking agents such as on-site soil, sawdust, kiln dust, coal combustion residuals, auto-fluff or other inert materials with absorptive capacity will be mixed with the liquids until the resulting mixture passes the paint filter test and any other requirements outlined for the specific material. Once the liquids have been solidified, it will be transported and disposed in the appropriate waste disposal unit.

Odor control will provide at the Liquid solidification areas through rapid processing of any odorous liquids received, the large buffers provided at the facility and distance to nearby receptors. Other measures that may be employed include the use of misters utilizing odor neutralizing compounds, pending approval of a permit modification. Should these measures not prove adequate and odors are confirmed to be migrating off site, liquid wastes that have an offending odor will not be accepted.

2.4 RACM

Regulated asbestos-containing material (RACM) may be accepted for disposal at the facility as defined in 40 Code of Federal Regulations Part 61 in accordance with the provisions of 30 TAC §330.171(c)(3). PERC is providing written notification to the executive director of the intent of the facility to accept RACM. The landfill, in accordance with §330.171(c)(3)(A), dedicates all of the landfill units (or cells) to potentially receive RACM. When RACM is accepted, a separate RACM unloading and disposal area will be provided. The exact area to be used will be consistent with the expected rate of incoming material, while allowing for safe and efficient operation of vehicles and equipment. After unloading, the RACM waste will be covered with a minimum of three feet of other solid waste or one foot of earthen material. If the deposited RACM is covered with other solid waste, daily cover consisting of a minimum of six inches of

Redline/Strikeout Version
Part III, Appendix III-B.1
General Facility Design Figures

**Part III
Attachment III-B
Appendix III-B.1**

GENERAL FACILITY DESIGN FIGURES

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015
Revised September 2015
Revised November 2015
Technically Complete March 11, 2016
Modified October 2016**

**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
CB&I Environmental and
Infrastructure, Inc.**



**12005 Ford Rd, Suite 600
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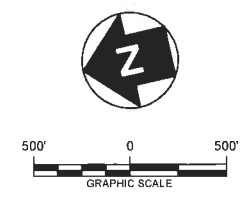
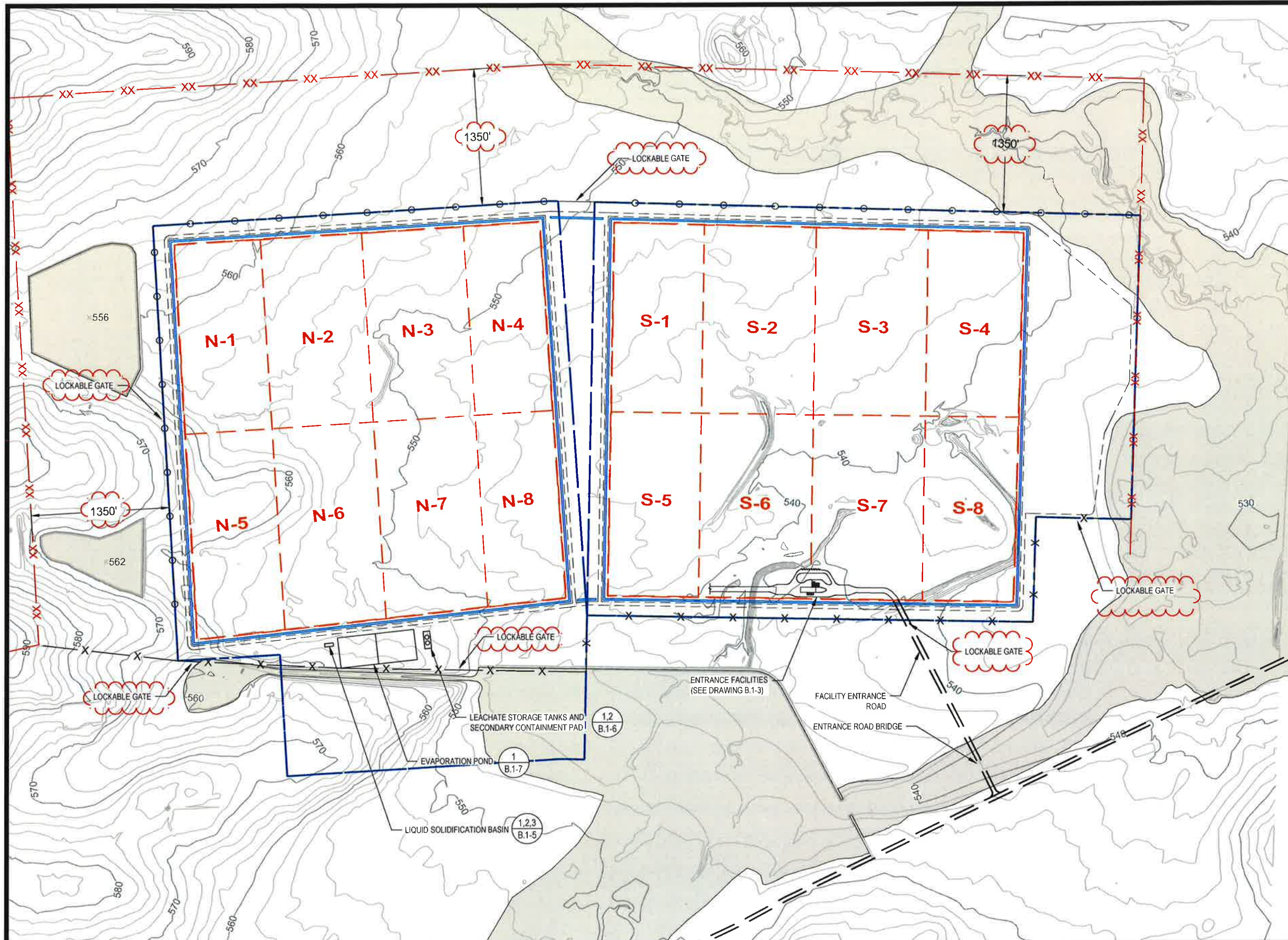
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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER ACCESS ROAD
- PERIMETER STORMWATER DITCH
- CLOMR 100-YEAR FLOODPLAIN
- XX EXISTING GAME FENCE
- X ACCESS CONTROL FENCE
- FUTURE FENCE (IF NEEDED)

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. BOUNDARY AND IMPROVEMENT SURVEY DEVELOPED BY MEJIA ENGINEERING COMPANY ON AUGUST 15, 2011 AND JUNE 9, 2014.
3. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
4. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
5. FACILITIES WILL BE ADDED AS THE NEED DICTATES.

REV. NO.	DATE	DESCRIPTION
1	10/2016	ADDED FENCE AND GATE LOCATIONS

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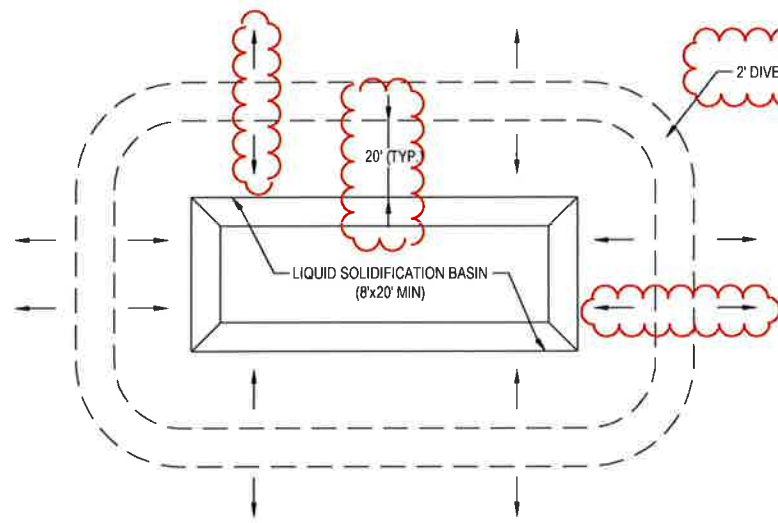
STATE OF TEXAS
 REGISTERED PROFESSIONAL ENGINEER
 MICHAEL W. ODEN
 67165
 P.E. 67165

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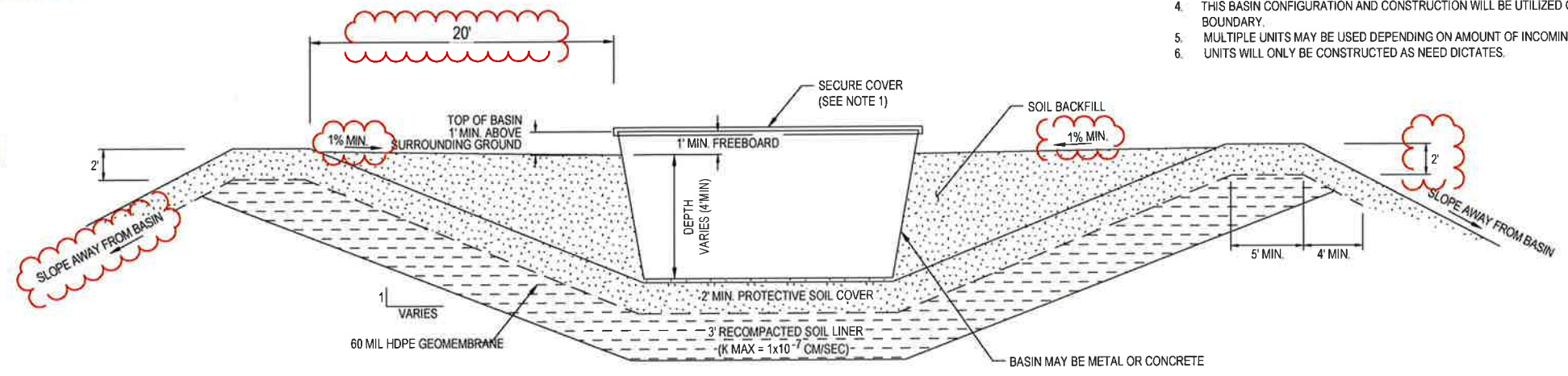
WASTE DISPOSAL, PROCESSING, AND STORAGE PLAN

PROJ. NO.: 148866	DATE: APRIL 2015
DESIGNED BY: -	DRAWING NO. III
DRAWN BY: MTE	B.1-2
CHECKED BY: RDS	2 OF 6 SHEETS
APPROVED BY: MWO	

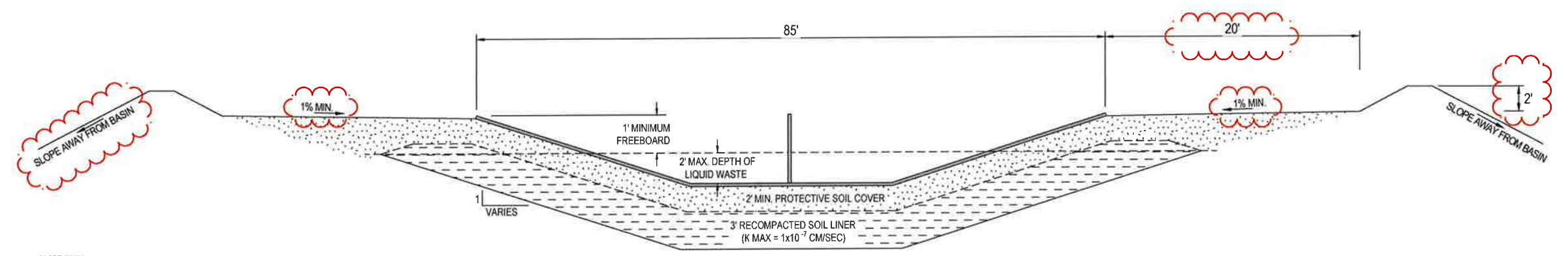


1
B.1-5
TEMPORARY LIQUID SOLIDIFICATION BASIN PLAN VIEW
NOT TO SCALE

- NOTE:
1. STORMWATER TO BE DIRECTED AWAY FROM DIVERSION BERM
 2. THIS PLAN IS CONCEPTUAL. ACTUAL DIMENSIONS OF THE BASIN WILL VARY.

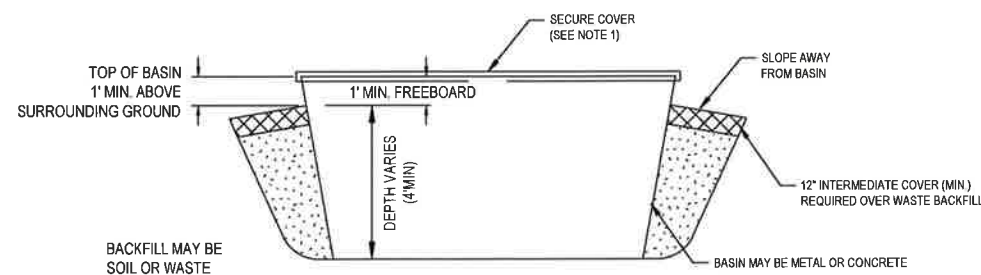


3
B.1-5
TYPICAL CROSS SECTION TEMPORARY BASIN LOCATED OUTSIDE OF WASTE CELL
NOT TO SCALE



4
B.1-5
TYPICAL CROSS SECTION PERMANENT LIQUID SOLIDIFICATION BASIN
NOT TO SCALE

- NOTE:
1. PERMANENT BASIN MAY BE CONSTRUCTED IN PHASES AS WASTE RECEIPTS DICTATE.



2
B.1-5
TYPICAL CROSS SECTION TEMPORARY BASIN LOCATED OVER LINED CELL
NOT TO SCALE

- NOTE:
1. A SECURE COVER WILL BE PLACED OVER THE TEMPORARY CONTAINER ANY TIME PROCESSED OR UNPROCESSED WASTE REMAINS IN THE CONTAINER OVERNIGHT
 2. THIS SECTION IS CONCEPTUAL. ACTUAL DIMENSIONS OF THE BASIN WILL VARY. THE NUMBER OF BASINS WILL VARY DEPENDING ON WASTE RECEIPTS.
 3. THIS BASIN CONFIGURATION MAY ONLY BE PLACED IN EXISTING WASTE OVER THE EXISTING COMPOSITE LINED CELLS

- NOTE:
1. A SECURE COVER WILL BE PLACED OVER THE TEMPORARY CONTAINER ANY TIME PROCESSED OR UNPROCESSED WASTE REMAINS IN THE CONTAINER OVERNIGHT
 2. THIS SECTION IS CONCEPTUAL. ACTUAL DIMENSIONS OF THE BASIN WILL VARY. THE BASIN SHALL BE AT A MINIMUM: 8 FEET WIDE, 20 FEET LONG, AND 5 FEET DEEP (4 FEET PLUS 1 FOOT FREEBOARD). THE NUMBER OF BASINS WILL VARY DEPENDING ON WASTE RECEIPTS.
 3. 2' OR 3' RECOMPACTED SOIL LINER AND 60 MIL HDPE GEOCOMPOSITE LINER AND 2' SOIL PROTECTIVE COVER TO BE CONSTRUCTED IN ACCORDANCE WITH APPENDIX III-D.7 (LINER QUALITY CONTROL PLAN)
 4. THIS BASIN CONFIGURATION AND CONSTRUCTION WILL BE UTILIZED OUTSIDE OF EXISTING WASTE BUT WITHIN PERMIT BOUNDARY.
 5. MULTIPLE UNITS MAY BE USED DEPENDING ON AMOUNT OF INCOMING WASTE.
 6. UNITS WILL ONLY BE CONSTRUCTED AS NEED DICTATES.

REV. NO.	DATE	DESCRIPTION
2	10/2016	REVISED LIQUID SOLIDIFICATION BASIN DETAILS
1	8/26/15	NO

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PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374

LIQUID SOLIDIFICATION BASIN PLAN AND DETAILS

PROJ. NO.:	148866	DATE:	APRIL 2015
DESIGNED BY:	-	DRAWING NO.:	III
DRAWN BY:	MTE		B.1-5
CHECKED BY:	RDS		5 OF 6 SHEETS
APPROVED BY:	MWO		

Redline/Strikeout Version
Part III, Attachment III-D
Waste Management Unit Design

**Part III
Attachment III-D**

WASTE MANAGEMENT UNIT DESIGN

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015
Revised September 2015
Revised November 2015
Technically Complete March 11, 2016
Modified October 2016

Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
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- III-D.1 – Site Layout
- III-D.2 – Landfill Cross Sections
- III-D.3 – Landfill Design and Details
- III-D.4 – Landfill Operation and Site Life
- III-D.5 – Geotechnical Analyses
- III-D.6 – Leachate and Contaminated Water Plan
- III-D.7 – Liner Quality Control Plan
- III-D.8 – Alternate Final Cover Demonstration
- III-D.9 – Final Cover Quality Control Plan

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facility in stages as the demand for this service increases. Initially, smaller units will be constructed as shown in Appendix III-B.1. In all cases, the required freeboard of one foot for the 25-year 24-hour rainfall event will be maintained. Run-on will be prevented by constructing berms around the facility, or by elevating the basin(s) above the surrounding ground level.

If the mixing basin(s) are filled to the maximum level (to within one-foot of the top – see Figure III-B.1-5 in Appendix III-B.1), no additional liquids will be added until they are emptied. However, PERC may provide a metal or fiberglass storage tank for a maximum of one day of acceptance (50,000 gallons) to account for temporary delays in the bulking process. Secondary containment will be provided around the tank, if used, by one of the following methods:

- Placing the tank over a lined area of the landfill
 - Constructing a secondary containment of compacted soil liner with a maximum permeability of 1×10^{-7} cm/sec. Construction will be documented using methods specified in the LQCP (Appendix III-D.7) with only one permeability test required
 - Utilizing a dual-walled tank
- A permit modification will be requested and approved prior to installation and use of the tank.

1.2 Large Item and Tire Storage Areas

A storage area for large items, white goods and tires may be provided near the citizen's convenience center or near the active working face for items delivered in enclosed vehicles or in mixed loads. Large items and white goods include ovens, dishwashers, freezers, air conditioners, and other large items, typically containing a large metal content. Should large items, white goods or tires be received in mixed loads, they will be removed from the active face if it is determined to be safe to do so and staged near the active working face, or removed to the designated area near the citizen's convenience center. The large items, white goods and tires will be transferred into roll-off containers, or similar storage device until transported to an off-site recycler. The containers will be covered to prevent the accumulation of rainfall inside the containers and to prevent the generation of contaminated water. The minimization of contaminated water will also limit the potential for generating odors within the storage areas. These items will be recycled to prevent a nuisance and to preclude discharge, but will not be stored in excess of 180 days. Large items and white goods that are not recycled will be disposed of at the working face. Tires will not be disposed unless they are split or quartered prior to disposal.

The procedure for acceptance, storage, processing and ultimate disposal is presented in Part IV – Site Operating Plan for PERC. Specific details regarding these areas can be found on drawings

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Part III, Appendix III-D.6

Leachate and Contaminated Water Plan

**Part III
Attachment III-D
Appendix III - D.6**

LEACHATE AND CONTAMINATED WATER PLAN

**Pescadito Environmental Resource Center
MSW-2374
Webb County, Texas**

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015
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**Prepared for:
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2. Ring Deflection of Leachate Pipe
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4. Compressed Thickness and Hydraulic Conductivity of the Geonet
5. Help Model Analysis
6. Leachate Collection System Flow Rates
7. Geotextile Permittivity
8. Leachate Collection System Design
9. Leachate Tank Size

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2. Open Conditions
 - a. Leachate Collection System Scenario A
 - b. Leachate Collection System Scenario B
 - c. Leachate Collection System Scenario C
 - d. Leachate Collection System Scenario D
3. Intermediate Conditions
4. Closed Conditions
5. Introduced Contaminated Water Analysis
 - a. Open Conditions – 20 Foot Waste Column
 - b. Intermediate Conditions – 50 Foot Waste Column
 - c. Intermediate Conditions – 100 Foot Waste Column

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3.4 Leachate Pump and Riser System

Extraction of leachate from the collection sumps will be accomplished by submersible pumps, which can be operated either manually or automatically. Leachate levels in the collection sumps, will be monitored to maintain a head buildup of no greater than ~~less than 30 cm on~~ the lowest point of the landfill floor adjacent to the sump in each cell.

Sump riser pipes will be located directly up the sideslopes from the sumps at the disposal area perimeter. Risers will be 18-inch diameter HDPE pipe and provide a means for lowering submersible pumps down the 3:1 sideslope incline into the collection sumps. The lower portion of the riser within the sump is perforated (1/2-inch diameter holes), which will allow leachate to flow to the pumps.

The depth of leachate on the liner will be measured using electronic transducers mounted on the leachate pump. Leachate pumps will be sized appropriately to ensure that leachate levels can be maintained at a depth no greater than the lowest point of the landfill floor adjacent to the sump in each cell ~~on the liner just outside the sump of 30 cm or less~~, without short-cycling. Pumps will be automatically controlled using liquid level sensors installed at appropriate elevations to activate the pump when the leachate level is ten inches above the top of the sump, and deactivate the pump when the leachate level is six inches, or less above the bottom of the sump.

3.5 Conveyance

Leachate will be transferred to storage tanks or disposal locations by tanker truck or pipeline. Leachate may be withdrawn from the collection sumps or lines, or storage tanks/ponds into tanker trucks. Spill containment for truck hose connection and loading will be provided by a portable trough or similar spill containment. Protection will be provided at hose connection locations. Contaminated water will be transported to an authorized and permitted facility, or to the on-site evaporation pond, for treatment and disposal.

3.6 Leachate Storage

Leachate will be stored on-site in two on-site leachate storage tanks or evaporation pond prior to transport to a permitted treatment facility. The leachate storage facility will have adequate secondary containment in the event of a tank failure. Secondary containment will be sized to

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Part III, Appendix III-F.1
Groundwater Monitoring Plan Figures

**Part III
Attachment III-F
Appendix III-F.1**

GROUNDWATER MONITORING PLAN FIGURES

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015
Revised September 2015
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**Prepared for:
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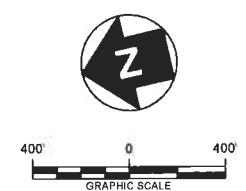
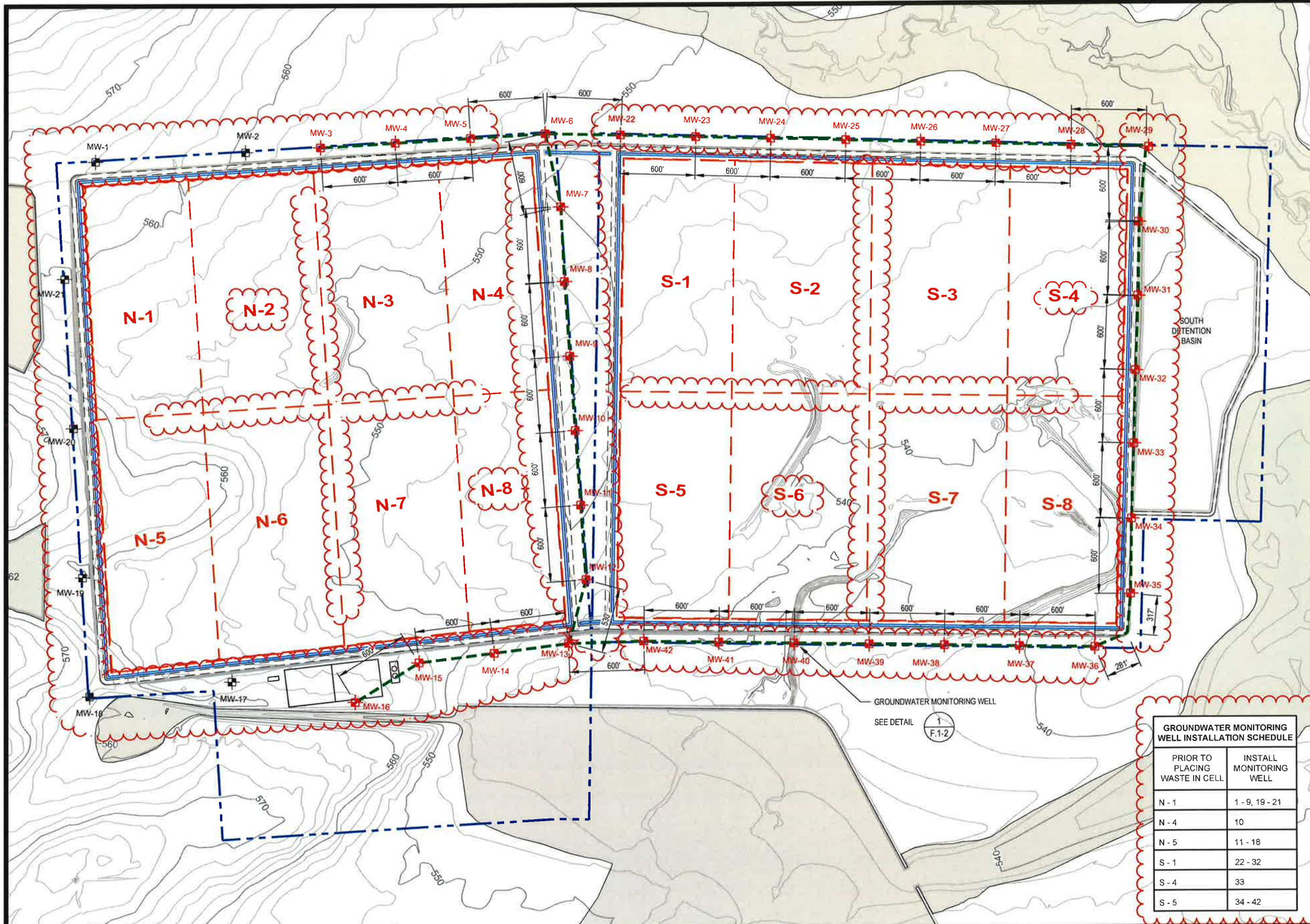
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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER DITCH
- PERIMETER ACCESS ROAD
- + MW-1 GROUNDWATER MONITORING WELL (UPGRADIENT)
- + MW-10 GROUNDWATER MONITORING WELL (DOWNGRADIENT)
- CLOMR 100-YEAR FLOODPLAIN
- POINT OF COMPLIANCE (P.O.C.)

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
4. MW-3 TO MW-42 ARE DOWNGRADIENT ALONG P.O.C.
5. MW-1, MW-2, AND MW-17 TO MW-21 ARE UPGRADIENT.

GROUNDWATER MONITORING WELL INSTALLATION SCHEDULE

PRIOR TO PLACING WASTE IN CELL	INSTALL MONITORING WELL
N - 1	1 - 9, 19 - 21
N - 4	10
N - 5	11 - 18
S - 1	22 - 32
S - 4	33
S - 5	34 - 42

REV. NO.	DATE	DESCRIPTION
3	10/2016	REVISED WELL LAYOUT / ADDED INSTALLATION SCHEDULE
2	11/2015	NOD 2
1	9/2015	NOD 1

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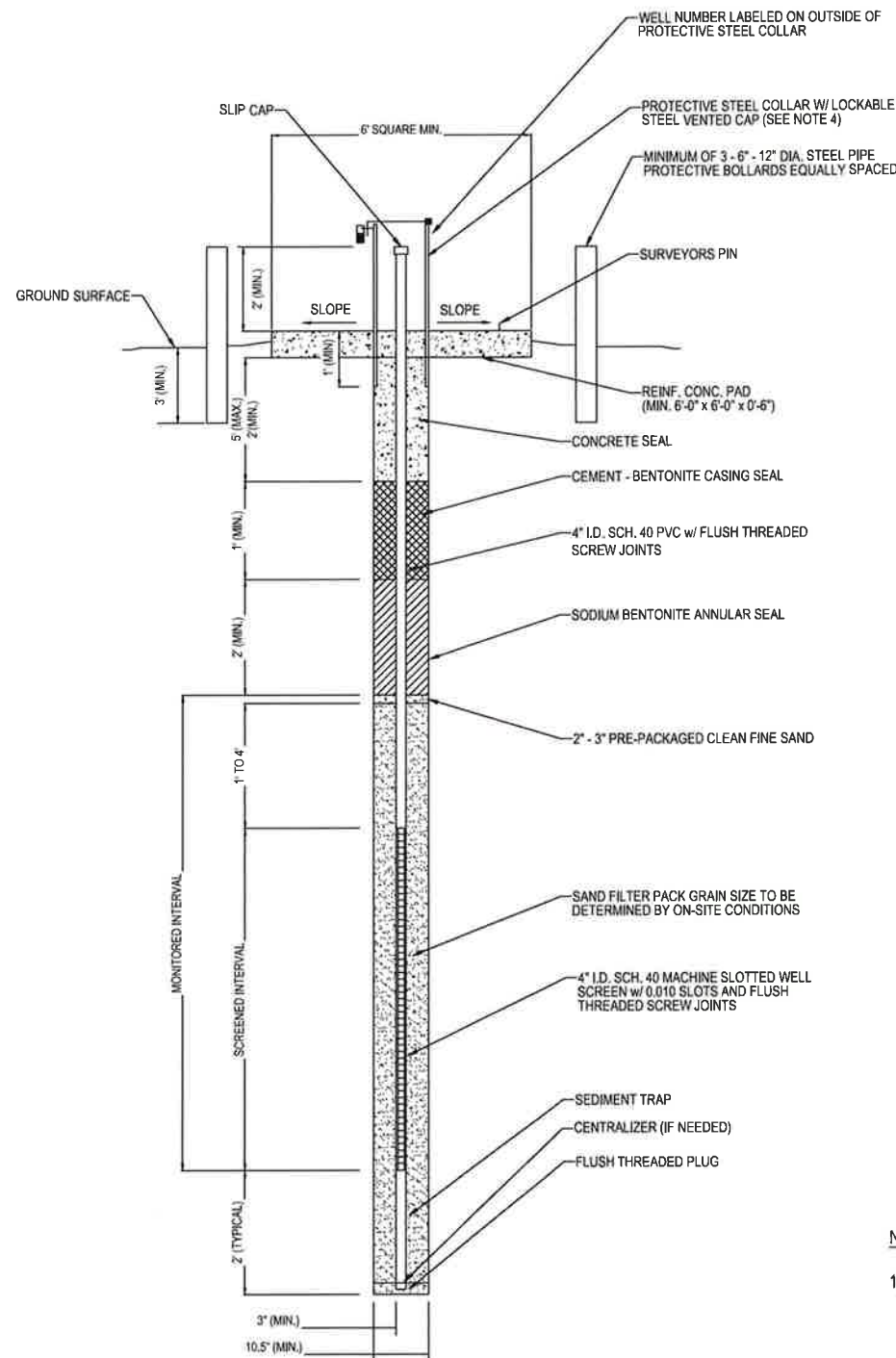


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 WEBB COUNTY, TEXAS
 MSW 2374**

GROUNDWATER MONITORING SYSTEM PLAN

PROJ. NO.: 148866	DATE: APRIL 2015
DESIGNED BY: -	DRAWING NO. III
DRAWN BY: MTE	F.1-1
CHECKED BY: RDS	1 OF 2 SHEETS
APPROVED BY: MWO	



1
F.1-2
TYPICAL GROUNDWATER MONITORING WELL
NOT TO SCALE

NOTES:

1. MONITORING WELL INSTALLATION SHALL CONFORM TO METHODS AND MATERIALS DESCRIBED IN APPLICABLE REGULATIONS OF TCEQ.
2. PTFE TAPE OR O-RINGS ON ALL JOINTS.
3. MONITORED INTERVAL TO BE FROM 9' BELOW GROUND SURFACE TO THE DEEPEST SUMP EXCAVATION ELEVATION NEAREST TO THE WELL, ASSUMING THREE FOOT LINER.
4. PROTECTIVE COLLAR AND CAP MAY BE STEEL OR ALUMINUM.

GROUNDWATER MONITORING WELL SUMMARY TABLE

Well Name	Northing	Eastng	Ground Surface Elevation (ft MSL)	Nearest Sump	Bottom Sump Elevation (ft. MSL)	Liner Excavation Elevation (see note 3)
MW-01	17098886.69	773881.16	565.91	N-1	456	453
MW-02	17097702.31	773688.14	559.21	N-2	456	453
MW-03	17097110.12	773591.63	556.43	N-3	451	448
MW-04	17096518.07	773494.27	554.75	N-3	451	448
MW-05	17095926.02	773396.92	552.54	N-4	451	448
MW-06	17095334.01	773299.35	550.91	N-4	451	448
MW-07	17095345.76	772700.03	549.22	N-4	451	448
MW-08	17095450.61	772109.12	548.00	N-4	451	448
MW-09	17095542.55	771516.21	545.83	N-4	451	448
MW-10	17095634.48	770923.29	544.73	N-8	451	448
MW-11	17095726.42	770330.38	544.33	N-8	451	448
MW-12	17095818.35	769737.46	544.74	N-8	451	448
MW-13	17096067.47	769269.65	543.99	N-8	451	448
MW-14	17096664.67	769327.57	547.69	N-8	451	448
MW-15	17097261.87	769385.49	552.73	N-7	451	448
MW-16	17097829.62	769191.05	558.02	N-7	451	448
MW-17	17098750.56	769569.69	556.70	N-6	451	448
MW-18	17099883.71	769707.17	563.37	N-5	456	453
MW-19	17099726.98	770651.32	560.31	N-5	456	453
MW-20	17099530.46	771835.12	566.08	N-5	456	453
MW-21	17099333.94	773018.92	559.58	N-1	456	453
MW-22	17094751.01	773153.82	549.51	S-1	446	443
MW-23	17094169.73	773005.28	548.77	S-1	446	443
MW-24	17093587.87	772856.59	548.00	S-2	441	438
MW-25	17093007.29	772707.40	546.58	S-2	441	438
MW-26	17092426.17	772558.07	545.54	S-3	441	438
MW-27	17091845.05	772408.73	544.09	S-3	441	438
MW-28	17091263.93	772259.40	542.59	S-4	436	433
MW-29	17090661.89	772104.69	540.87	S-4	436	433
MW-30	17090877.12	771537.08	541.47	S-4	436	433
MW-31	17091016.01	770960.70	540.00	S-4	436	433
MW-32	17091168.38	770382.58	538.20	S-4	436	433
MW-33	17091313.94	769813.46	536.14	S-8	436	433
MW-34	17091466.27	769229.95	537.85	S-8	436	433
MW-35	17091608.70	768644.15	537.87	S-8	436	433
MW-36	17091984.47	768293.13	537.94	S-8	436	433
MW-37	17092567.11	768436.39	540.44	S-8	436	433
MW-38	17093149.76	768579.65	541.99	S-7	441	438
MW-39	17093732.41	768722.91	541.54	S-7	441	438
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MW-42	17095480.34	769152.69	541.99	S-5	446	443

REV. NO.	DATE	DESCRIPTION
3	10/2016	REVISED MONITORING WELL SYSTEM
2	09/2015	ADD SURVEY POINT
1	11/2015	NOD 2

CBI CB&I Environmental & Infrastructure, Inc.
TBPE FIRM F-5650

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STATE OF TEXAS
MICHAEL W. ODEN
67165
REGISTERED PROFESSIONAL ENGINEER

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**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374**

TYPICAL GROUNDWATER MONITORING WELL DETAIL

PROJ. NO.:	148866	DATE:	APRIL 2015
DESIGNED BY:	-	DRAWING NO.:	III
DRAWN BY:	MTE		F.1-2
CHECKED BY:	RDS		2 OF 2 SHEETS
APPROVED BY:	MWO		

Redline/Strikeout Version
Part III, Appendix III-G.1
Landfill Gas Management Plan Figures

**Part III
Attachment III-G
Appendix III-G.1**

LANDFILL GAS MANAGEMENT PLAN FIGURES

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

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

**Initial Submittal March 2015
Revised September 2015
Technically Complete March 11, 2016
Modified October 2016**

**Prepared for:
Rancho Viejo Waste Management, LLC
1116 Calle del Norte
Laredo, TX 78041**

**Prepared by:
CB&I Environmental and
Infrastructure, Inc.**



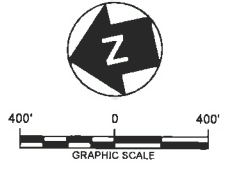
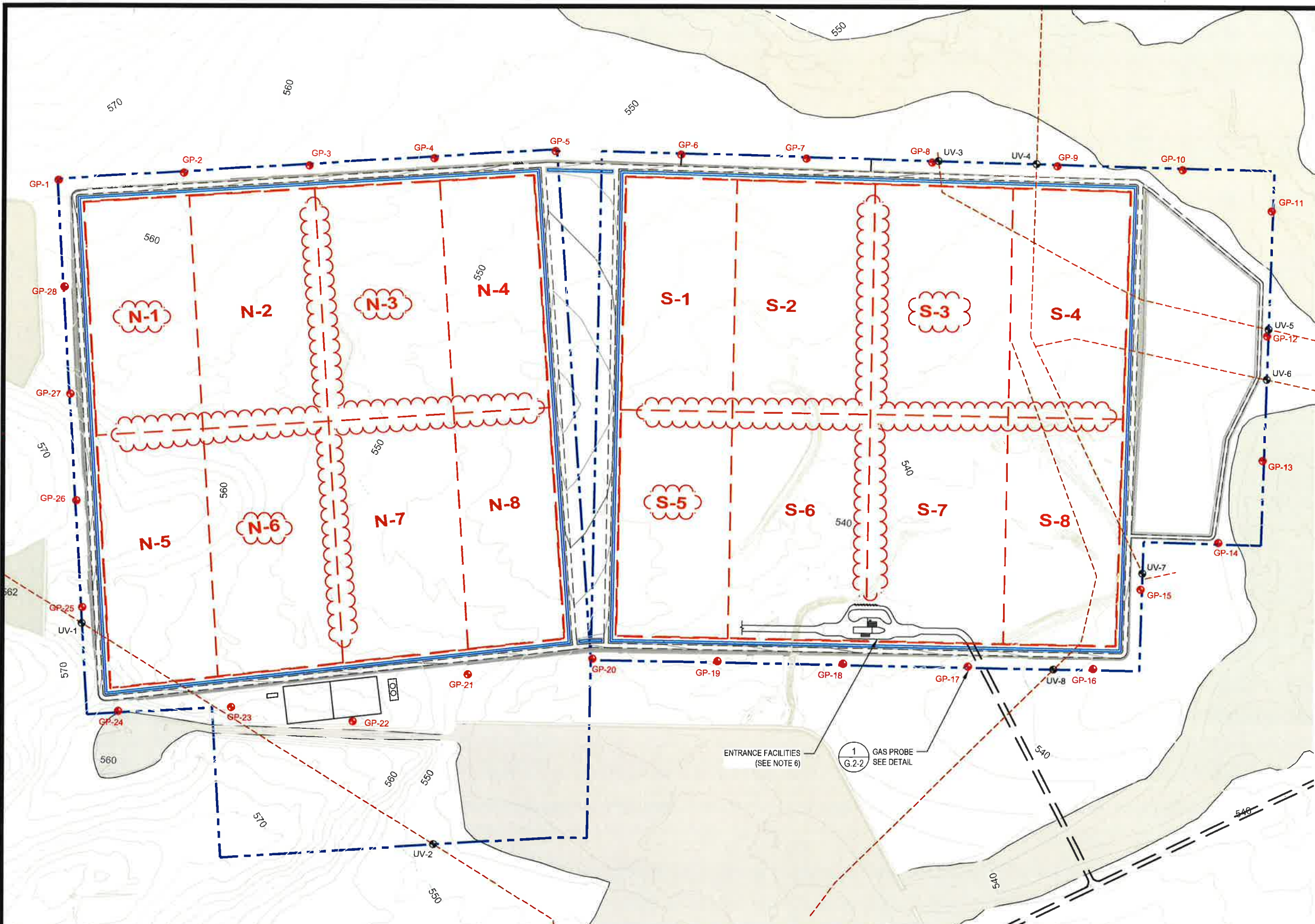
**12005 Ford Rd, Suite 600
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LEGEND

- PERMIT BOUNDARY
- WASTE UNIT BOUNDARY
- PERIMETER DITCH
- PERIMETER ACCESS ROAD
- PIPELINE EASEMENT CENTERLINE
- GP-1 GAS PROBE LOCATION
- UV-1 UTILITY VENT LOCATION
- CLOMR 100-YEAR FLOODPLAIN

NOTES

1. EXISTING CONTOURS DEVELOPED FROM SITE AERIAL TOPOGRAPHIC SURVEY BY DALLAS AERIAL SURVEYS ON FEBRUARY 15, 2010.
2. FOR CLARITY, NOT ALL SITE FEATURES MAY BE SHOWN.
3. THE NEED FOR FLEXIBILITY TO ACCOMMODATE ADJUSTMENTS AND MODIFICATIONS IS ANTICIPATED CONSIDERING THE SIZE, COMPLEXITY, AND LIFE OF THE PROJECT.
4. FOR UTILITY VENT SEE DETAIL 2 OF DRAWING G.2-2. UTILITY VENTS TO BE INSTALLED AT PROPERTY LINE WHEN WASTE IS WITHIN 1,000 FEET, UNLESS PIPELINE HAS BEEN ABANDONED AND REMOVED.
5. GAS PROBES WILL BE INSTALLED AS CELLS ARE CONSTRUCTED SO THAT A PROBE EXISTS AT LEAST 1000 FEET FROM WASTE.
6. SCALE HOUSE TO HAVE PERMANENT MONITOR.

LANDFILL GAS PROBE INSTALLATION SCHEDULE

PRIOR TO PLACING WASTE IN CELL	INSTALL PROBE / VENT
N - 1	GP-1, 2, 3, 25, 26, 27, 28
N - 2	GP-4
N - 3	GP-5
N - 4	GP-6
N - 5	GP-22, 23, 24; UV-1, 2
N - 6	GP-21
N - 7	GP-20
N - 8	GP-19
S - 1	GP-7, 8; UV-3
S - 2	GP-9; UV-4
S - 3	GP-10
S - 4	GP-11, 12, 13; UV-5, 6
S - 5	GP-18
S - 6	GP-17
S - 7	GP-16; UV-8
S - 8	GP-14, 15; UV-7

REV. NO.	DATE	DESCRIPTION
1	10/2016	ADDED CELL LAYOUT AND INSTALLATION SCHEDULE

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TBPE FIRM F-5650



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**PESCADITO ENVIRONMENTAL RESOURCE CENTER
WEBB COUNTY, TEXAS
MSW 2374**

LANDFILL GAS MONITORING PLAN

PROJ. NO.:	148888	DATE:	APRIL 2015
DESIGNED BY:	-	DRAWING NO.	III
DRAWN BY:	MTE		G.1-1
CHECKED BY:	RDS		1 OF 2 SHEETS
APPROVED BY:	MWO		

Redline/Strikeout Version

Part IV

Site Operating Plan

Part IV

SITE OPERATING PLAN

Pescadito Environmental Resource Center

MSW-2374

Webb County, Texas

PESCADITO
ENVIRONMENTAL RESOURCE CENTER

Initial Submittal March 2015

Revised September 2015

Revised November 2015

Technically Complete March 11, 2016

Modified Revised August 2016

Modified October 2016

Prepared for:

Rancho Viejo Waste Management, LLC

1116 Calle del Norte

Laredo, TX 78041

Prepared by:

CB&I Environmental and

Infrastructure, Inc.



12005 Ford Rd, Suite 600

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Attachment IV-A Contingency Plan
Attachment IV-B Liquid Waste Solidification

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19.0 SITE ACCESS ROADS §330.153 and 330.237

All-weather roads within the site will be constructed with compacted flexible base or other appropriate surfaces over a compacted subgrade to facilitate vehicle traffic and access to the unloading areas and to reduce accumulation of mud on the tires of waste hauling trucks. Additionally, the private road, which is the site access road that extends from Jordon Road to the facility entrance will have an all-weather surface of adequate thickness to support the waste traffic. During wet weather the “all weather” surfaced site access roads and the approximately 3 miles of access road to the site from Jordon Road will allow the vehicles to throw off the mud from their tires prior to entering public roadway. Should mud and associated debris be tracked onto Jordon road, the materials will be removed at least once daily typically by using the water truck and/or motor grader.

Litter and other debris will be picked up from the site access roads and along the first 2 miles of the access road to the site (measured from the gate) and transported to the working face for disposal on a daily basis. (Refer to Sections 12 and 15).

Dust development will be minimized through proper operating procedures. Haul roads will be sprayed using a water truck to control dust as necessary. Water for dust control will be obtained from detention ponds or a water well. ~~After construction of the liquid waste solidification unit and acceptance of liquid wastes commences, treated liquids removed from grit trap waste water and fresh water based drilling fluid (with a TPH less than 1,500 ppm) may be removed from the solidification unit and used for dust control over active lined areas.~~ If necessary, commercial dust-control may be sprayed on the road surfaces to retard the spread of dust.

On-site roads will be maintained on a regular basis. Access roadways will be re-graded to minimize depressions, ruts, and potholes when they would interfere with access to the unloading area. Typically, re-grading will be required after significant rain events and will be performed while the materials are sufficiently moist to facilitate grading and re-compaction. Road repair materials such as cold mix asphalt, stone, or gravel will be stockpiled on site for use as necessary.

minimum, the RACM will be placed at least 20 feet away from exterior final side slopes, and at least 10 feet below final grade. During unloading and placement of RACM in the waste fill, care will be exercised to prevent breaking open the bags or containers. One foot of soil cover or 3 feet of asbestos-free municipal solid waste will be placed over the RACM immediately after it is placed in the landfill unit. RACM that has been designated as Class 1 industrial solid waste, and that arrives at the facility will be disposed of in accordance with §330.171(c) or in accordance with this section of the SOP. Upon closure of the facility, a notation indicating that the site accepted RACM will be placed in the deed record. This notation will indicate where the RACM was disposed of on the property by showing its location on a site diagram. A copy of this documentation will be provided to the TCEQ.

- Non-regulated asbestos-containing materials (non-RACM) may be accepted for disposal provided the wastes are placed on the active working face and covered. Under no circumstances shall any material containing non-RACM be placed on any surface or roadway that is subject to vehicular traffic or disposed of by any other means by which the material could be crumbled into a friable state.
 -
 - Municipal hazardous waste from conditionally exempt small quantity generators provided the amount of waste does not exceed 220 pounds per month per generator.
- Nonhazardous liquids from municipal sources providing the material is classified as Class 1 (nonhazardous), Class 2, or Class 3 may be accepted consistent with this section and the procedures outlined in the “Liquid Waste Solidification Operations” in Attachment IV-B. Liquids in tank trucks or vacuum trucks are discharged in the liquid waste stabilization unit in the liquid processing area and processed until the residual material passes the paint filter tests as described in the “Liquid Waste Solidification Operations” in the Appendix B. ~~Liquids removed from the processing unit section containing treated liquids removed from grit trap waste water and fresh water based drilling fluid (with a TPH less than 1,500 ppm) may be utilized for dust and litter control and waste compaction over active waste disposal areas of the landfill.~~ Once

sufficient water has evaporated or the material has otherwise been dried to the point that the residual material will pass a paint filter test, the residual

- material may be disposed of in the landfill. Solidified Class 1 liquids will only be placed in a cell approved for Class 1 waste.~~Classification will be based on source/process knowledge. Metals and TPH testing will be performed if the source/process review indicates the potential for the water to be Class 1 industrial or hazardous.~~

TCEQ approval will be requested on a case by case basis through the use of the 0152 Form (or other forms prescribed by the TCEQ) for any liquids listed in Subsection 27.1 of the Site Operating Plan (SOP) or that are not exempt from prior approval either in Subsection 27.2 of the permit SOP, or §330.171(c) or (d).

1.3 Liquid Waste Solidification Process

Liquids in tank trucks or vacuum trucks will be discharged directly into one of the separate bulk liquid solidification units of the facility. The solidification facility will have at least two dividers creating three or more separate processing units. The usage of each unit will vary depending on the daily volumes of each type of liquid. Approved Class 2 liquid waste that is received may be comingled and solidified with the grease trap waste, grit trap waste, or septage. Class 1 liquids will not be comingled with other liquids but will be processed separately. Approved waste liquids may be added to a unit where liquids are being processed; however, the processing time limit is based on the date and time the first load of liquids were discharged into the unit. Operations will be rotated among the different units, which will allow liquids to be processed in one unit while the other unit is being cleaned out and prepared to receive more liquid waste.

Solidification will be accomplished using soil, fly ash, cement, auto shredded fluff, or other acceptable non-waste solids as needed. Processing will continue until the processed material will pass a Paint Filter Test (§330.171(c)(7)). Paint filter testing will be conducted at a minimum of one test per solidified batch. The time required for solidification of a batch of liquid waste is based on volume, bulking agent used, and odor control requirements, but solidification will be accomplished no less than weekly for liquids other than grease trap waste, grit trap waste, or septage.

Material that has been dried or solidified to the point that the residual material will pass a paint filter test may be disposed of in the landfill. Processed material from municipal/commercial sources and industrial sources classified as Class 2 or 3 may also be used as alternate daily cover (ADC), provided prior authorization is received from the TCEQ and the ADC is used in accordance with Section 25.2 of this SOP.

Attachment D
to October 2016 Supplement Letter (MSW 2374)

Three copies of Changed Pages (TCEQ Only)