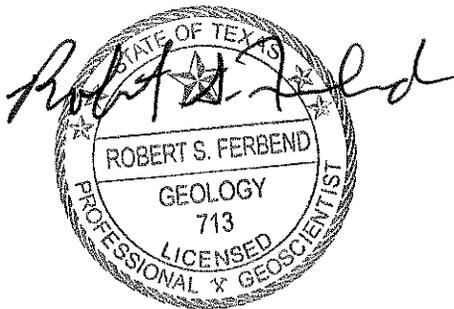


**CHARLES M. HINTON, JR. REGIONAL LANDFILL  
DALLAS COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1895A**

**PERMIT MODIFICATION**

**MONITORING WELL SPACING REVISION**

Prepared for  
City of Garland  
March 2010

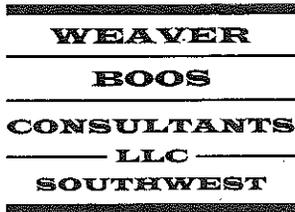


3-25-10

Prepared by

**Weaver Boos Consultants, LLC-Southwest**  
TBPE Registration No. F-3727  
6420 Southwest Blvd., Suite 206  
Fort Worth, Texas 76109  
817-735-9770

Project No. 0647-01-14-11-01



6420 SOUTHWEST BLVD, SUITE 206  
FORT WORTH, TEXAS 76109  
PHONE: 817.735.9770  
FAX: 817.735.9775  
www.weaverboos.com

Chicago, IL  
Springfield, IL  
Naperville, IL  
Griffith, IN  
South Bend, IN  
Denver, CO  
St. Louis, MO  
Columbus, OH  
Beaverton, OR  
Fort Worth, TX

March 25, 2010  
Project No. 0647-02-14-11-01

Gale Baker, P.G.  
Municipal Solid Waste Permits Section, MC 124  
Texas Commission on Environmental Quality  
P. O. Box 13087  
Austin, Texas 78711-3087

Re: Permit Modification Application  
Monitoring Well Spacing Revision  
Charles M. Hinton Jr. Regional Landfill, MSW Permit No. 1895A  
Dallas County, Texas  
Tracking No. 11994764; RN103049490/CN600328694

Dear Mr. Baker:

The purpose of this permit modification, submitted on behalf of the City of Garland, is to revise the facility's groundwater monitoring well system in accordance with §330.403(a)(2). This permit modification is being submitted as a public notice permit modification in accordance with §§305.70(l) and 330.401(b). This permit modification is also intended to revise the facility's inter-well spacing in accordance with TCEQ guidance provided during an Austin meeting in February 2010 regarding this project. As such, point of compliance wells spaced adjacent to several of the facility's leachate sumps and other monitor wells spaced 600 feet or less along the point of compliance have been proposed.

Please process this modification per Title 30 Texas Administrative Code (TAC) §305.70(l), §305.401(b) and §330.403(a)(2). A detailed permit modification justification is provided in the permit modification narrative section of the attached permit modification.

In addition, the following additional appendices are also included to complete this permit modification in accordance with TCEQ requirements.

- Appendix A includes proposed redline/strikeout format replacement pages for Attachments 4 and 5 of the Site Development Plan to facilitate your review of this permit modification.
- Appendix B includes proposed clean replacement pages for Attachments 4 and 5 of the Site Development Plan to facilitate your review of this permit modification.

Gale Baker, P.G.  
March 25, 2010  
Page 2

- Appendix C includes a completed TCEQ Part I Form 0650/applicant certification consistent with 30 TAC §305.70(e) and §305.44.
- Appendix D includes a surrounding landowner's maps (Drawings D-1, D-2, and D-3) and a list of property owners' names and addresses within ¼ mile of the facility permit boundary.

One original and one copy of this submittal are provided for your use and distribution. A copy of this document was placed in the site operating record for this facility. A copy of this submittal was sent to the Commission's regional office consistent with 305.70(f). Please note that the Part I form has been included in Appendix B of the permit modification. In accordance with 30 TAC §305.59(h)(1), a \$150.00 application fee has been submitted to the TCEQ as documented on page 8 of the Part I form.

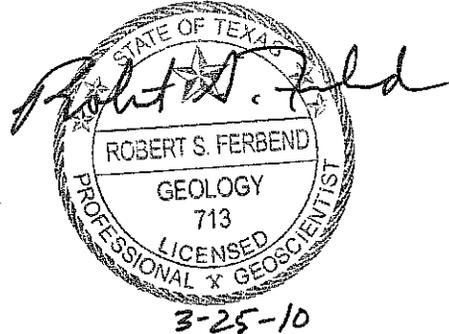
During the course of your review, if you need additional information or have any questions, please call.

Sincerely,  
**Weaver Boos Consultants, LLC-Southwest**

Robert S. Ferbend, P.G.  
Senior Hydrogeologist

Attachment: Permit Modification

cc: Sam Barrett, Waste Section Manager, TCEQ Region 4 Office  
Lonnie R. Banks, City of Garland



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## PERMIT MODIFICATION NARRATIVE

### APPENDIX A

SDP Replacement Pages (Redline/Strikeout)

### APPENDIX B

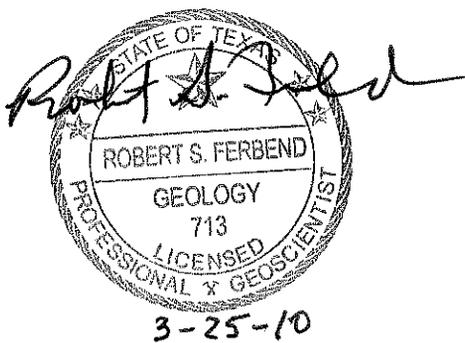
SDP Replacement Pages (Clean Copy)

### APPENDIX C

TCEQ Part I Application Form 0650/Applicant Certification

### APPENDIX D

Landownership Map and Address List



## PERMIT MODIFICATION NARRATIVE

---

### Introduction

The purpose of this permit modification is to revise the groundwater monitoring system configuration for the Charles M. Hinton Jr. Regional Landfill. The modification is necessary to comply with the 30 TAC §330 Subchapter J regulations (effective March 26, 2006). Specifically, 30 TAC 330.403(a)(2) requires that the monitoring well spacing along the point of compliance for a municipal solid waste landfill unit cannot exceed 600 feet without an applicable site-specific technical demonstration. A certified groundwater monitor well system is currently in place and operational which fulfilled the former applicable §330 requirements and regulations. The proposed groundwater monitoring system provides inter-well spacing that complies with Title 30 TAC §330. The proposed system is described in Appendices A and B of this permit modification.

### SDP Replacement Pages

Consistent with §305.70(e)(3), applicable Attachments 4 and 5 drawings and text within the currently permitted Site Development Plan (SDP) that are affected by the changes in this modification are included in Appendix A (redline/strikeout format) and Appendix B (clean copy).

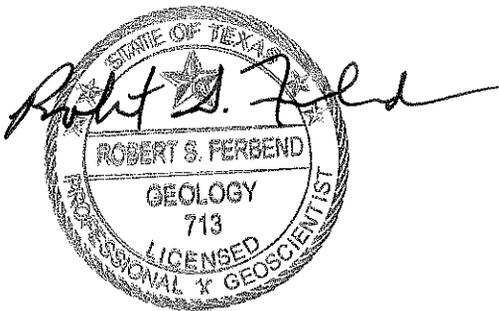
### Permit Modification Justification

The purpose of this permit modification is to revise the groundwater monitoring system configuration for Charles M. Hinton Jr. Regional Landfill. Specifically, 30 TAC §330.403(a)(2) of the revised §330 rules requires that the monitoring well spacing for a municipal solid waste landfill unit shall not exceed 600 feet without an applicable site-specific technical demonstration. The existing groundwater monitoring well network is inconsistent with the 600 foot well spacing requirement. As such, this permit modification is necessary to comply with the 30 TAC §330.401(b).

Please process this modification with notice in accordance with 30 TAC §330.70(l), §330.401(b), and §330.403(a)(2). The TCEQ Part I Application Form is provided in Appendix C. In accordance with §330.59(h)(1), a payment of \$150 has been made online through the TCEQ ePay system as noted on page 8 of the form. Per §330.70(e)(5), an adjacent landowners map and landowners list are provided in Appendix D.

APPENDIX A

SDP REPLACEMENT PAGES  
(REDLINE/STRIKEOUT FORMAT)



3-25-10

## INTRODUCTION

---

The following replacement pages have been developed to replace applicable sections of the Major Permit Amendment prepared by HDR in 1999. The following table summarizes the proposed replacement pages for the currently approved Site Development Plan (SDP). In accordance with the current SDP, the Attachment 4 Section 7 text mirrors the Attachment 5 Section 3.5 text (except for referenced figure numbers).

### Site Development Plan Replacement Pages

Replacement or Additional Page/Section Number	Explanation
Attachment 4 – Cover Page and Table of Contents	Pages have been signed and sealed for updated SDP.
Attachment 4 – Section 7	Pages updated to include revised groundwater monitoring system. Former Section 7 well construction details table information (pages 75 and 76) has been moved and updated as Figure 36 in Appendix A. Also updated proposed Section 7 well construction text to present industry standards.
Attachment 4 – Appendix A, Figure 35	Former Figure 35 – Proposed Groundwater Monitoring System replaced with proposed Figure 35 to reflect revised groundwater monitoring system layout.
Attachment 4 – Appendix A, Figure 36	Former monitor well details table on pages 75 and 76 removed and replaced by Attachment 4's Appendix A, Figure 36 – Proposed Monitoring Well Details to reflect revised groundwater monitoring well details.
Attachment 4 – Appendix A, Figure 37	New Figure 37 – Final Western Point of Compliance geologic cross section added to illustrate proposed groundwater monitoring system configuration on the west side of the landfill.
Attachment 4 – Appendix A, Figure 38	New Figure 38 – Final Northern Point of Compliance geologic cross section added to illustrate proposed groundwater monitoring system configuration on the north side of the landfill.
Attachment 5 – Cover Page and Table of Contents	Pages have been signed and sealed for updated SDP.
Attachment 5 – Section 3.5	Pages updated to include revised groundwater monitoring system. Former Section 3.5 well construction details table information has been moved and updated as Figure 14 in Appendix A of Attachment 5. Also updated proposed well construction text to present industry standards.

**Site Development Plan  
Replacement Pages (Continued)**

Replacement or Additional Page/Section Number	Explanation
Attachment 5 – Appendix A, Figure 10	Former Figure 10 – Proposed Groundwater Monitoring System replaced with proposed Figure 10 to reflect revised groundwater monitoring system layout.
Attachment 5 – Appendix A, Figure 11	Former HDR Figure 11 – Typical Monitor Well Detail drawing is replaced with proposed Figure 11 – Typical Monitoring Well Details to illustrate proposed typical monitoring well construction details.
Attachment 5 – Appendix A, Figure 12	Former monitor well details table on pages 25 and 26 removed and replaced by Attachment 5's Appendix A, Figure 12 – More Monitoring Well Details to reflect revised groundwater monitoring well details.
Attachment 5 – Appendix 2 Groundwater Monitoring System Certification	Revised page has been signed and sealed for updated SDP.

**CHARLES M. HINTON, JR. REGIONAL LANDFILL**

**DALLAS COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1895A**

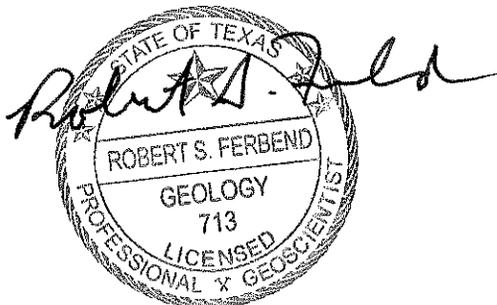
**PART III – SITE DEVELOPMENT PLAN  
ATTACHMENT 4  
GEOLOGY REPORT**

Prepared for

City of Garland

Permit Approved 1999

Revised March 2010

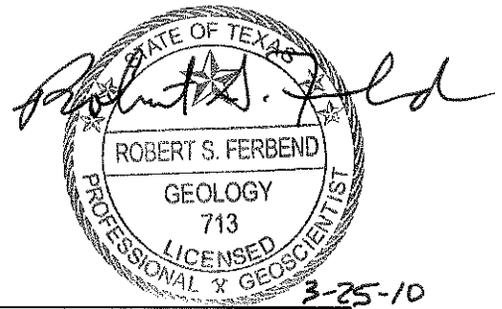


3-25-10

Prepared by

**Weaver Boos Consultants, LLC–Southwest**  
TBPE Registration No. F-3727  
6420 Southwest Blvd., Suite 206  
Fort Worth, Texas 76109

WBC Project No. 0647-02-14-11-01



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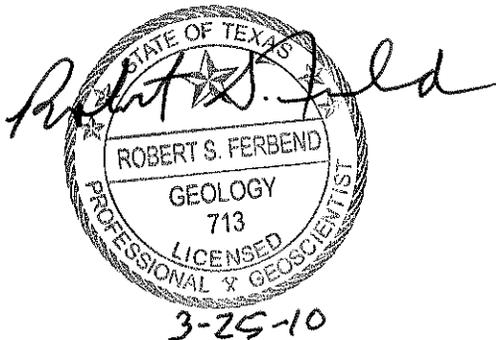
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### APPENDICES

- 1 Water Well Driller's Reports
- 2 Rone Engineers Report, Geotechnical Investigation Proposed 300 Acre Garland Landfill Near Sachse, Texas, November 1985, revised December, 1987
- 3 Logs of Borings, HDR Investigation
- 4 Ashok H. Gajria and Associates Report
- 5 Calculations for Groundwater Inflow into Test Pit
- 6 Calculations for Quantity of Groundwater Inflow
- 7 Ballast Calculations
- 8 Geotechnical Design



## 7.0 PROPOSED MONITORING WELL SYSTEM

~~The proposed groundwater monitoring well system for this site will consist of twenty-four wells (MW-1, 2, 3, 4/4A, 5/5A, 6/6A, 7/7A, 8/8A, 9/9A, 10, 11, 12, 13, 14, 15, 16, and 17/17A). Wells MW-1 through MW-3 will be installed to monitor upgradient conditions and wells MW-4/4A, 5/5A, 6/6A, 7/7A, 8/8A, 9/9A, 10, 11, 12, and 13 will be installed to monitor downgradient conditions. The downgradient wells will be located by each sump, since these areas will contain the highest quantities of leachate. Wells MW-14 through MW-17/17A will be installed along the northwest perimeter of the proposed expansion area and will be located adjacent to the sumps for cell Nos. 21 through 24. Since the downgradient side of Phase 2 will be completed in the unweathered marl, cluster wells will be installed to monitor the alluvial terrace deposits and the unweathered marl. Therefore, the locations of MW-4 through MW-9 will consist of cluster wells. Wells designated with "A" will be completed in the unweathered marl. The locations of the proposed monitor wells are shown on Figure 35. A summary of the proposed well completion details is presented in Table 6. To keep the downgradient wells out of the floodplain and protect them from potential flooding, they will be installed in the levee embankment to be constructed on the west side of the landfill. In order to minimize the impact the levee will have on existing drainage patterns, it will be constructed in phases during the development of the landfill (refer to site development plan for sequence of development). Therefore, the downgradient monitor wells will be installed in phases as each stage of the levee is completed. The downgradient wells will be within 500 feet of the waste fill footprint.~~

~~The three upgradient wells (MW-1, MW-2, and MW-3) will be installed prior to construction in order to begin collecting background monitoring data. Prior to the construction of cell No. 1 (Phase 1), cluster wells MW-4/4A and MW-5/5A will be installed. Wells MW-4A and MW-5A will be screened in the unweathered marl. As development progresses toward cell Nos. 2, 3, 4, 7, and 8, the levee will be extended along the western side of the landfill and wells MW-6/6A through MW-9/9A will be installed prior to the construction of these cells. Wells MW-6A through MW-9A will be screened in the unweathered marl. The same procedure for Phase I will occur for~~

**Table 6**

**Garland-Raney Landfill  
Summary of Monitoring Wells**

Well No.	Surface Elevation (ft) MSL	PVC Casing Elevation (ft) MSL	Date Installed	Depth (ft)	Screen Interval (ft)	Screen Elevation (ft)	Filter Pack Elevation (ft)
MW-1	510.00	513.00	SDP	57.00	57-47	453-463	453-466
MW-2	493.00	496.00	SDP	40.00	40-30	453-463	453-466
MW-3	485.00	488.00	SDP	34.00	34-24	451-441	451-438
MW-4	*457	456.00	SDP	32.00	**25-15	**425-435	425-437
MW-4A	*457	456.00		47.00	**40-30	**410-420	410-422
MW-5	*458	457.00	SDP	33.00	**25-15	**425-435	425-437
MW-5A	*458	457.00		48.00	**40-30	**410-420	410-422
MW-6	*459	458.00	SDP	30.00	**22-12	**429-439	429-441
MW-6A	*459	458.00		48.00	**40-30	**411-421	411-423
MW-7	*460	459.00	SDP	27.00	**20-10	**434-444	434-446
MW-7A	*460	459.00		47.00	**40-30	**414-424	414-426

**Note:** The depths and elevations shown are estimated. Actual depths and elevations to be determined when wells are installed.

Well Nos. designated with "A" are to be installed in the unweathered marl. All other wells in alluvial terrace material.

\* Approximate elevation of top of levee. See Attachment 6 for specific elevations.

\*\* Depth and elevation below natural ground surface.

SDP = See Site Development Plan for sequence of installation.

**Table 6-cont.**  
**Garland-Raney Landfill**  
**Summary of Monitoring Wells**

Well No.	Surface Elevation		Date	Depth (ft)	Screen Interval (ft)	Screen Elevation (ft)	Filter Pack Elevation (ft)
	(ft) MSL	(ft) MSL					
MW-8	*464	463.00	SDP	30.00	**22-12	**433-443	433-445
MW-8A	*464	463.00		48.00	**40-30	**415-425	415-427
MW-9	*464	463.00	SDP	18.00	**12-7	**446-451	446-453
MW-9A	*464	463.00		31.00	**25-15	**433-443	433-445
MW-10	*451	450.00	SDP	27.00	**20-10	**424-434	424-435
MW-11	*453	452.00	SDP	28.00	**21-11	**425-435	425-437
MW-12	*454	453.00	SDP	26.00	**20-10	**428-438	428-440
MW-13	*455	454.00	SDP	27.00	**20-10	**427-437	427-439
MW-14	495.00	498.00	SDP	50.00	50-40	445-455	445-457
MW-15	498.00	501.00	SDP	53.00	53-43	445-455	445-457
MW-16	498.00	501.00	SDP	51.00	51-41	447-457	447-459
MW-17	507.00	510.00	SDP	35.00	35-25	475-485	475-487
MW-17A	507.00	510.00	SDP	56.00	56-46	451-461	451-463

Note: The depths and elevations shown are estimated. Actual depths and elevations to be determined when wells are installed.  
 Well Nos. designated with "A" are to be installed in the unweathered marl. All other wells in alluvial terrace material.  
 \* Approximate elevation of top of levee. See Attachment 6 for specific elevations.  
 \*\* Depth and elevation below natural ground surface.  
 SDP = See Site Development Plan for sequence of installation.

~~Phase 2 beginning with cell No. 14 in the southwest corner of Phase 2. As the levee is constructed for cell Nos. 14, 16, 18, and 20, wells MW 10 through MW 13 will be installed prior to the construction of these cells. Since the downgradient side of Phase 2 will be completed within the alluvial terrace deposits, these four wells will be single completions to monitor the alluvial terrace deposits. Wells MW 14 through MW 17 will be installed prior to the construction of cell Nos. 21 through 24 for Phase 3. The location of MW 17 will consist of cluster wells, since the floor of the excavation will be terminated in the unweathered marl. Well MW 17A will be screened in the unweathered marl and MW 17 will be screened in the alluvial terrace deposits.~~

As shown on Figures 35 and 36, the proposed monitoring system will consist of 31 monitoring wells when the landfill is fully developed. Four existing background detection monitoring wells (MW-1, MW-1A, MW-3 and MW-3A) are designated background well pairs in the proposed system. With the approval of this permit modification, these four wells will be renamed MW-1S, MW-1D, MW-3S, and MW-3D, respectively. The 'S' in the well name indicates the well is screened in a shallower portion of the uppermost aquifer and the 'D' indicates the well is screened in a deeper portion of the uppermost aquifer. One existing background well pair (MW-2 and MW-2A) will be removed at the time of new well installations – as only two sets of background wells are needed for statistical evaluation purposes.

In accordance with an agreement with the TCEQ, the point of compliance (POC) monitor wells will have two separate monitoring targets. Consistent with the original monitoring system design, six POC wells will have well screens that straddle the adjacent leachate collection sump elevations when the landfill is fully developed and have well names ending in a 'D'. These sump wells include existing monitor wells MW-5D (former MW-5A) and MW-6D (former MW-6A), and future monitor wells MW-4D, MW-7D, MW-8D and MW-16D. These wells are spaced more than 600 feet apart as are the adjacent sumps to be monitored and are located where the nearby permitted excavations are not founded in the unweathered marl beneath the site. The remaining 21 POC detection monitoring wells will be shallow wells (with names ending in an 'S') that have inter-well spacing of 600 feet or less along the POC as shown on Figure 35. The construction details of these wells are shown on Figure 36. Two geologic cross sections are provided as Figures 37 and 38 to also illustrate the layout of monitoring wells along the western

and northern points of compliance.

Within 90 days following the approval of this permit modification, the facility will install monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-6RS, MW-7 and MW-7D, and begin new well background data collection within 90 days following installation. Following the evaluation of these wells' background data, the detection monitoring system will be comprised of background wells MW-1, MW-1A, MW-3 and MW-3A, and point of compliance monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-5S, MW-5D, MW-6RS, MW-6D, MW-7S and MW-7D. Additional POC wells will be installed at least two years before waste is placed up groundwater gradient of the applicable future well location in future disposal cells. This will facilitate the completion of future monitor well background data collection prior to the placement of up gradient waste. For example, at least two years prior to the placement of waste to the west of its current limits in cell 6 (i.e., the construction of cells 7 and 8), the facility will likely require the installation of monitoring wells MW-8S, MW-8D, and MW-9 (depending on the westward extent of waste placement in the new up gradient waste disposal cells). The facility experiences little variability in the groundwater flow regime as shown on Figures 6, 7, 8, 9, 13, and 14.

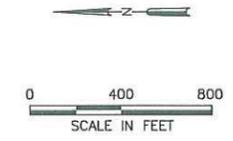
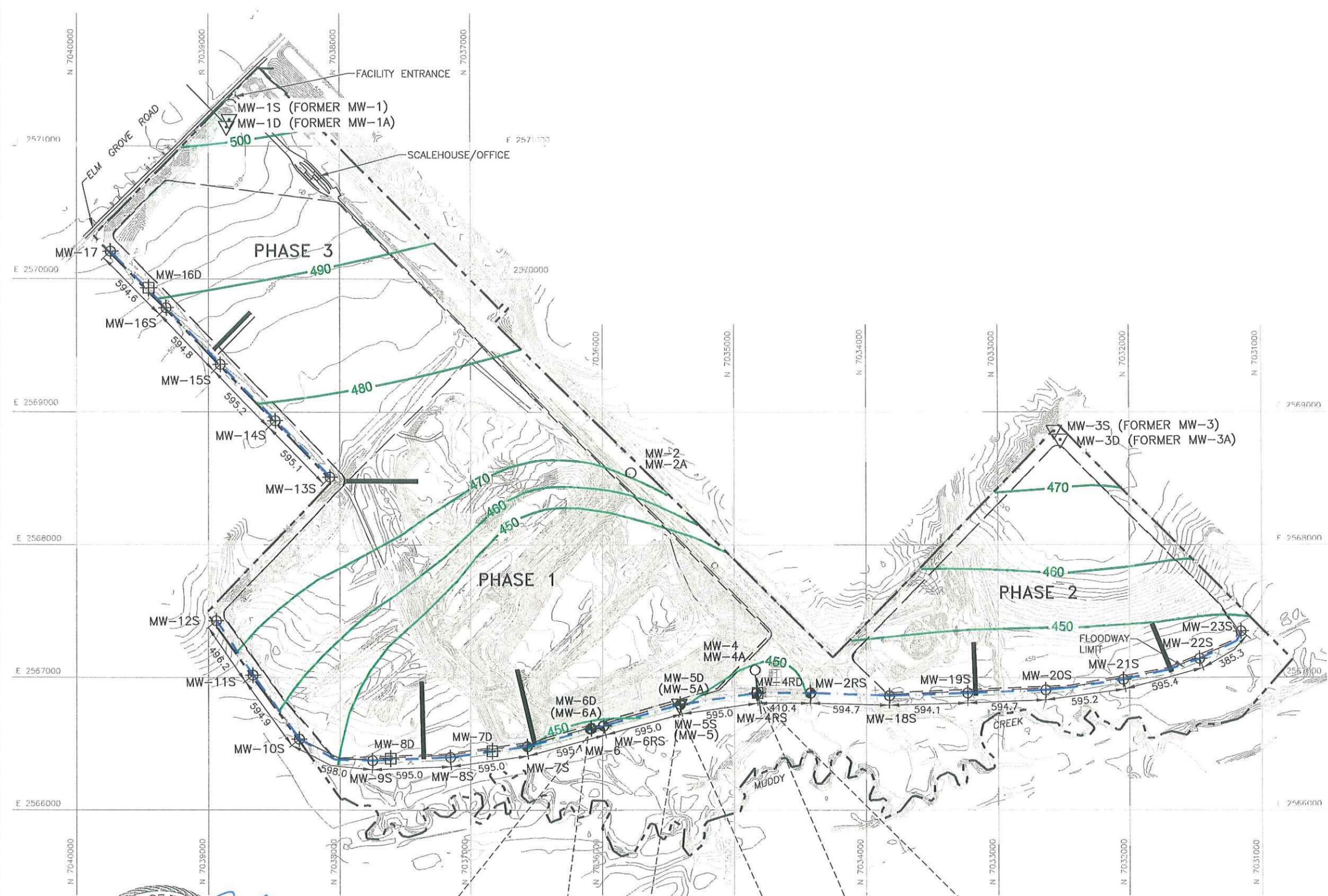
The installation of the wells will involve drilling and sampling using hollow-stem augers. The proposed monitoring wells will be constructed of four two-inch inside diameter, schedule 40 or 80 PVC flush-threaded casing with O-ring seals. The screen size will consist of 0.01-inch slots and 10 feet in length. An appropriate A washed silica 20/40 mesh sand filter pack will be used to fill the annular space between the borehole wall and well screen. The filter pack will extend a maximum of four about 2 feet above the top of the screen. A minimum of three 2 foot thickness of bentonite seal will be placed above the filter pack, and the remainder of the annulus will be filled with a bentonite/cement grout to the within 1 to 2 feet of surface. The tops of the monitor wells will extend a minimum of approximately three feet above ground and will be protected with a metal locking cover. A concrete pad measuring 6'x6'x6" 4'x4'x6" with wire-mesh reinforcement will be constructed around the well heads. At each corner of the concrete pad, a steel bollards measuring a minimum of eight 3 inches in diameter and extending at least four about 3 feet above grade will be installed as needed. The down gradient wells will be installed on top of the levee and completed in flush mounted pre-cast concrete utility boxes/vaults. The boxes will be at least

~~3'x3' with a 3 foot skirt and concreted in place. The wells will be located in the center of the levee in order to reduce the potential of vehicles from driving directly on the vaults. The lids on the vaults will have seals to prohibit infiltration of water into the vaults.~~

The elevations of the tops of the PVC well casingsheads, metal protective covers, utility boxes, concrete pads, and ground surface adjacent to the wells will be surveyed by a licensed surveyor to nearest 0.01 foot using the on site datum for control. Development of the wells will follow standard protocol procedures. Each new monitoring well will be developed until field indicator parameters (pH, conductivity and temperature) have stabilized. A well installation report will be submitted to the TCEQ within 60 days of new well installation. The sampling and analysis program will follow the Groundwater Sampling and Analysis Plan presented in Attachment 11 of this application.

A certification of the proposed groundwater monitoring well system is presented in Appendix 2 of Attachment 5.

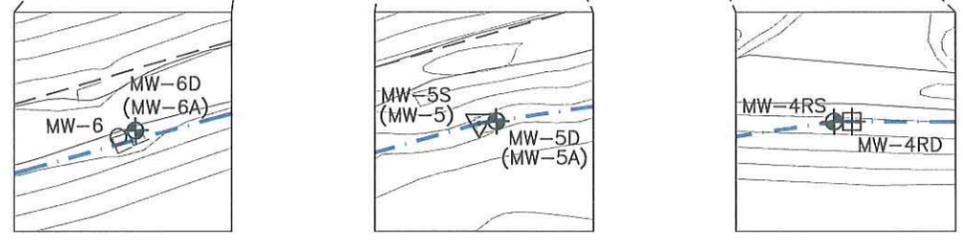
O:\0647\02\600-FT WELL SPACING (02-10)\35-PROPOSED SYSTEM LAYOUT.dwg, 3/25/2010 2:50:51 PM, r.sellers



- LEGEND**
- PERMIT BOUNDARY
  - - - LIMITS OF WASTE
  - - - PHASE BOUNDARY
  - - - POINT OF COMPLIANCE
  - 450 — SHALLOW ZONE GROUNDWATER CONTOUR (FT-MSL)
  - ▬ LETDOWN STRUCTURE
  - ⊕ MW-5R SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED IN 2010
  - ⊕ MW-8 FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS FACILITY IS DEVELOPED
  - MW-4 EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION
  - ▽ MW-6AS EXISTING GROUNDWATER MONITORING WELL TO REMAIN
  - ⊕ MW-4RD FUTURE GROUNDWATER MONITORING DEEP WELL SUMP TO BE PHASED IN AS FACILITY IS DEVELOPED
  - ⊕ MW-6A (MW-6D) EXISTING DEEP ZONE SUMP ZONE MONITORING WELL TO REMAIN WITH OLD WELL NAME IN PARENTHESIS

- NOTES:**
- EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 9-8-2008. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-9-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  - SHALLOW ZONE GROUNDWATER GRADIENT PRODUCED USING JUNE 1, 2009 DETECTION MONITORING GROUNDWATER ELEVATIONS GAUGED ON JUNE 1, 2009.

*Robert S. Ferbend*  
 STATE OF TEXAS  
 ROBERT S. FERBEND  
 GEOLOGY  
 713  
 LICENSED GEOSCIENTIST  
 3-25-10

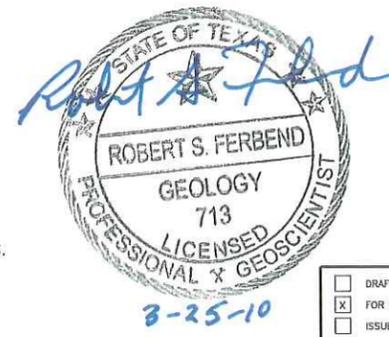


<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY:	PREPARED FOR	CITY OF GARLAND	
	DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 35.DWG	DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF	PERMIT MODIFICATION PROPOSED MONITORING WELL SYSTEM  CHARLES M. HINTON JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS  <i>Weaver Boos Consultants</i> TBPE REGISTRATION NO. F-3727
REVISIONS NO. DATE DESCRIPTION		CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO	
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		FIGURE 35	

WELL NUMBER	NORTHING	EASTING	INSTALL DATE	GROUND ELEVATION <sup>1</sup>	TOP OF CASING ELEVATION	TOTAL BOREHOLE DEPTH	DEPTH TOP OF UNWEATHERED MARL	NEAREST SUMP ELEVATION	FILTER PACK ELEVATION		WELL SCREEN ELEVATION		FILTER PACK DEPTH		WELL SCREEN DEPTH		GROUNDWATER ELEVATION <sup>1,11</sup>	DEPTH TO GROUNDWATER
									TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM		
EXISTING GROUNDWATER MONITORING WELLS <sup>10</sup>																		
MW-1 <sup>4</sup>	7038879	2571178	06/14/01	511.2	513.30	38.5	NA	467	487.3	474.8	485.3	475.3	26.0	38.5	28.0	38.0	502.12	9.1
MW-1A <sup>4</sup>			08/25/00	510.8	513.94	58	44.5	467	468.9	455.9	466.9	456.9	45.0	58.0	47.0	57.0	502.26	8.5
MW-2 <sup>7</sup>	7035784	2568543	8/28/00	490.3	493.33	40	NA	446	467.0	453.3	463.8	453.8	26.3	40.0	29.5	39.5	470.61	19.7
MW-2A <sup>7</sup>			06/18/01	491.1	493.13	68	50.0	446	438.3	425.1	436.1	426.1	54.8	68.0	57.0	67.0	429.29	61.8
MW-3 <sup>4</sup>	7032501	2568777	08/28/00	486	489.09	35	NA	459	468.1	454.1	465.1	455.1	21.0	35.0	24.0	34.0	472.16	13.8
MW-3A <sup>4</sup>			06/19/01	486.8	489.70	73	54.0	459	429.7	416.7	427.7	417.7	60.0	73.0	62.0	72.0	446.64	40.2
MW-4 <sup>7</sup>	7034832	2567070	06/20/01	458.3	460.52	33	NA	431	441.0	427.5	438.4	428.4	19.5	33.0	22.1	32.1	449.22	9.1
MW-4A <sup>7</sup>			06/20/01	458.3	460.69	48.5	33.0	431	425.7	412.2	422.6	412.6	35.0	48.5	38.1	48.1	449.12	9.2
MW-5 (MW-5S) <sup>5</sup>	7035418	2566796	06/20/01	458.7	461.00	32	NA	433	442.0	429.0	440.0	430.0	19.0	32.0	21.0	31.0	451.77	6.9
MW-5A <sup>4</sup> (MW-5D) <sup>5</sup>			06/19/01	458.8	461.10	47	32.0	433	427.1	414.1	425.1	415.1	34.0	47.0	36.0	46.0	449.48	9.3
MW-6 <sup>7</sup>	7036090	2566612	07/07/03	460.6	464.23	31	25.0	430	442.6	429.3	439.6	429.6	18.0	31.3	21.0	31.0	446.6	14.0
MW-6A (MW-6D) <sup>5</sup>	7036082	2566615	07/07/03	460.5	464.14	49.3	25.0	430	424.5	411.2	421.5	411.5	36.0	49.3	39.0	49.0	420.34	40.2
PROPOSED NEW GROUNDWATER MONITORING SHALLOW ZONE WELLS <sup>3</sup>																		
MW-2RS <sup>8</sup>	7034419	2566883	NEW	460	NEW	35.0	34.7	431	437.5	425.0	435.5	425.5	22.5	35.0	24.5	34.5	451	9.0
MW-4RS <sup>8</sup>	7034829	2566884	NEW	458	NEW	33.5	33.0	431	437.0	424.5	435.0	425.0	21.0	33.5	23.0	33.0	452	6.0
MW-6RS <sup>8</sup>	7035991	2566636	NEW	461	NEW	28.5	25.0	430	445.0	432.5	443.0	433.0	16.0	28.5	18.0	28.0	448	13.0
MW-7S <sup>8</sup>	7036565	2566479	NEW	460	NEW	25.5	22.0	428	447.0	434.5	445.0	435.0	13.0	25.5	15.0	25.0	450	10.0
MW-8S <sup>9</sup>	7037154	2566398	NEW	464	NEW	30.5	28.0	426	446.0	433.5	444.0	434.0	18.0	30.5	20.0	30.0	449	15.0
MW-9S <sup>9</sup>	7037749	2566373	NEW	464	NEW	32.5	32.0	426	444.0	431.5	442.0	432.0	20.0	32.5	22.0	32.0	449	15.0
MW-10S <sup>9</sup>	7038311	2566535	NEW	458	NEW	21.0	20.5	436	449.5	437.0	447.5	437.5	8.5	21.0	10.5	20.5	455	3.0
MW-11S <sup>9</sup>	7038660	2567017	NEW	464	NEW	27.0	26.5	440	449.5	437.0	447.5	437.5	14.5	27.0	16.5	26.5	462	2.0
MW-12S <sup>9</sup>	7038940	2567426	NEW	468	NEW	31.0	30.5	444	449.5	437.0	447.5	437.5	18.5	31.0	20.5	30.5	466	2.0
MW-13S <sup>9</sup>	7038075	2568510	NEW	492	NEW	47.5	47.0	449	457.0	444.5	455.0	445.0	35.0	47.5	37.0	47.0	475	17.0
MW-14S <sup>9</sup>	7038492	2568934	NEW	496	NEW	51.5	51.0	451	457.0	444.5	455.0	445.0	39.0	51.5	41.0	51.0	478	18.0
MW-15S <sup>9</sup>	7038909	2569358	NEW	498	NEW	55.5	55.0	452	455.0	442.5	453.0	443.0	43.0	55.5	45.0	55.0	485	13.0
MW-16S <sup>9</sup>	7039325	2569784	NEW	502	NEW	49.5	49.0	455	465.0	452.5	463.0	453.0	37.0	49.5	39.0	49.0	489	13.0
MW-17S <sup>9</sup>	7039741	2570208	NEW	508	NEW	39.5	39.0	455	481.0	468.5	479.0	469.0	27.0	39.5	29.0	39.0	494	14.0
MW-18S <sup>9</sup>	7033825	2566864	NEW	455	NEW	30.0	29.5	431	437.5	425.0	435.5	425.5	17.5	30.0	19.5	29.5	448	7.0
MW-19S <sup>9</sup>	7033231	2566883	NEW	454	NEW	29.5	29.0	431	437.0	424.5	435.0	425.0	17.0	29.5	19.0	29.0	448	6.0
MW-20S <sup>9</sup>	7032637	2566906	NEW	454	NEW	27.5	27.0	433	439.0	426.5	437.0	427.0	15.0	27.5	17.0	27.0	448	6.0
MW-21S <sup>9</sup>	7032047	2566985	NEW	453	NEW	24.5	24.0	435	441.0	428.5	439.0	429.0	12.0	24.5	14.0	24.0	448	5.0
MW-22S <sup>9</sup>	7031473	2567142	NEW	451	NEW	26.5	26.0	437	437.0	424.5	435.0	425.0	14.0	26.5	16.0	26.0	448	3.0
MW-23S <sup>9</sup>	7031159	2567349	NEW	450	NEW	25.5	25.0	437	437.0	424.5	435.0	425.0	13.0	25.5	15.0	25.0	448	2.0
PROPOSED NEW GROUNDWATER MONITORING SUMP WELLS <sup>3</sup>																		
MW-4D <sup>10</sup>	7034822	2566884	NEW	458	NEW	39.0	33.0	431	431.5	419.0	429.5	419.5	26.5	39.0	28.5	38.5	452	6.0
MW-7D <sup>10</sup>	7036833	2566445	NEW	460	NEW	38.0	22.0	428	434.5	422.0	432.5	422.5	25.5	38.0	27.5	37.5	449	11.0
MW-8D <sup>10</sup>	7037610	2566388	NEW	464	NEW	43.0	29.0	427	433.5	421.0	431.5	421.5	30.5	43.0	32.5	42.5	449	15.0
MW-16D <sup>10</sup>	7039454	2569932	NEW	504	NEW	55.0	44.0	455	461.5	449.0	459.5	449.5	42.5	55.0	44.5	54.5	489	15.0

**NOTES:**

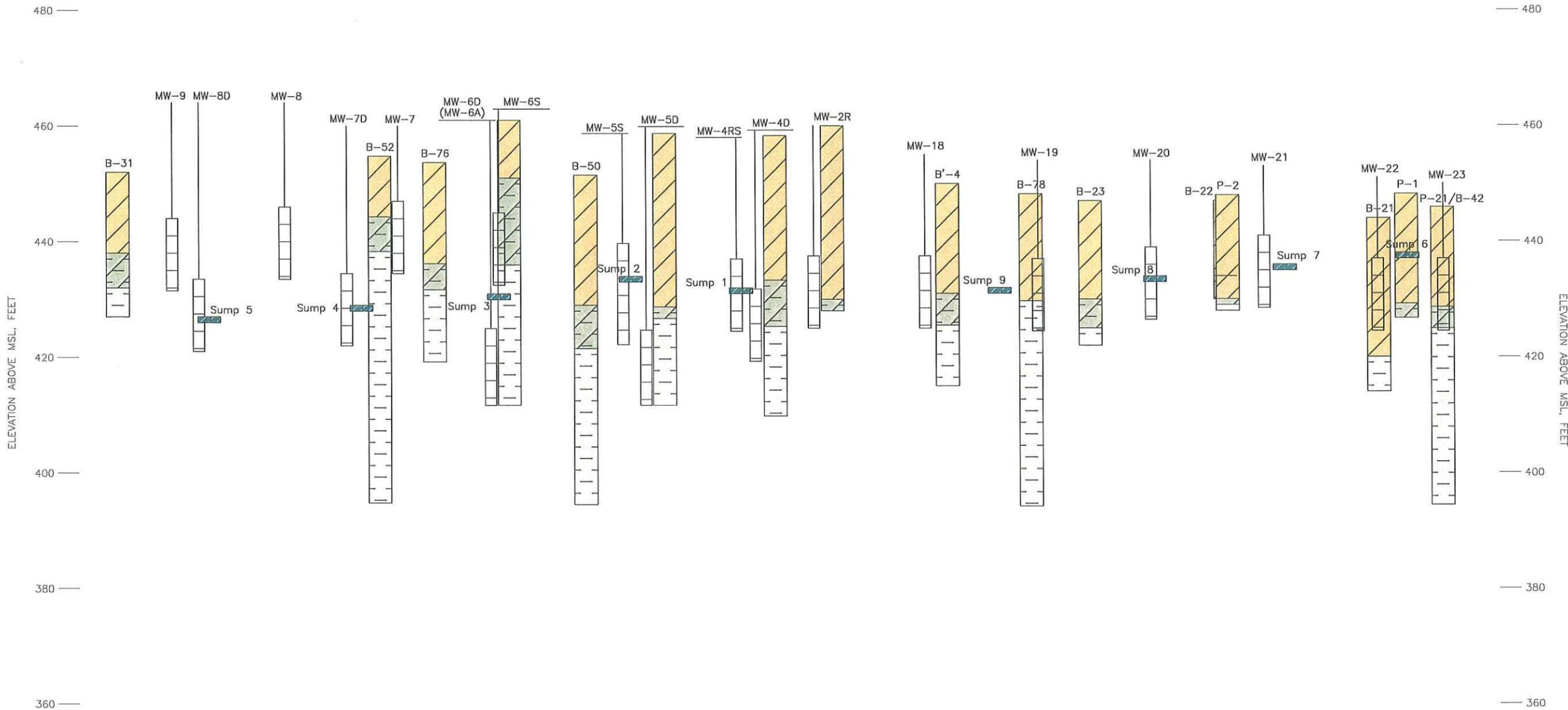
- NEW WELL GROUND ELEVATIONS ESTIMATED FROM SITE TOPOGRAPHIC MAP.
- ELEVATIONS LISTED ABOVE IN FEET ABOVE MEAN SEA LEVEL, ALL DEPTHS LISTED IN FEET BELOW GROUND SURFACE.
- PROPOSED GROUNDWATER MONITORING WELL DETAILS ARE ESTIMATED FROM EXISTING BORING LOGS. ACTUAL DEPTHS AND ELEVATIONS OF DETAILS TO BE DETERMINED IN FIELD BASED ON ACTUAL GROUND ELEVATIONS AND DEPTH TO TOP OF UNWEATHERED MARL.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN AS A SUMP MONITORING WELL WITH NEW WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE CONVERTED TO AN OBSERVATION WELL WITH OBSERVATION WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION.
- SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS THE FACILITY IS DEVELOPED.
- GROUNDWATER MONITORING SUMP WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- GROUNDWATER ELEVATIONS FOR EXISTING WELLS OBTAINED FROM THE FACILITY'S GROUNDWATER MONITORING DATABASE FROM JUNE 2009 GROUNDWATER MEASUREMENTS.
- ALL EXISTING WELLS ARE 4-INCH INSIDE DIAMETER, PROPOSED NEW WELL INSTALLATIONS WILL BE 2-INCH INSIDE DIAMETER.



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DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 36.dwg		DRAWN BY: VRS DESIGN BY: AE REVIEWED BY: RSF				REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	DESCRIPTION										
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<b>FIGURE 36</b>																				

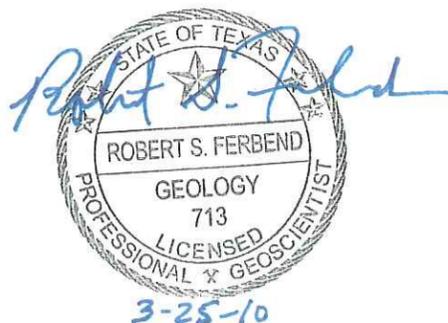
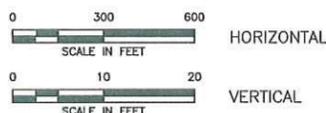
NORTH

SOUTH



BORING LEGEND

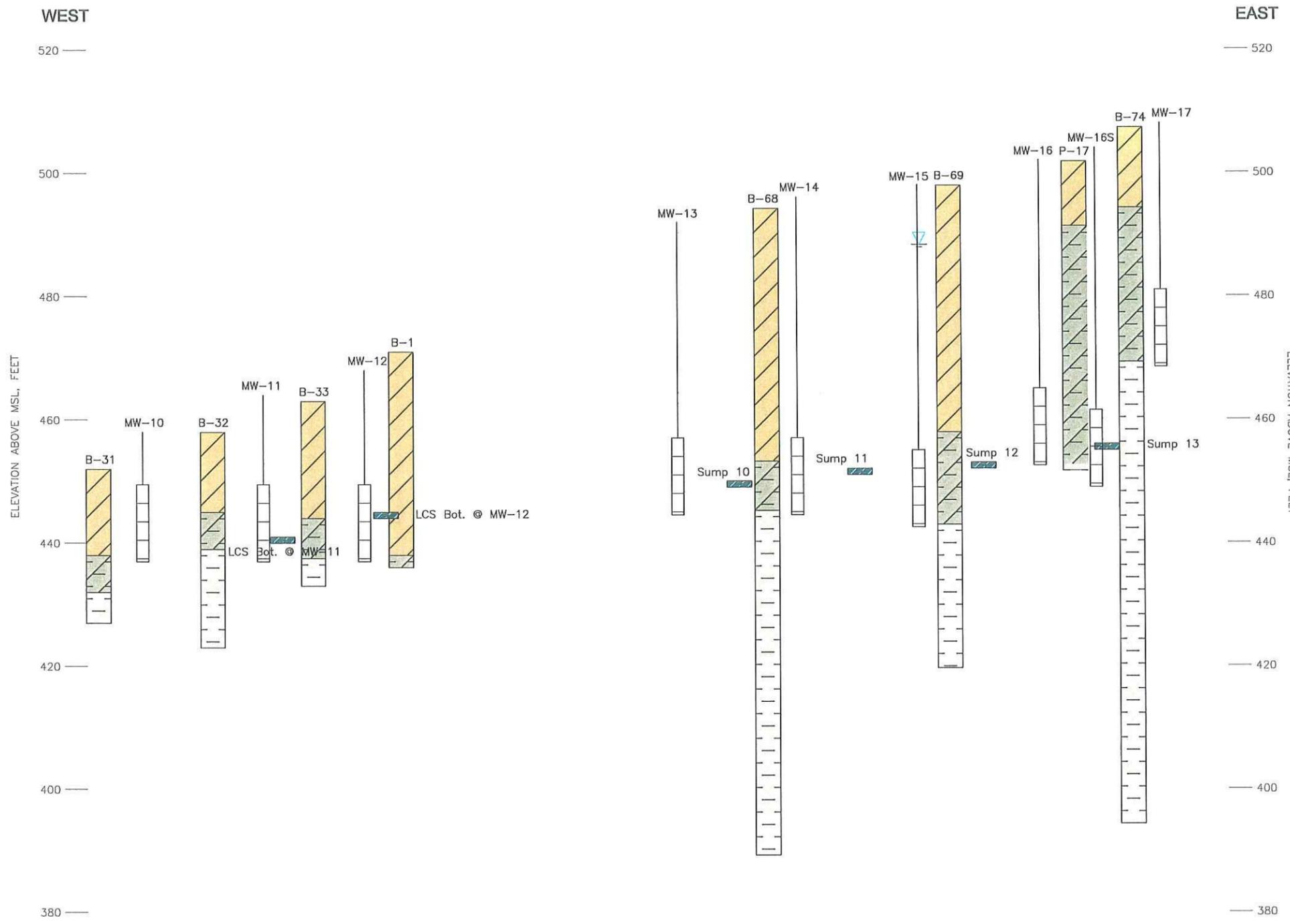
- ALLUVIUM
- UNWEATHERED MARL
- WEATHERED MARL
- SUMP



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	DATE: 02/2010 FILE: 0647-02-14 CAD: FIGURE 37.DWG		CHARLES M. HINTON JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS	
DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF		<b>Weaver Boos Consultants</b> TBPE REGISTRATION NO. F-3727		
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		FORT WORTH, TX (817) 735-9770		GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO
				<b>FIGURE 37</b>

G:\0647\02\600-FT WELL SPACING (02-10)\37-FINAL WESTERN POC.dwg, 2/26/2010 5:11:29 PM, rsellers

C:\0647\02\600-FT WELL SPACING (02-10)\38-FINAL NORTHERN POC.dwg, 2/26/2010 4:28:59 PM, rscifers



**BORING LEGEND**

- ALLUVIUM
- UNWEATHERED MARL
- WEATHERED MARL
- SUMP

**HORIZONTAL SCALE IN FEET**  
 0 — 300 — 600

**VERTICAL SCALE IN FEET**  
 0 — 10 — 20

3-25-10

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DATE: 02/2010 FILE: 0647-02-14 CAD: FIGURE 38.DWG	DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th style="width: 10%;">NO.</th> <th style="width: 10%;">DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS			NO.	DATE	DESCRIPTION															
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CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO	FORT WORTH, TX (817) 735-9770	GRIFFITH, IN SPRINGFIELD, IL ST. LOUIS, MO																					
		FIGURE 38																					

**CHARLES M. HINTON, JR. REGIONAL LANDFILL**

**DALLAS COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1895A**

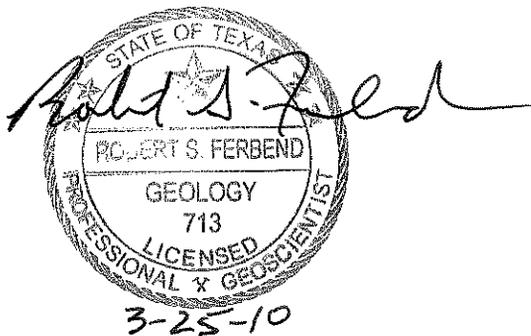
**PART III – SITE DEVELOPMENT PLAN  
ATTACHMENT 5  
GROUNDWATER CHARACTERIZATION REPORT**

Prepared for

City of Garland

Permit Approved 1999

Revised March 2010



Prepared by

**Weaver Boos Consultants, LLC–Southwest**  
TBPE Registration No. F-3727  
6420 Southwest Blvd., Suite 206  
Fort Worth, Texas 76109

WBC Project No. 0647-02-14-11-01

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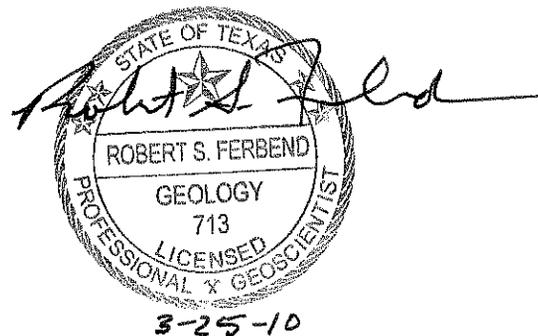
<b>1.0</b>	<b>INTRODUCTION</b>	<b>1</b>
<b>2.0</b>	<b>GROUNDWATER CONDITIONS</b>	<b>2</b>
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5	Hydrographs, P-16 through P-20
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7	Groundwater Contour Map, October 1995
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9	Groundwater Contour Map, March 1996
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11	Typical Monitoring Well Details
12	More Monitoring Well Details
13	December 2008 Potentiometric Surfaces Map
14	June 2009 Potentiometric Surfaces Map



## APPENDICES

1	Slug Test Data
2	Certification of Groundwater Monitoring System

### 3.4 Potential Receptors

The only potential receptor that could possibly be impacted by the landfill is Muddy Creek down gradient of the site. Muddy Creek flows from north to south and eventually discharges into Lake Ray Hubbard approximately one mile to the south of the site. There are only two identified water wells within one mile of the site. One of the wells (Well No. 33-04-5A) is located down gradient of the site and was reported dry at the time of installation in April 1962. The depth of this well is only 35 feet and is completed in clays. There was no documentation found in the files to indicate if this well was permanently abandoned. The other well (Well No. 33-04-3A) is up gradient of the site and therefore would not be impacted by the landfill operations. This well is reported to be used for household purposes.

### 3.5 Proposed Monitoring Well System

~~The proposed groundwater monitoring well system for this site will consist of twenty-four wells (MW-1, 2, 3, 4/4A, 5/5A, 6/6A, 7/7A, 8/8A, 9/9A, 10, 11, 12, 13, 14, 15, 16, and 17/17A). Wells MW-1 through MW-3 will be installed to monitor upgradient conditions and wells MW-4/4A, 5/5A, 6/6A, 7/7A, 8/8A, 9/9A, 10, 11, 12, and 13 will be installed to monitor downgradient conditions. The downgradient wells will be located by each sump, since these areas will contain the highest quantities of leachate. Wells MW-14 through MW-17/17A will be installed along the northwest perimeter of the proposed expansion area and will be located adjacent to the sumps for cell Nos. 21 through 24. Since the downgradient side of Phase 2 will be completed in the unweathered marl, cluster wells will be installed to monitor the alluvial terrace deposits and the unweathered marl. Therefore, the locations of MW-4 through MW-9 will consist of cluster wells. Wells designated with "A" will be completed in the unweathered marl. The locations of the proposed monitor wells are shown on Figure 35. A summary of the proposed well completion details is presented in Table 6. To keep the downgradient wells out of the floodplain and protect them from potential flooding, they will be installed in the levee embankment to be constructed on the west side of the landfill. In order to minimize the impact the levee will have on existing drainage patterns, it will be constructed in phases during the development of the landfill (refer to site development plan for sequence of development). Therefore, the downgradient monitor wells will be installed in phases as each stage of the levee~~

~~is completed. The downgradient wells will be within 500 feet of the waste fill footprint.~~

~~The three upgradient wells (MW-1, MW-2, and MW-3) will be installed prior to construction in order to begin collecting background monitoring data. Prior to the construction of cell No. 1 (Phase 1), cluster wells MW-4/4A and MW-5/5A will be installed. Wells MW-4A and MW-5A will be screened in the unweathered marl. As development progresses toward cell Nos. 2, 3, 4, 7, and 8, the levee will be extended along the western side of the landfill and wells MW-6/6A through MW-9/9A will be installed prior to the construction of these cells. Wells MW-6A through MW-9A will be screened in the unweathered marl. The same procedure for Phase I will occur for~~

**Table 3**

**Garland-Raney Landfill  
Summary of Monitoring Wells**

Well No.	Surface Elevation (ft) MSL	PVC Casing Elevation (ft) MSL	Date Installed	Depth (ft)	Screen Interval (ft)	Screen Elevation (ft)	Filter Pack Elevation (ft)
MW-1	510.00	513.00	SDP	57.00	57-47	453-463	453-466
MW-2	493.00	496.00	SDP	40.00	40-30	453-463	453-466
MW-3	485.00	488.00	SDP	34.00	34-24	451-441	451-438
MW-4	*457	456.00	SDP	32.00	**25-15	**425-435	425-437
MW-4A	*457	456.00		47.00	**40-30	**410-420	410-422
MW-5	*458	457.00	SDP	33.00	**25-15	**425-435	425-437
MW-5A	*458	457.00		48.00	**40-30	**410-420	410-422
MW-6	*459	458.00	SDP	30.00	**22-12	**429-439	429-441
MW-6A	*459	458.00		48.00	**40-30	**411-421	411-423
MW-7	*460	459.00	SDP	27.00	**20-10	**434-444	434-446
MW-7A	*460	459.00		47.00	**40-30	**414-424	414-426

Note: The depths and elevations shown are estimated. Actual depths and elevations to be determined when wells are installed.

Well Nos. designated with "A" are to be installed in the unweathered marl. All other wells in alluvial terrace material.

\* Approximate elevation of top of levee. See Attachment 6 for specific elevations.

\*\* Depth and elevation below natural ground surface.

SDP = See Site Development Plan for sequence of installation.

**Table 3-cont.**

**Garland-Raney Landfill**

**Summary of Monitoring Wells**

Well No.	Surface Elevation (ft) MSL	PVC Casing Elevation (ft) MSL	Date	Depth (ft)	Screen Interval (ft)	Screen Elevation (ft)		Filter Pack Elevation (ft)
MW-8	*464	463.00	SDP	30.00	**22-12	**433-443	433-445	
MW-8A	*464	463.00		48.00	**40-30	**415-425	415-427	
MW-9	*464	463.00	SDP	18.00	**12-7	**446-451	446-453	
MW-9A	*464	463.00		31.00	**25-15	**433-443	433-445	
MW-10	*451	450.00	SDP	27.00	**20-10	**424-434	424-435	
MW-11	*453	452.00	SDP	28.00	**21-11	**425-435	425-437	
MW-12	*454	453.00	SDP	26.00	**20-10	**428-438	428-440	
MW-13	*455	454.00	SDP	27.00	**20-10	**427-437	427-439	
MW-14	495.00	498.00	SDP	50.00	50-40	445-455	445-457	
MW-15	498.00	501.00	SDP	53.00	53-43	445-455	445-457	
MW-16	498.00	501.00	SDP	51.00	51-41	447-457	447-459	
MW-17	507.00	510.00	SDP	35.00	35-25	475-485	475-487	
MW-17A	507.00	510.00	SDP	56.00	56-46	451-461	451-463	

**Note:** The depths and elevations shown are estimated. Actual depths and elevations to be determined when wells are installed.  
 Well Nos. designated with "A" are to be installed in the unweathered marl. All other wells in alluvial terrace material.  
 \* Approximate elevation of top of levee. See Attachment 6 for specific elevations.  
 \*\* Depth and elevation below natural ground surface.  
 SDP = See Site Development Plan for sequence of installation.

Phase 2 beginning with cell No. 14 in the southwest corner of Phase 2. As the levee is constructed for cell Nos. 14, 16, 18, and 20, wells MW-10 through MW-13 will be installed prior to the construction of these cells. Since the downgradient side of Phase 2 will be completed within the alluvial terrace deposits, these four wells will be single completions to monitor the alluvial terrace deposits. Wells MW-14 through MW-17 will be installed prior to the construction of cell Nos. 21 through 24 for Phase 3. The location of MW-17 will consist of cluster wells, since the floor of the excavation will be terminated in the unweathered marl. Well MW-17A will be screened in the unweathered marl and MW-17 will be screened in the alluvial terrace deposits.

As shown on Attachment 5 Figures 10 and 12, the proposed monitoring system will consist of 31 monitoring wells when the landfill is fully developed. Four existing background detection monitoring wells (MW-1, MW-1A, MW-3 and MW-3A) are designated background well pairs in the proposed system. With the approval of this permit modification, these four wells will be renamed MW-1S, MW-1D, MW-3S, and MW-3D, respectively. The 'S' in the well name indicates the well is screened in a shallower portion of the uppermost aquifer and the 'D' indicates the well is screened in a deeper portion of the uppermost aquifer. One existing background well pair (MW-2 and MW-2A) will be removed at the time of new well installations – as only two sets of background wells are needed for statistical evaluation purposes.

In accordance with an agreement with the TCEQ, the point of compliance (POC) monitor wells will have two separate monitoring targets. Consistent with the original monitoring system design, six POC wells will have well screens that straddle the adjacent leachate collection sump elevations when the landfill is fully developed and have well names ending in a 'D'. These sump wells include existing monitor wells MW-5D (former MW-5A) and MW-6D (former MW-6A), and future monitor wells MW-4D, MW-7D, MW-8D and MW-16D. These wells are spaced more than 600 feet apart as are the adjacent sumps to be monitored and are located where the nearby permitted excavations are not founded in the unweathered marl beneath the site. The remaining 21 POC detection monitoring wells will be shallow wells (with names ending in an 'S') that have inter-well spacing of 600 feet or less along the POC as shown on Figure 10. The construction details of these wells are shown on Figures 11 and 12.

Within 90 days following the approval of this permit modification, the facility will install monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-6RS, MW-7 and MW-7D, and begin new well background data collection within 90 days following installation. Following the evaluation of these wells' background data, the detection monitoring system will be comprised of background wells MW-1, MW-1A, MW-3 and MW-3A, and point of compliance monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-5S, MW-5D, MW-6RS, MW-6D, MW-7S and MW-7D. Additional POC wells will be installed at least two years before waste is placed up groundwater gradient of the applicable future well location in future disposal cells. This will facilitate the completion of future monitor well background data collection prior to the placement of up gradient waste. For example, at least two years prior to the placement of waste to the west of its current limits in cell 6 (i.e., the construction of cells 7 and 8), the facility will likely require the installation of monitoring wells MW-8S, MW-8D, and MW-9 (depending on the westward extent of waste placement in the new up gradient waste disposal cells). The facility experiences little variability in the groundwater flow regime as shown on Figures 6, 7, 8, 9, 13, and 14.

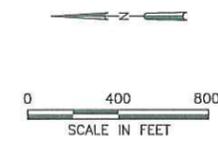
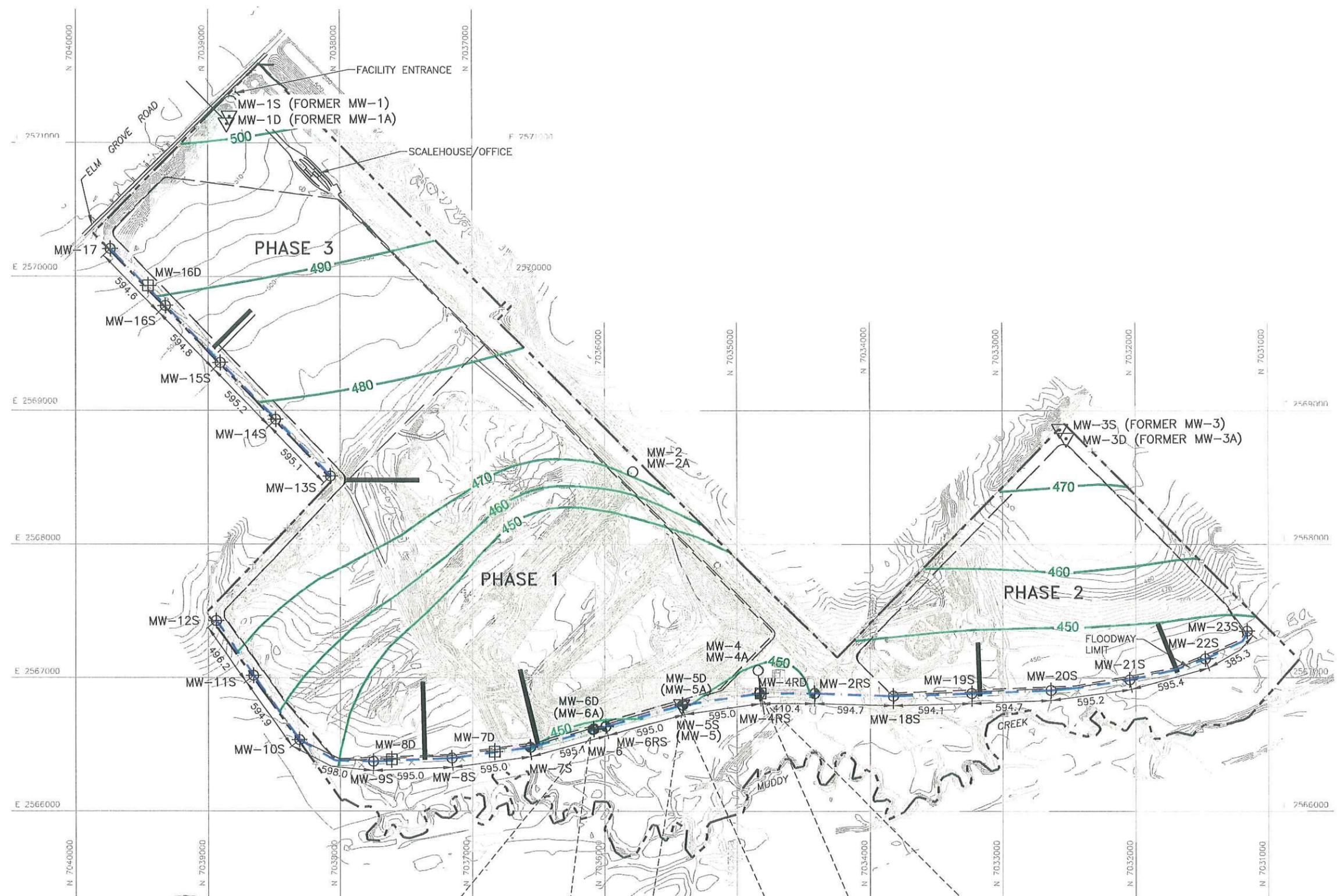
The installation of the wells will involve drilling and sampling using hollow stem augers. The proposed monitoring wells will be constructed of four two-inch inside diameter, schedule 40 or 80 PVC flush-threaded casing with O-ring seals. The well screen size will consist of 0.01-inch slots and 10 feet in length. An appropriate washed silica 20/40 mesh sand filter pack will be used to fill the annular space between the borehole wall and well screen. The filter pack will extend a maximum of four about 2 feet above the top of the screen. A minimum of three 2 foot thickness of bentonite seal will be placed above the filter pack, and the remainder of the annulus will be filled with a bentonite cement grout to the within 1 to 2 feet of surface. The tops of the monitor wells will extend a minimum of approximately three feet above ground and will be protected with a metal locking cover. A concrete pad measuring 6'x6'x6" 4'x4'x6" with wire-mesh reinforcement will be constructed around the well heads. At each corner of the concrete pad, a steel bollards measuring a minimum of eight 3 inches in diameter and extending at least four about 3 feet above grade will be installed as needed. The down gradient wells will be installed on top of the levee and completed in flush-mounted pre-cast concrete utility boxes/vaults. The boxes will be at least 3'x3' with a 3 foot skirt and concreted in place. The wells will be located in the center of the levee in order to reduce the potential of vehicles from

~~driving directly on the vaults. The lids on the vaults will have seals to prohibit infiltration of water into the vaults.~~

The elevations of the tops of the PVC well casingsheads, metal protective covers, utility boxes, concrete pads, and ground surface adjacent to the wells will be surveyed by a licensed surveyor to nearest 0.01 foot using the on site datum for control. ~~Development of the wells will follow standard protocol procedures. Each new monitoring well will be developed until field indicator parameters (pH, conductivity and temperature) have stabilized. A well installation report will be submitted to the TCEQ within 60 days of new well installation.~~ The sampling and analysis program will follow the Groundwater Sampling and Analysis Plan presented in Attachment 11 of this application.

A certification of the proposed groundwater monitoring well system is presented in Appendix 2 of Attachment 5.

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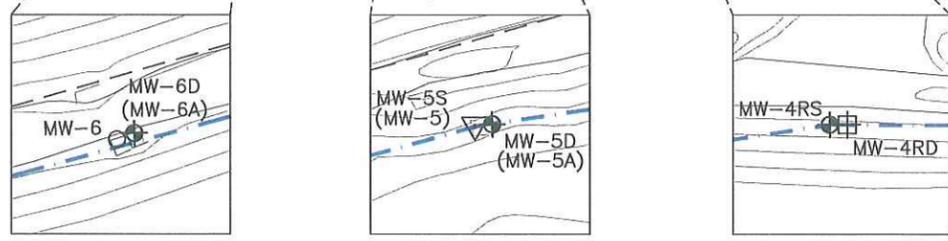


- LEGEND**
- PERMIT BOUNDARY
  - - - LIMITS OF WASTE
  - - - PHASE BOUNDARY
  - POINT OF COMPLIANCE
  - 450 SHALLOW ZONE GROUNDWATER CONTOUR (FT-MSL)
  - LETDOWN STRUCTURE
  - ⊕ MW-5R SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED IN 2010
  - ⊕ MW-8 FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS FACILITY IS DEVELOPED
  - MW-4 EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION
  - ▽ MW-6AS EXISTING GROUNDWATER MONITORING WELL TO REMAIN
  - ⊕ MW-4RD FUTURE GROUNDWATER MONITORING DEEP WELL SUMP TO BE PHASED IN AS FACILITY IS DEVELOPED
  - ⊕ MW-6A (MW-6D) EXISTING DEEP ZONE SUMP ZONE MONITORING WELL TO REMAIN WITH OLD WELL NAME IN PARENTHESIS

- NOTES:**
- EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 9-8-2008. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-9-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  - SHALLOW ZONE GROUNDWATER GRADIENT PRODUCED USING JUNE 1, 2009 DETECTION MONITORING GROUNDWATER ELEVATIONS GAUGED ON JUNE 1, 2009.

*Robert S. Fербend*

STATE OF TEXAS  
 ROBERT S. FERBEND  
 GEOLOGY  
 713  
 LICENSED PROFESSIONAL GEOSCIENTIST  
 3-25-10



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DATE: 03/2010	DRAWN BY: VRS
FILE: 0647-02-14	DESIGN BY: RSF
CAD: FIGURE 10.DWG	REVIEWED BY: RSF

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NO.	DATE	DESCRIPTION

PERMIT MODIFICATION  
 PROPOSED MONITORING WELL SYSTEM

CHARLES M. HINTON JR. REGIONAL LANDFILL  
 DALLAS COUNTY, TEXAS

*Weaver Boos Consultants*  
 TBPE REGISTRATION NO. F-3727

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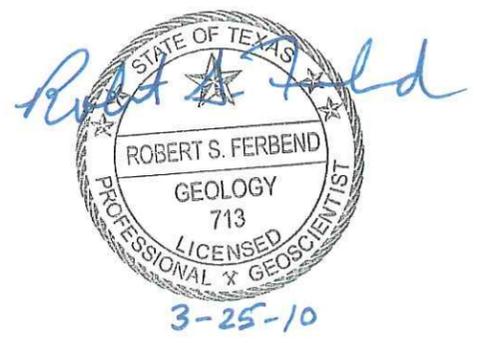
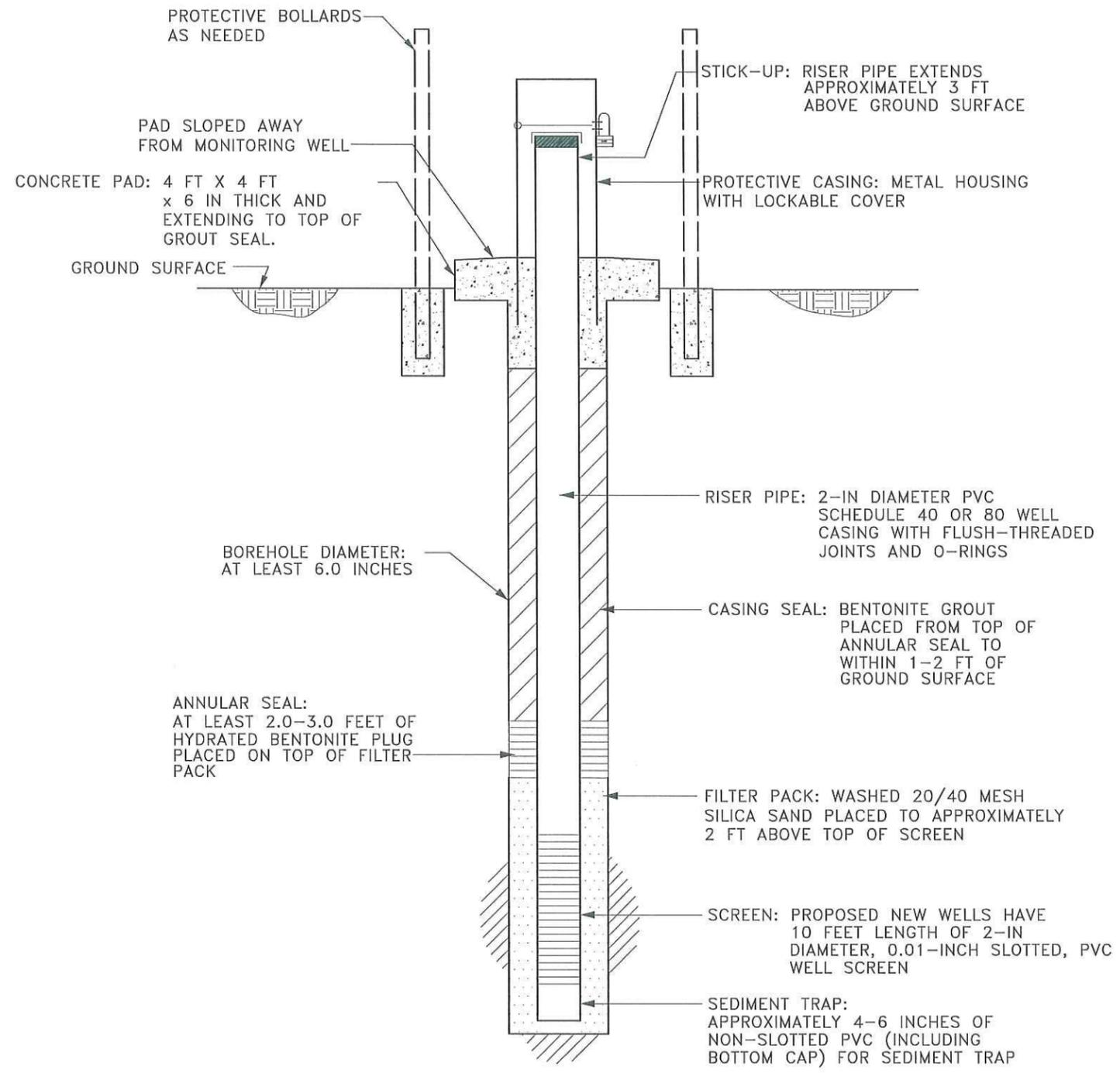
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FIGURE 10

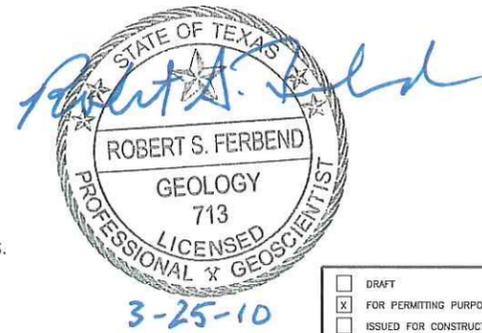


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DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 11.DWG		DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF		CHARLES M. HINTON JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS																			
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SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO		GRIFFITH, IN		<b>FIGURE 11</b>																			

WELL NUMBER	NORTHING	EASTING	INSTALL DATE	GROUND ELEVATION <sup>1</sup>	TOP OF CASING ELEVATION	TOTAL BOREHOLE DEPTH	DEPTH TOP OF UNWEATHERED MARL	NEAREST SUMP ELEVATION	FILTER PACK ELEVATION		WELL SCREEN ELEVATION		FILTER PACK DEPTH		WELL SCREEN DEPTH		GROUNDWATER ELEVATION <sup>1,11</sup>	DEPTH TO GROUNDWATER
									TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM		
EXISTING GROUNDWATER MONITORING WELLS <sup>10</sup>																		
MW-1 <sup>4</sup>	7038879	2571178	06/14/01	511.2	513.30	38.5	NA	467	487.3	474.8	485.3	475.3	26.0	38.5	28.0	38.0	502.12	9.1
MW-1A <sup>4</sup>			08/25/00	510.8	513.94	58	44.5	467	468.9	455.9	466.9	456.9	45.0	58.0	47.0	57.0	502.26	8.5
MW-2 <sup>7</sup>	7035784	2568543	8/28/00	490.3	493.33	40	NA	446	467.0	453.3	463.8	453.8	26.3	40.0	29.5	39.5	470.61	19.7
MW-2A <sup>7</sup>			06/18/01	491.1	493.13	68	50.0	446	438.3	425.1	436.1	426.1	54.8	68.0	57.0	67.0	429.29	61.8
MW-3 <sup>4</sup>	7032501	2568777	08/28/00	486	489.09	35	NA	459	468.1	454.1	465.1	455.1	21.0	35.0	24.0	34.0	472.16	13.8
MW-3A <sup>4</sup>			06/19/01	486.8	489.70	73	54.0	459	429.7	416.7	427.7	417.7	60.0	73.0	62.0	72.0	446.64	40.2
MW-4 <sup>7</sup>	7034832	2567070	06/20/01	458.3	460.52	33	NA	431	441.0	427.5	438.4	428.4	19.5	33.0	22.1	32.1	449.22	9.1
MW-4A <sup>7</sup>			06/20/01	458.3	460.69	48.5	33.0	431	425.7	412.2	422.6	412.6	35.0	48.5	38.1	48.1	449.12	9.2
MW-5 (MW-5S) <sup>5</sup>	7035418	2566796	06/20/01	458.7	461.00	32	NA	433	442.0	429.0	440.0	430.0	19.0	32.0	21.0	31.0	451.77	6.9
MW-5A <sup>4</sup> (MW-5D) <sup>5</sup>			06/19/01	458.8	461.10	47	32.0	433	427.1	414.1	425.1	415.1	34.0	47.0	36.0	46.0	449.48	9.3
MW-6 <sup>7</sup>	7036090	2566612	07/07/03	460.6	464.23	31	25.0	430	442.6	429.3	439.6	429.6	18.0	31.3	21.0	31.0	446.6	14.0
MW-6A (MW-6D) <sup>5</sup>	7036082	2566615	07/07/03	460.5	464.14	49.3	25.0	430	424.5	411.2	421.5	411.5	36.0	49.3	39.0	49.0	420.34	40.2
PROPOSED NEW GROUNDWATER MONITORING SHALLOW ZONE WELLS <sup>3</sup>																		
MW-2RS <sup>8</sup>	7034419	2566883	NEW	460	NEW	35.0	34.7	431	437.5	425.0	435.5	425.5	22.5	35.0	24.5	34.5	451	9.0
MW-4RS <sup>8</sup>	7034829	2566884	NEW	458	NEW	33.5	33.0	431	437.0	424.5	435.0	425.0	21.0	33.5	23.0	33.0	452	6.0
MW-6RS <sup>8</sup>	7035991	2566636	NEW	461	NEW	28.5	25.0	430	445.0	432.5	443.0	433.0	16.0	28.5	18.0	28.0	448	13.0
MW-7S <sup>8</sup>	7036565	2566479	NEW	460	NEW	25.5	22.0	428	447.0	434.5	445.0	435.0	13.0	25.5	15.0	25.0	450	10.0
MW-8S <sup>9</sup>	7037154	2566398	NEW	464	NEW	30.5	28.0	426	446.0	433.5	444.0	434.0	18.0	30.5	20.0	30.0	449	15.0
MW-9S <sup>9</sup>	7037749	2566373	NEW	464	NEW	32.5	32.0	426	444.0	431.5	442.0	432.0	20.0	32.5	22.0	32.0	449	15.0
MW-10S <sup>9</sup>	7038311	2566535	NEW	458	NEW	21.0	20.5	436	449.5	437.0	447.5	437.5	8.5	21.0	10.5	20.5	455	3.0
MW-11S <sup>9</sup>	7038660	2567017	NEW	464	NEW	27.0	26.5	440	449.5	437.0	447.5	437.5	14.5	27.0	16.5	26.5	462	2.0
MW-12S <sup>9</sup>	7038940	2567426	NEW	468	NEW	31.0	30.5	444	449.5	437.0	447.5	437.5	18.5	31.0	20.5	30.5	466	2.0
MW-13S <sup>9</sup>	7038075	2568510	NEW	492	NEW	47.5	47.0	449	457.0	444.5	455.0	445.0	35.0	47.5	37.0	47.0	475	17.0
MW-14S <sup>9</sup>	7038492	2568934	NEW	496	NEW	51.5	51.0	451	457.0	444.5	455.0	445.0	39.0	51.5	41.0	51.0	478	18.0
MW-15S <sup>9</sup>	7038909	2569358	NEW	498	NEW	55.5	55.0	452	455.0	442.5	453.0	443.0	43.0	55.5	45.0	55.0	485	13.0
MW-16S <sup>9</sup>	7039325	2569784	NEW	502	NEW	49.5	49.0	455	465.0	452.5	463.0	453.0	37.0	49.5	39.0	49.0	489	13.0
MW-17S <sup>9</sup>	7039741	2570208	NEW	508	NEW	39.5	39.0	455	481.0	468.5	479.0	469.0	27.0	39.5	29.0	39.0	494	14.0
MW-18S <sup>9</sup>	7033825	2566864	NEW	455	NEW	30.0	29.5	431	437.5	425.0	435.5	425.5	17.5	30.0	19.5	29.5	448	7.0
MW-19S <sup>9</sup>	7033231	2566883	NEW	454	NEW	29.5	29.0	431	437.0	424.5	435.0	425.0	17.0	29.5	19.0	29.0	448	6.0
MW-20S <sup>9</sup>	7032637	2566906	NEW	454	NEW	27.5	27.0	433	439.0	426.5	437.0	427.0	15.0	27.5	17.0	27.0	448	6.0
MW-21S <sup>9</sup>	7032047	2566985	NEW	453	NEW	24.5	24.0	435	441.0	428.5	439.0	429.0	12.0	24.5	14.0	24.0	448	5.0
MW-22S <sup>9</sup>	7031473	2567142	NEW	451	NEW	26.5	26.0	437	437.0	424.5	435.0	425.0	14.0	26.5	16.0	26.0	448	3.0
MW-23S <sup>9</sup>	7031159	2567349	NEW	450	NEW	25.5	25.0	437	437.0	424.5	435.0	425.0	13.0	25.5	15.0	25.0	448	2.0
PROPOSED NEW GROUNDWATER MONITORING SUMP WELLS <sup>3</sup>																		
MW-4D <sup>10</sup>	7034822	2566884	NEW	458	NEW	39.0	33.0	431	431.5	419.0	429.5	419.5	26.5	39.0	28.5	38.5	452	6.0
MW-7D <sup>10</sup>	7036833	2566445	NEW	460	NEW	38.0	22.0	428	434.5	422.0	432.5	422.5	25.5	38.0	27.5	37.5	449	11.0
MW-8D <sup>10</sup>	7037610	2566388	NEW	464	NEW	43.0	29.0	427	433.5	421.0	431.5	421.5	30.5	43.0	32.5	42.5	449	15.0
MW-16D <sup>10</sup>	7039454	2569932	NEW	504	NEW	55.0	44.0	455	461.5	449.0	459.5	449.5	42.5	55.0	44.5	54.5	489	15.0

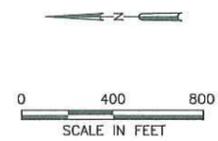
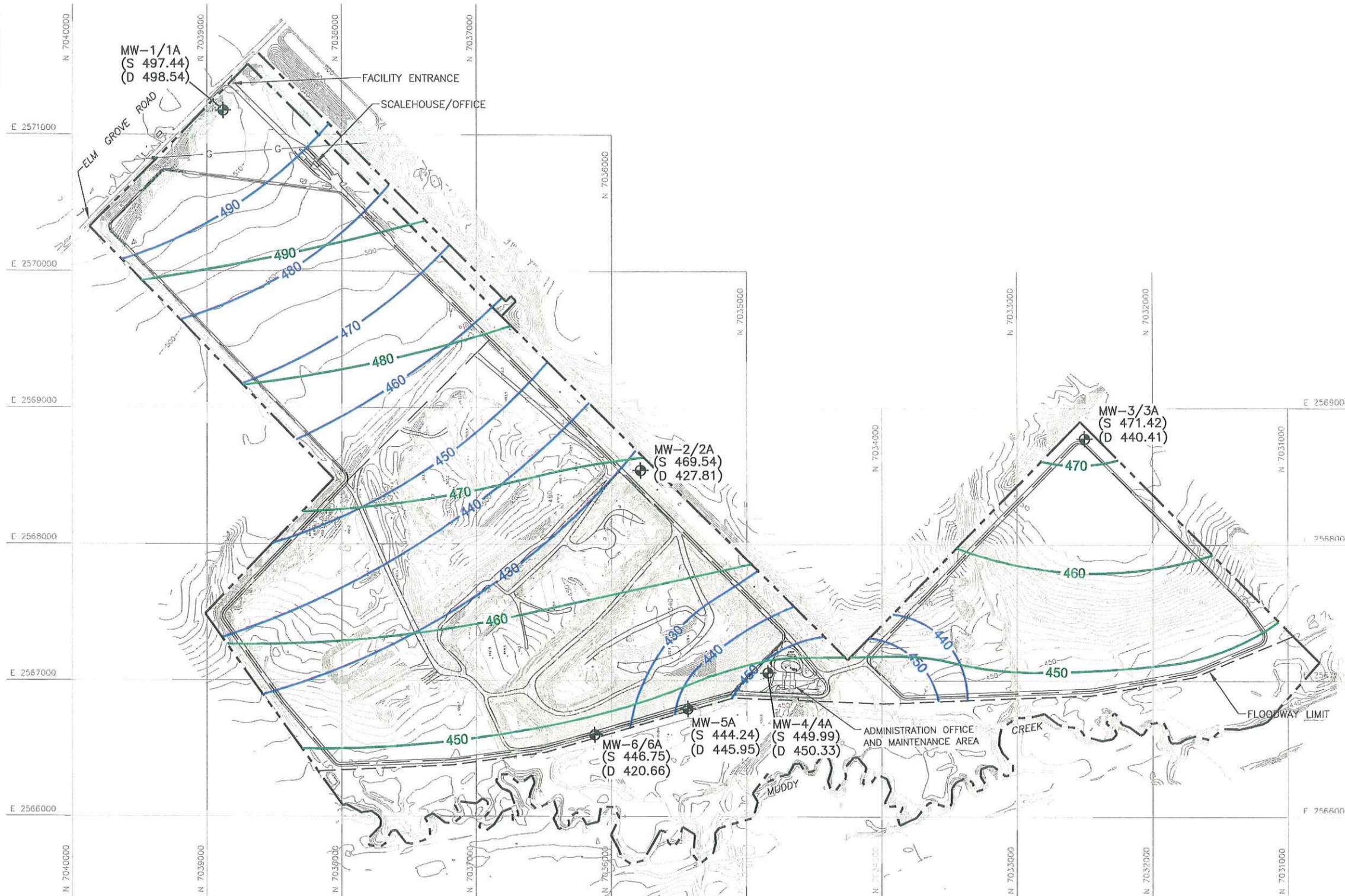
NOTES:

- NEW WELL GROUND ELEVATIONS ESTIMATED FROM SITE TOPOGRAPHIC MAP.
- ELEVATIONS LISTED ABOVE IN FEET ABOVE MEAN SEA LEVEL, ALL DEPTHS LISTED IN FEET BELOW GROUND SURFACE.
- PROPOSED GROUNDWATER MONITORING WELL DETAILS ARE ESTIMATED FROM EXISTING BORING LOGS. ACTUAL DEPTHS AND ELEVATIONS OF DETAILS TO BE DETERMINED IN FIELD BASED ON ACTUAL GROUND ELEVATIONS AND DEPTH TO TOP OF UNWEATHERED MARL.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN AS A SUMP MONITORING WELL WITH NEW WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE CONVERTED TO AN OBSERVATION WELL WITH OBSERVATION WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION.
- SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS THE FACILITY IS DEVELOPED.
- GROUNDWATER MONITORING SUMP WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- GROUNDWATER ELEVATIONS FOR EXISTING WELLS OBTAINED FROM THE FACILITY'S GROUNDWATER MONITORING DATABASE FROM JUNE 2009 GROUNDWATER MEASUREMENTS.
- ALL EXISTING WELLS ARE 4-INCH INSIDE DIAMETER, PROPOSED NEW WELL INSTALLATIONS WILL BE 2-INCH INSIDE DIAMETER.



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DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 12.dwg		DRAWN BY: VRS DESIGN BY: AE REVIEWED BY: RSF		CHARLES M. HINTON, JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS																
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<small>GRIFITH, IN          SOUTH BEND, IN          SPRINGFIELD, IL          ST. LOUIS, MO</small>		<b>FIGURE 12</b>																		

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- LEGEND**
- TOE OF LEVEE
  - - - PERMIT BOUNDARY
  - - - PHASE BOUNDARY
  - 450 SHALLOW GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - 450 DEEPER GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - MW-4/4A (S 449.99) (D 450.33) EXISTING MONITORING WELL PAIR WITH GROUNDWATER ELEVATIONS FOR SHALLOW (S) AND DEEPER (D) SCREENED WELLS

- NOTE:**
1. EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 8-01-2007. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-09-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  2. GROUNDWATER LEVELS MEASURED ON 12-08-2008 POSTED IN FT-MSL BY MEASUREMENT LOCATION.

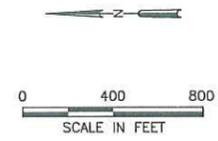
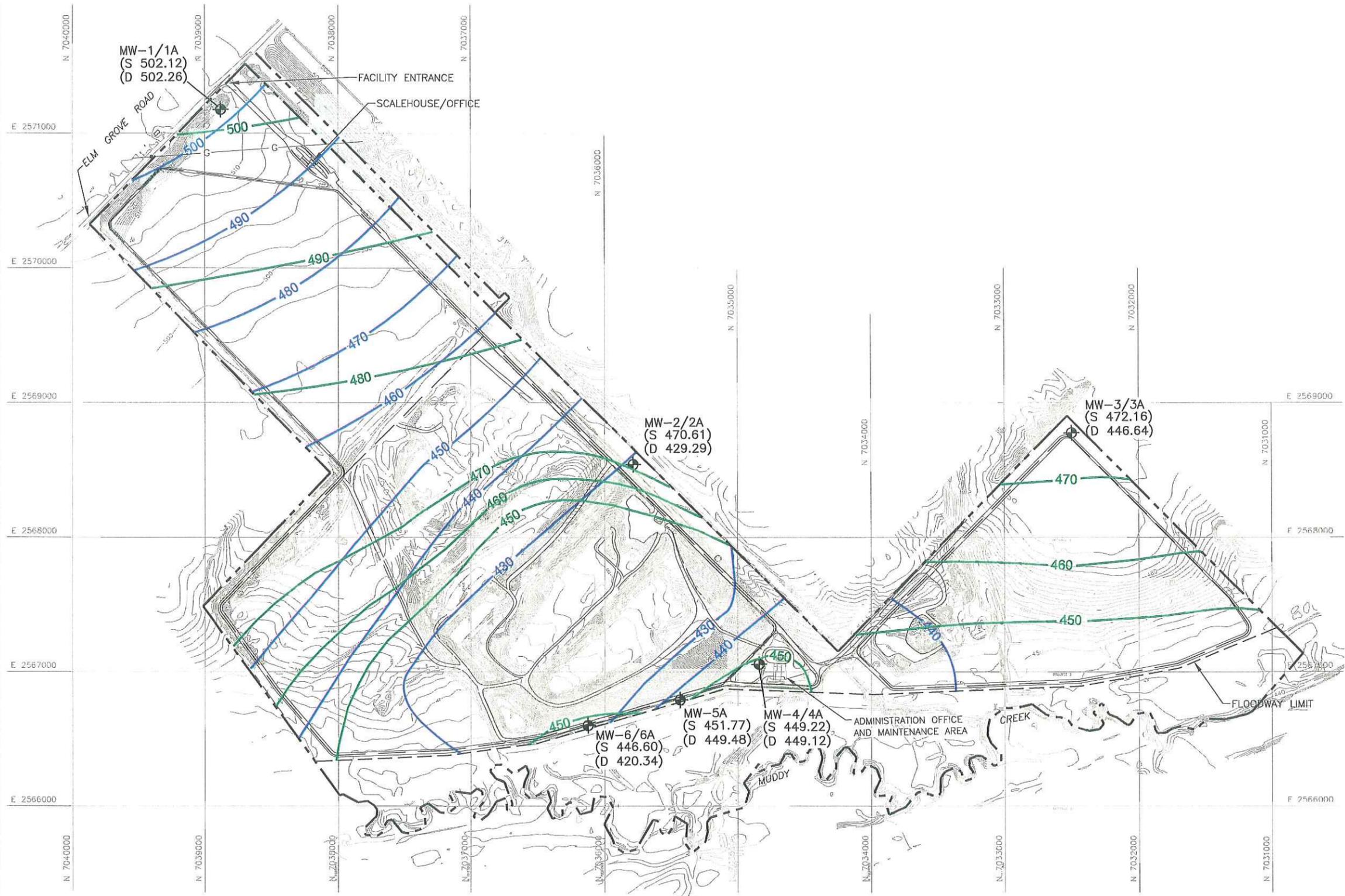
*Robert S. Ferbend*  
 STATE OF TEXAS  
 ROBERT S. FERBEND  
 GEOLOGY  
 713  
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 3-25-10

<input type="checkbox"/> DRAFT	PREPARED FOR	CITY OF GARLAND												
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<input type="checkbox"/> ISSUED FOR CONSTRUCTION		DECEMBER 2008 MONITORING EVENT POTENTIOMETRIC SURFACES MAP  CHARLES M. HINTON LANDFILL DALLAS COUNTY, TEXAS												
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NO.	DATE		DESCRIPTION											
FILE: 0647-02-14	DESIGN BY: AKE													
CAD: FIGURE 13.DWG	REVIEWED BY: RSF													

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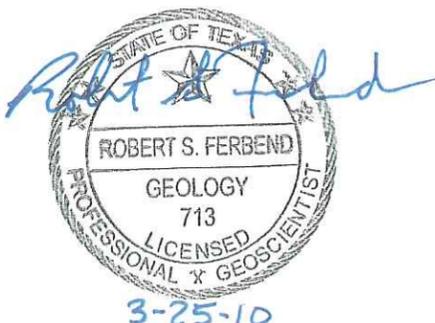
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 FORT WORTH, TX  
 (817) 735-9770  
 GRIFFITH, IN  
 SOUTH BEND, IN  
 SPRINGFIELD, IL  
 ST. LOUIS, MO  
**FIGURE 13**

P:\Groundwater\Garland\Hinton\600 FT Well Spacing Mod 09\Figure 5-31.dwg, 3/25/2010 2:57:25 PM, rseliers



- LEGEND**
- TOE OF LEVEE
  - - - PERMIT BOUNDARY
  - - - PHASE BOUNDARY
  - 450— SHALLOW GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - 450— DEEPER GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - ⊕ MW-4/4A (S 449.22) (D 449.12) EXISTING MONITORING WELL PAIR WITH GROUNDWATER ELEVATIONS FOR SHALLOW (S) AND DEEPER (D) SCREENED WELLS. GROUNDWATER ELEVATIONS POSTED IN FT-MSL.

- NOTE:**
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  2. GROUNDWATER LEVELS MEASURED ON 06-01-2009 POSTED IN FT-MSL BY MEASUREMENT LOCATION.

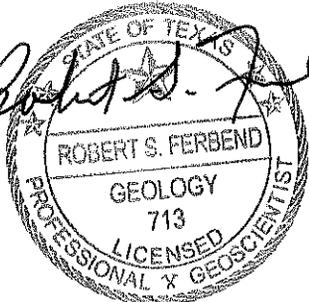


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DATE: 07/2009 FILE: 0647-02-14 CAD: FIGURE 14.DWG	DRAWN BY: SRF DESIGN BY: AKE REVIEWED BY: RSF	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	DESCRIPTION									
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PREPARED FOR <b>CITY OF GARLAND</b>		<b>JUNE 2009 MONITORING EVENT          POTENTIOMETRIC SURFACES MAP</b>													
DATE: 07/2009 FILE: 0647-02-14 CAD: FIGURE 14.DWG		CHARLES M. HINTON LANDFILL DALLAS COUNTY, TEXAS													
DRAWN BY: SRF DESIGN BY: AKE REVIEWED BY: RSF		<i>Weaver Boos Consultants</i>													
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NO.	DATE	DESCRIPTION													

P:\Groundwater\Garland\Hinton\600 FT Well Spacing Mod 09\FIGURE 5-14.dwg, 3/25/2010 2:57:54 PM, r.sellars

**APPENDIX 2**  
**GROUNDWATER MONITORING SYSTEM CERTIFICATION**

*Robert S. Ferbend*  


3-25-10

# GROUNDWATER MONITORING SYSTEM CERTIFICATION

## General Site Information

Site: Charles M. Hinton Jr. Regional Landfill

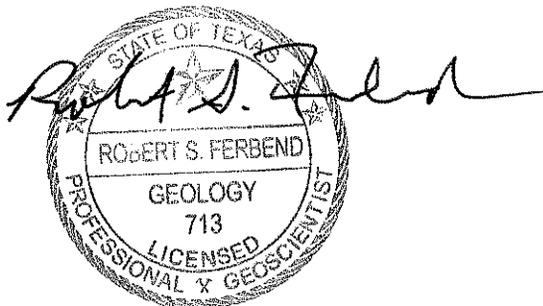
Site Location: Dallas County

MSW Permit No.: 1895A

## Qualified Groundwater Scientist Statement

I, Robert S. Ferbend, am a registered professional geoscientist in the State of Texas and a qualified groundwater scientist as defined in Title 30 TAC §330.3(120). I have reviewed the groundwater monitoring system and supporting details contained herein. In my professional opinion, the groundwater monitoring system design and construction details are in compliance with the groundwater monitoring requirements specified in Title 30 TAC §§330.401, 330.403, 330.405, and 330.421. This system has been designed for the Charles M. Hinton Jr. Regional Landfill. The only warranty made by me in connection with this document is that I have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of my profession, practicing in the same or similar locality. No other warranty, expressed or implied, is intended.

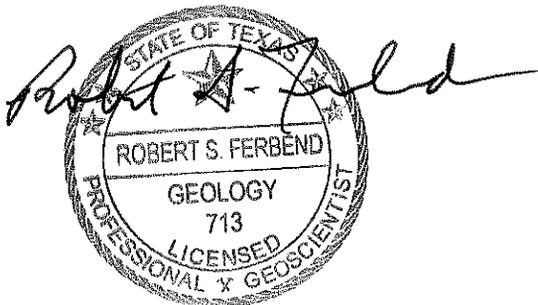
Firm/Address: Weaver Boos Consultants, LLC--Southwest  
6420 Southwest Boulevard, Suite 206  
Fort Worth, Texas 76019



Signature: Robert S. Ferbend, P.G., Texas License No. 713

Date: 3-25-10

**APPENDIX B**  
**SDP CLEAN REPLACEMENT PAGES**  
**(CLEAN COPY)**



3-25-10

**CHARLES M. HINTON, JR. REGIONAL LANDFILL**

**DALLAS COUNTY, TEXAS  
TCEQ PERMIT NO. MSW-1895A**

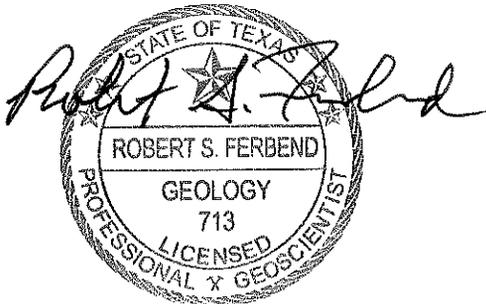
**PART III – SITE DEVELOPMENT PLAN  
ATTACHMENT 4  
GEOLOGY REPORT**

Prepared for

City of Garland

Permit Approved 1999

Revised March 2010



3-25-10

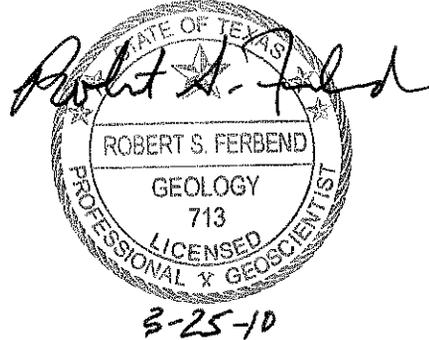
Prepared by

**Weaver Boos Consultants, LLC–Southwest**  
TBPE Registration No. F-3727  
6420 Southwest Blvd., Suite 206  
Fort Worth, Texas 76109

WBC Project No. 0647-02-14-11-01

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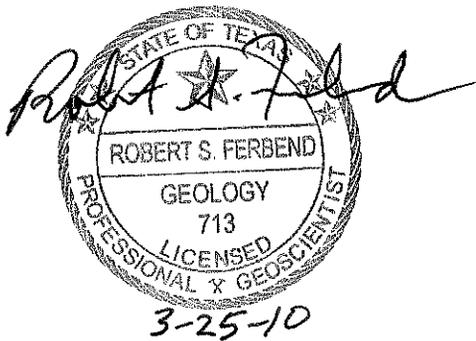


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### APPENDICES

- 1 Water Well Driller's Reports
- 2 Rone Engineers Report, Geotechnical Investigation Proposed 300 Acre Garland Landfill Near Sachse, Texas, November 1985, revised December, 1987
- 3 Logs of Borings, HDR Investigation
- 4 Ashok H. Gajria and Associates Report
- 5 Calculations for Groundwater Inflow into Test Pit
- 6 Calculations for Quantity of Groundwater Inflow
- 7 Ballast Calculations
- 8 Geotechnical Design



## 7.0 PROPOSED MONITORING WELL SYSTEM

As shown on Figures 35 and 36, the proposed monitoring system will consist of 31 monitoring wells when the landfill is fully developed. Four existing background detection monitoring wells (MW-1, MW-1A, MW-3 and MW-3A) are designated background well pairs in the proposed system. With the approval of this permit modification, these four wells will be renamed MW-1S, MW-1D, MW-3S, and MW-3D, respectively. The 'S' in the well name indicates the well is screened in a shallower portion of the uppermost aquifer and the 'D' indicates the well is screened in a deeper portion of the uppermost aquifer. One existing background well pair (MW-2 and MW-2A) will be removed at the time of new well installations – as only two sets of background wells are needed for statistical evaluation purposes.

In accordance with an agreement with the TCEQ, the point of compliance (POC) monitor wells will have two separate monitoring targets. Consistent with the original monitoring system design, six POC wells will have well screens that straddle the adjacent leachate collection sump elevations when the landfill is fully developed and have well names ending in a 'D'. These sump wells include existing monitor wells MW-5D (former MW-5A) and MW-6D (former MW-6A), and future monitor wells MW-4D, MW-7D, MW-8D and MW-16D. These wells are spaced more than 600 feet apart as are the adjacent sumps to be monitored and are located where the nearby permitted excavations are not founded in the unweathered marl beneath the site. The remaining 21 POC detection monitoring wells will be shallow wells (with names ending in an 'S') that have inter-well spacing of 600 feet or less along the POC as shown on Figure 35. The construction details of these wells are shown on Figure 36. Two geologic cross sections are provided as Figures 37 and 38 to also illustrate the layout of monitoring wells along the western and northern points of compliance.

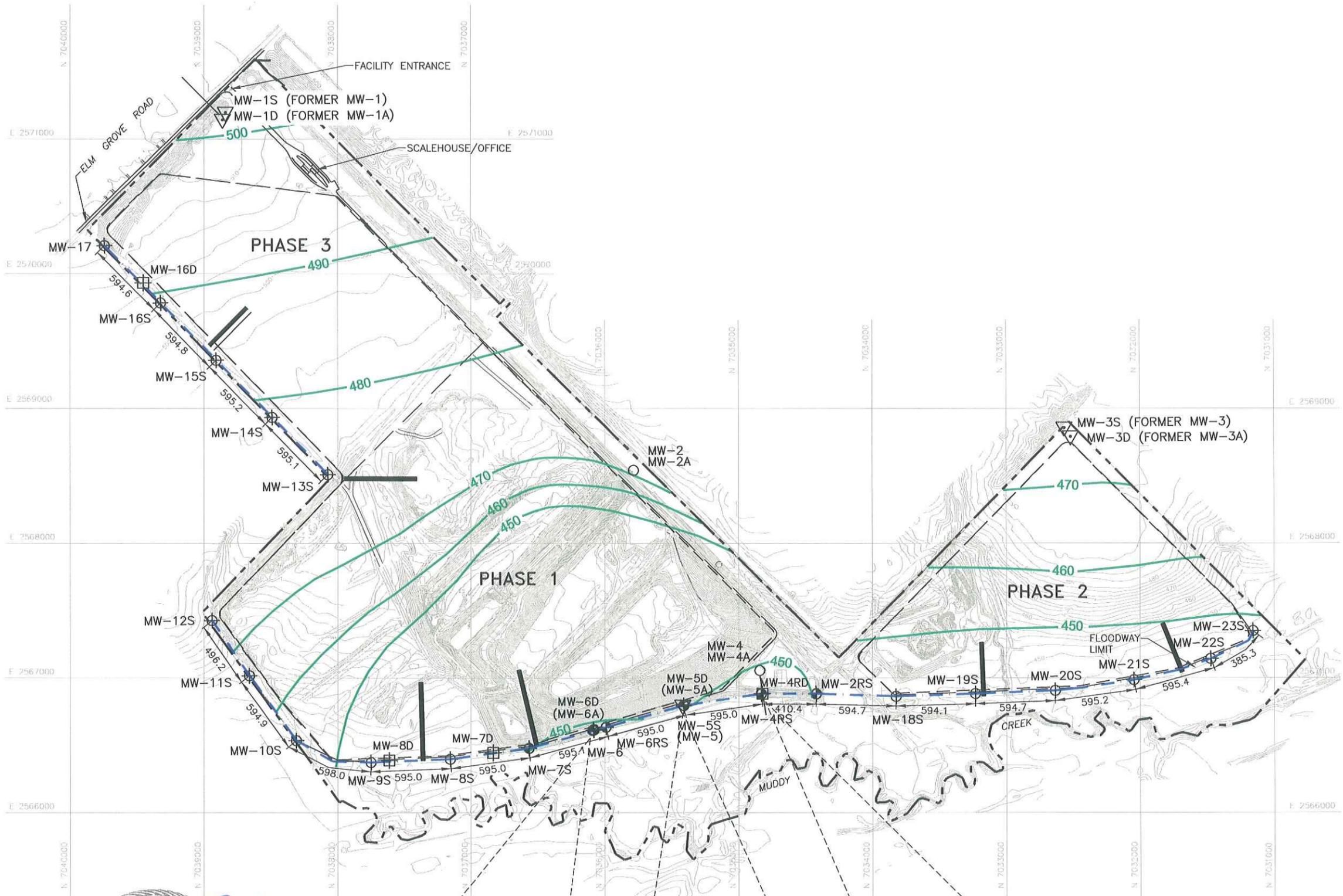
Within 90 days following the approval of this permit modification, the facility will install monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-6RS, MW-7 and MW-7D, and begin new well background data collection within 90 days following installation. Following the evaluation of these wells' background data, the detection monitoring system will be comprised of background wells MW-1, MW-1A, MW-3 and MW-3A, and point of compliance monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-5S, MW-5D, MW-6RS, MW-6D, MW-7S and MW-

7D. Additional POC wells will be installed at least two years before waste is placed up groundwater gradient of the applicable future well location in future disposal cells. This will facilitate the completion of future monitor well background data collection prior to the placement of up gradient waste. For example, at least two years prior to the placement of waste to the west of its current limits in cell 6 (i.e., the construction of cells 7 and 8), the facilitate will likely require the installation of monitoring wells MW-8S, MW-8D, and MW-9 (depending on the westward extent of waste placement in the new up gradient waste disposal cells). The facility experiences little variability in the groundwater flow regime as shown on Figures 6, 7, 8, 9, 13, and 14.

The proposed monitoring wells will be constructed of two-inch inside diameter, schedule 40 or 80 PVC flush-threaded casing with O-ring seals. The screen size will consist of 0.01-inch slots and 10 feet in length. A washed silica 20/40 mesh sand filter pack will be used to fill the annular space between the borehole wall and well screen. The filter pack will extend about 2 feet above the top of the screen. A minimum 2 foot thickness of bentonite seal will be placed above the filter pack, and the remainder of the annulus will be filled with a bentonite grout to within 1 to 2 feet of surface. The tops of the monitor wells will extend approximately three feet above ground and will be protected with a metal locking cover. A concrete pad measuring 4'x4'x6" with wire-mesh reinforcement will be constructed around the well heads. Steel bollards measuring a minimum of 3 inches in diameter and extending about 3 feet above grade will be installed as needed.

The elevations of the tops of the PVC well casings and ground surface adjacent to the wells will be surveyed by a licensed surveyor to nearest 0.01 foot using the on site datum for control. Each new monitoring well will be developed until field indicator parameters (pH, conductivity and temperature) have stabilized. A well installation report will be submitted to the TCEQ within 60 days of new well installation. The sampling and analysis program will follow the Groundwater Sampling and Analysis Plan presented in Attachment 11 of this application.

A certification of the proposed groundwater monitoring well system is presented in Appendix 2 of Attachment 5.



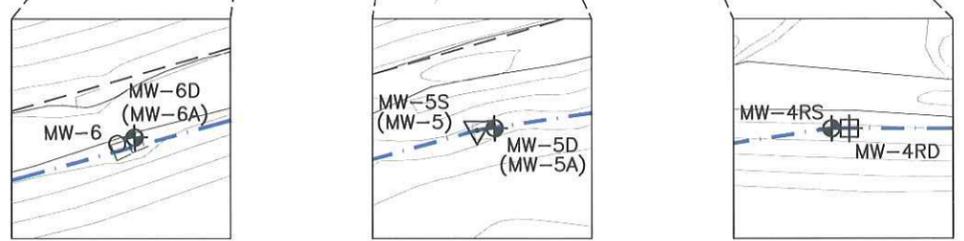
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SCALE IN FEET

**LEGEND**

- PERMIT BOUNDARY
- - - LIMITS OF WASTE
- PHASE BOUNDARY
- POINT OF COMPLIANCE
- 450 SHALLOW ZONE GROUNDWATER CONTOUR (FT-MSL)
- LETDOWN STRUCTURE
- ⊕ MW-5R SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED IN 2010
- ⊕ MW-8 FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS FACILITY IS DEVELOPED
- MW-4 EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION
- ▽ MW-6AS EXISTING GROUNDWATER MONITORING WELL TO REMAIN
- ⊕ MW-4RD FUTURE GROUNDWATER MONITORING DEEP WELL SUMP TO BE PHASED IN AS FACILITY IS DEVELOPED
- ⊕ MW-6A (MW-6D) EXISTING DEEP ZONE SUMP ZONE MONITORING WELL TO REMAIN WITH OLD WELL NAME IN PARENTHESIS

- NOTES:**
- EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 9-8-2008. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-9-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  - SHALLOW ZONE GROUNDWATER GRADIENT PRODUCED USING JUNE 1, 2009 DETECTION MONITORING GROUNDWATER ELEVATIONS GAUGED ON JUNE 1, 2009.

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 GEOLOGY  
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FILE: 0647-02-14	DESIGN BY: RSF
CAD: FIGURE 35.DWG	REVIEWED BY: RSF

REVISIONS		
NO.	DATE	DESCRIPTION

**PERMIT MODIFICATION**  
**PROPOSED MONITORING WELL SYSTEM**  
 CHARLES M. HINTON JR. REGIONAL LANDFILL  
 DALLAS COUNTY, TEXAS  
*Weaver Boos Consultants*  
 TBPE REGISTRATION NO. F-3727

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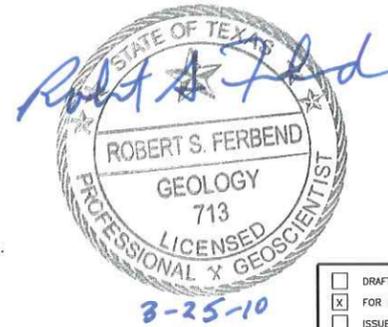
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 NAPERVILLE, IL      SOUTH BEND, IN  
 COLUMBUS, OH      (817) 735-9770      SPRINGFIELD, IL  
 DENVER, CO      ST. LOUIS, MO

O:\0647\02\600-FT WELL SPACING (02-10)\35-PROPOSED SYSTEM LAYOUT.dwg, 3/25/2010 2:50:51 PM, r sellers

WELL NUMBER	NORTHING	EASTING	INSTALL DATE	GROUND ELEVATION <sup>1</sup>	TOP OF CASING ELEVATION	TOTAL BOREHOLE DEPTH	DEPTH TOP OF UNWEATHERED MARL	NEAREST SUMP ELEVATION	FILTER PACK ELEVATION		WELL SCREEN ELEVATION		FILTER PACK DEPTH		WELL SCREEN DEPTH		GROUNDWATER ELEVATION <sup>1,11</sup>	DEPTH TO GROUNDWATER
									TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM		
EXISTING GROUNDWATER MONITORING WELLS <sup>10</sup>																		
MW-1 <sup>4</sup>	7038879	2571178	06/14/01	511.2	513.30	38.5	NA	467	487.3	474.8	485.3	475.3	26.0	38.5	28.0	38.0	502.12	9.1
MW-1A <sup>4</sup>			08/25/00	510.8	513.94	58	44.5	467	468.9	455.9	466.9	456.9	45.0	58.0	47.0	57.0	502.26	8.5
MW-2 <sup>7</sup>	7035784	2568543	8/28/00	490.3	493.33	40	NA	446	467.0	453.3	463.8	453.8	26.3	40.0	29.5	39.5	470.61	19.7
MW-2A <sup>7</sup>			06/18/01	491.1	493.13	68	50.0	446	438.3	425.1	436.1	426.1	54.8	68.0	57.0	67.0	429.29	61.8
MW-3 <sup>4</sup>	7032501	2568777	08/28/00	486	489.09	35	NA	459	468.1	454.1	465.1	455.1	21.0	35.0	24.0	34.0	472.16	13.8
MW-3A <sup>4</sup>			06/19/01	486.8	489.70	73	54.0	459	429.7	416.7	427.7	417.7	60.0	73.0	62.0	72.0	446.64	40.2
MW-4 <sup>7</sup>	7034832	2567070	06/20/01	458.3	460.52	33	NA	431	441.0	427.5	438.4	428.4	19.5	33.0	22.1	32.1	449.22	9.1
MW-4A <sup>7</sup>			06/20/01	458.3	460.69	48.5	33.0	431	425.7	412.2	422.6	412.6	35.0	48.5	38.1	48.1	449.12	9.2
MW-5 (MW-5S) <sup>5</sup>	7035418	2566796	06/20/01	458.7	461.00	32	NA	433	442.0	429.0	440.0	430.0	19.0	32.0	21.0	31.0	451.77	6.9
MW-5A <sup>4</sup> (MW-5D) <sup>5</sup>			06/19/01	458.8	461.10	47	32.0	433	427.1	414.1	425.1	415.1	34.0	47.0	36.0	46.0	449.48	9.3
MW-6 <sup>7</sup>	7036090	2566612	07/07/03	460.6	464.23	31	25.0	430	442.6	429.3	439.6	429.6	18.0	31.3	21.0	31.0	446.6	14.0
MW-6A (MW-6D) <sup>5</sup>	7036082	2566615	07/07/03	460.5	464.14	49.3	25.0	430	424.5	411.2	421.5	411.5	36.0	49.3	39.0	49.0	420.34	40.2
PROPOSED NEW GROUNDWATER MONITORING SHALLOW ZONE WELLS <sup>3</sup>																		
MW-2RS <sup>8</sup>	7034419	2566883	NEW	460	NEW	35.0	34.7	431	437.5	425.0	435.5	425.5	22.5	35.0	24.5	34.5	451	9.0
MW-4RS <sup>8</sup>	7034829	2566884	NEW	458	NEW	33.5	33.0	431	437.0	424.5	435.0	425.0	21.0	33.5	23.0	33.0	452	6.0
MW-6RS <sup>8</sup>	7035991	2566636	NEW	461	NEW	28.5	25.0	430	445.0	432.5	443.0	433.0	16.0	28.5	18.0	28.0	448	13.0
MW-7S <sup>8</sup>	7036565	2566479	NEW	460	NEW	25.5	22.0	428	447.0	434.5	445.0	435.0	13.0	25.5	15.0	25.0	450	10.0
MW-8S <sup>9</sup>	7037154	2566398	NEW	464	NEW	30.5	28.0	426	446.0	433.5	444.0	434.0	18.0	30.5	20.0	30.0	449	15.0
MW-9S <sup>9</sup>	7037749	2566373	NEW	464	NEW	32.5	32.0	426	444.0	431.5	442.0	432.0	20.0	32.5	22.0	32.0	449	15.0
MW-10S <sup>9</sup>	7038311	2566535	NEW	458	NEW	21.0	20.5	436	449.5	437.0	447.5	437.5	8.5	21.0	10.5	20.5	455	3.0
MW-11S <sup>9</sup>	7038660	2567017	NEW	464	NEW	27.0	26.5	440	449.5	437.0	447.5	437.5	14.5	27.0	16.5	26.5	462	2.0
MW-12S <sup>9</sup>	7038940	2567426	NEW	468	NEW	31.0	30.5	444	449.5	437.0	447.5	437.5	18.5	31.0	20.5	30.5	466	2.0
MW-13S <sup>9</sup>	7038075	2568510	NEW	492	NEW	47.5	47.0	449	457.0	444.5	455.0	445.0	35.0	47.5	37.0	47.0	475	17.0
MW-14S <sup>9</sup>	7038492	2568934	NEW	496	NEW	51.5	51.0	451	457.0	444.5	455.0	445.0	39.0	51.5	41.0	51.0	478	18.0
MW-15S <sup>9</sup>	7038909	2569358	NEW	498	NEW	55.5	55.0	452	455.0	442.5	453.0	443.0	43.0	55.5	45.0	55.0	485	13.0
MW-16S <sup>9</sup>	7039325	2569784	NEW	502	NEW	49.5	49.0	455	465.0	452.5	463.0	453.0	37.0	49.5	39.0	49.0	489	13.0
MW-17S <sup>9</sup>	7039741	2570208	NEW	508	NEW	39.5	39.0	455	481.0	468.5	479.0	469.0	27.0	39.5	29.0	39.0	494	14.0
MW-18S <sup>9</sup>	7033825	2566864	NEW	455	NEW	30.0	29.5	431	437.5	425.0	435.5	425.5	17.5	30.0	19.5	29.5	448	7.0
MW-19S <sup>9</sup>	7033231	2566883	NEW	454	NEW	29.5	29.0	431	437.0	424.5	435.0	425.0	17.0	29.5	19.0	29.0	448	6.0
MW-20S <sup>9</sup>	7032637	2566906	NEW	454	NEW	27.5	27.0	433	439.0	426.5	437.0	427.0	15.0	27.5	17.0	27.0	448	6.0
MW-21S <sup>9</sup>	7032047	2566985	NEW	453	NEW	24.5	24.0	435	441.0	428.5	439.0	429.0	12.0	24.5	14.0	24.0	448	5.0
MW-22S <sup>9</sup>	7031473	2567142	NEW	451	NEW	26.5	26.0	437	437.0	424.5	435.0	425.0	14.0	26.5	16.0	26.0	448	3.0
MW-23S <sup>9</sup>	7031159	2567349	NEW	450	NEW	25.5	25.0	437	437.0	424.5	435.0	425.0	13.0	25.5	15.0	25.0	448	2.0
PROPOSED NEW GROUNDWATER MONITORING SUMP WELLS <sup>3</sup>																		
MW-4D <sup>10</sup>	7034822	2566884	NEW	458	NEW	39.0	33.0	431	431.5	419.0	429.5	419.5	26.5	39.0	28.5	38.5	452	6.0
MW-7D <sup>10</sup>	7036833	2566445	NEW	460	NEW	38.0	22.0	428	434.5	422.0	432.5	422.5	25.5	38.0	27.5	37.5	449	11.0
MW-8D <sup>10</sup>	7037610	2566388	NEW	464	NEW	43.0	29.0	427	433.5	421.0	431.5	421.5	30.5	43.0	32.5	42.5	449	15.0
MW-16D <sup>10</sup>	7039454	2569932	NEW	504	NEW	55.0	44.0	455	461.5	449.0	459.5	449.5	42.5	55.0	44.5	54.5	489	15.0

**NOTES:**

- NEW WELL GROUND ELEVATIONS ESTIMATED FROM SITE TOPOGRAPHIC MAP.
- ELEVATIONS LISTED ABOVE IN FEET ABOVE MEAN SEA LEVEL, ALL DEPTHS LISTED IN FEET BELOW GROUND SURFACE.
- PROPOSED GROUNDWATER MONITORING WELL DETAILS ARE ESTIMATED FROM EXISTING BORING LOGS. ACTUAL DEPTHS AND ELEVATIONS OF DETAILS TO BE DETERMINED IN FIELD BASED ON ACTUAL GROUND ELEVATIONS AND DEPTH TO TOP OF UNWEATHERED MARL.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN AS A SUMP MONITORING WELL WITH NEW WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE CONVERTED TO AN OBSERVATION WELL WITH OBSERVATION WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION.
- SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS THE FACILITY IS DEVELOPED.
- GROUNDWATER MONITORING SUMP WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- GROUNDWATER ELEVATIONS FOR EXISTING WELLS OBTAINED FROM THE FACILITY'S GROUNDWATER MONITORING DATABASE FROM JUNE 2009 GROUNDWATER MEASUREMENTS.
- ALL EXISTING WELLS ARE 4-INCH INSIDE DIAMETER, PROPOSED NEW WELL INSTALLATIONS WILL BE 2-INCH INSIDE DIAMETER.

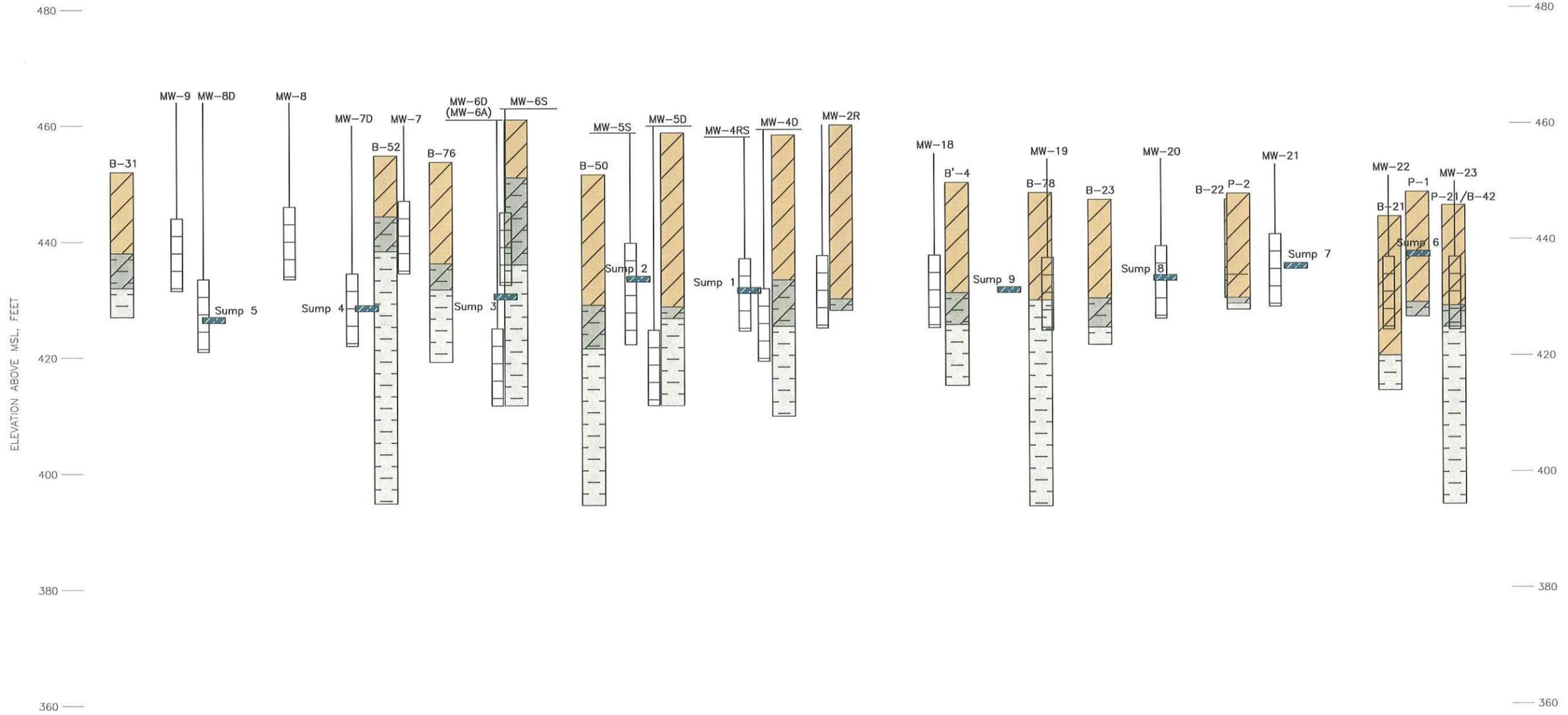


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DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 36.dwg		DRAWN BY: VRS DESIGN BY: AE REVIEWED BY: RSF		CHARLES M. HINTON, JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS													
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NO.	DATE	DESCRIPTION															
<small>CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO</small>		<small>FORT WORTH, TX (817) 735-9770</small>		<small>GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO</small>													
<b>FIGURE 36</b>																	

0:\0647\02\600-FT WELL SPACING (02-10)\36-MW DETAILS.dwg, 3/25/2010 2:51:35 PM, r sellers

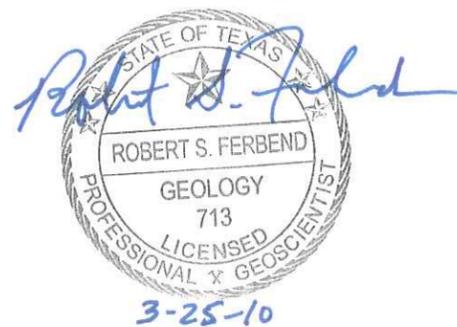
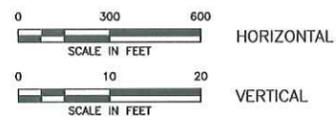
NORTH

SOUTH



BORING LEGEND

-  ALLUVIUM
-  UNWEATHERED MARL
-  WEATHERED MARL
-  SUMP



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DATE: 02/2010 FILE: 0647-02-14 CAD: FIGURE 37.DWG	DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	DESCRIPTION												
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PERMIT MODIFICATION  
 FINAL WESTERN POINT OF COMPLIANCE

CHARLES M. HINTON JR. REGIONAL LANDFILL  
 DALLAS COUNTY, TEXAS

*Weaver Boos Consultants*  
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CHICAGO, IL  
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 COLUMBUS, OH  
 DENVER, CO

FORT WORTH, TX  
 (817) 735-9770

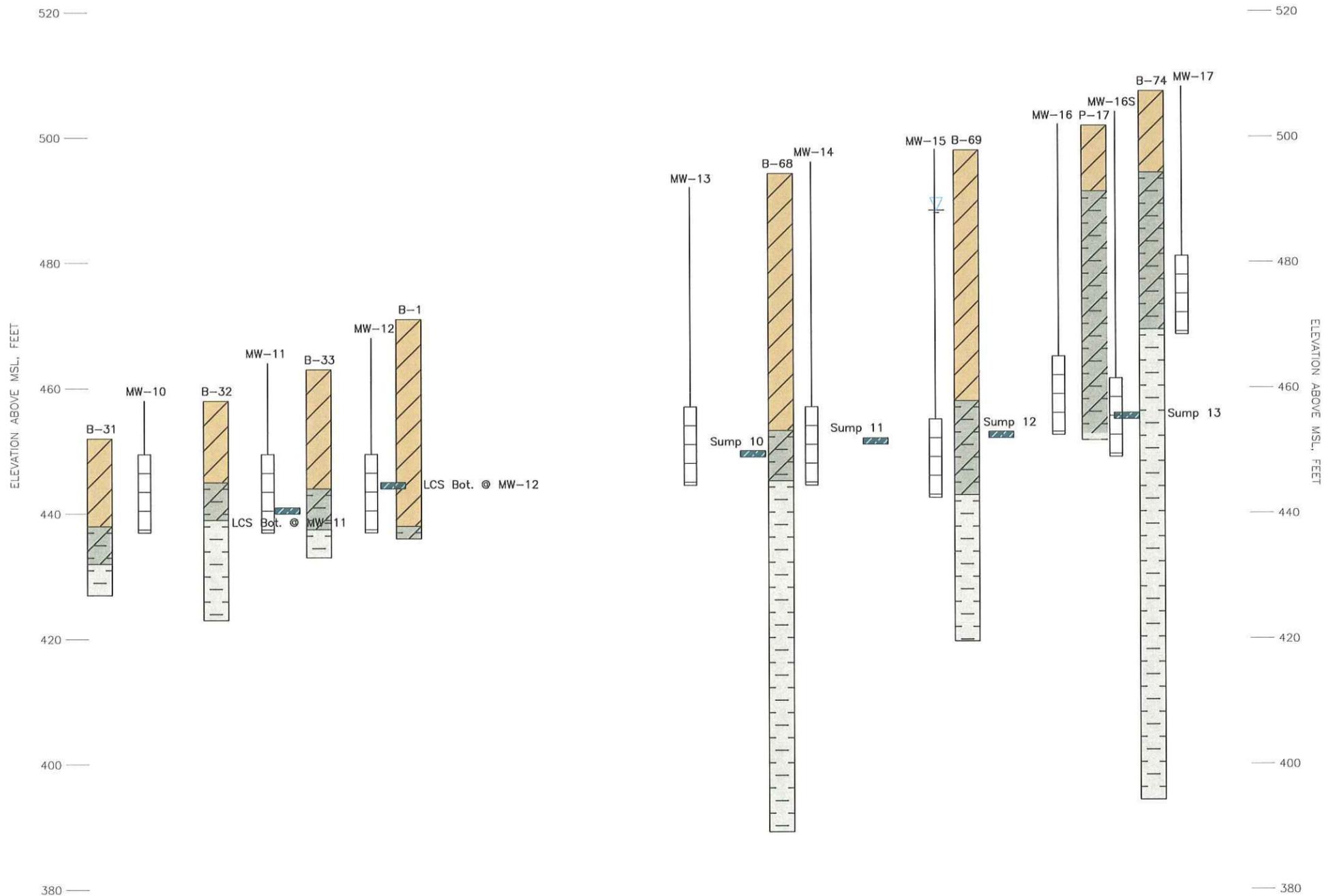
GRIFFITH, IN  
 SOUTH BEND, IN  
 SPRINGFIELD, IL  
 ST. LOUIS, MO

**FIGURE 37**

O:\0647\02\600-FT WELL SPACING (02-10)\37-FINAL WESTERN POC.dwg, 2/26/2010 5:11:29 PM, rsellers

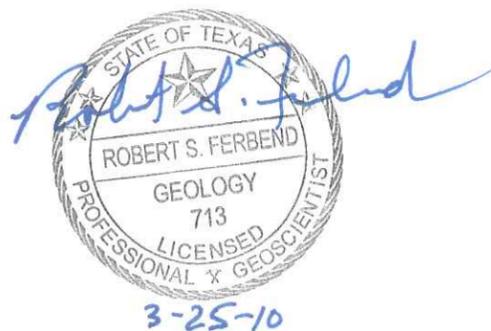
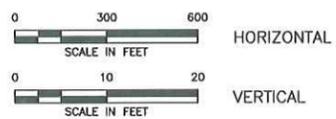
WEST

EAST



BORING LEGEND

-  ALLUVIUM
-  UNWEATHERED MARL
-  WEATHERED MARL
-  SUMP



<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR <b>CITY OF GARLAND</b>		<b>PERMIT MODIFICATION          FINAL NORTHERN POINT OF COMPLIANCE</b>	
	DATE: 02/2010 FILE: 0647-02-14 CAD: FIGURE 38.DWG		CHARLES M. HINTON JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS	
DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF	REVISIONS		<b>Weaver Boos Consultants</b> TBPE REGISTRATION NO. F-3727	
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			<b>FIGURE 38</b>	

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**CHARLES M. HINTON, JR. REGIONAL LANDFILL**

**DALLAS COUNTY, TEXAS**  
**TCEQ PERMIT NO. MSW-1895A**

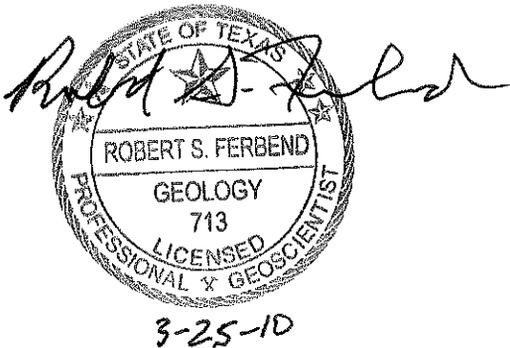
**PART III – SITE DEVELOPMENT PLAN**  
**ATTACHMENT 5**  
**GROUNDWATER CHARACTERIZATION REPORT**

Prepared for

City of Garland

Permit Approved 1999

Revised March 2010



Prepared by

**Weaver Boos Consultants, LLC–Southwest**  
TBPE Registration No. F-3727  
6420 Southwest Blvd., Suite 206  
Fort Worth, Texas 76109

WBC Project No. 0647-02-14-11-01

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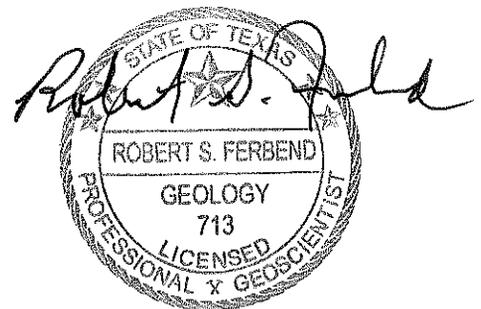
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## APPENDICES

1	Slug Test Data
2	Certification of Groundwater Monitoring System



3-25-10

### 3.4 Potential Receptors

The only potential receptor that could possibly be impacted by the landfill is Muddy Creek down gradient of the site. Muddy Creek flows from north to south and eventually discharges into Lake Ray Hubbard approximately one mile to the south of the site. There are only two identified water wells within one mile of the site. One of the wells (Well No. 33-04-5A) is located down gradient of the site and was reported dry at the time of installation in April 1962. The depth of this well is only 35 feet and is completed in clays. There was no documentation found in the files to indicate if this well was permanently abandoned. The other well (Well No. 33-04-3A) is up gradient of the site and therefore would not be impacted by the landfill operations. This well is reported to be used for household purposes.

### 3.5 Proposed Monitoring Well System

As shown on Attachment 5 Figures 10 and 12, the proposed monitoring system will consist of 31 monitoring wells when the landfill is fully developed. Four existing background detection monitoring wells (MW-1, MW-1A, MW-3 and MW-3A) are designated background well pairs in the proposed system. With the approval of this permit modification, these four wells will be renamed MW-1S, MW-1D, MW-3S, and MW-3D, respectively. The 'S' in the well name indicates the well is screened in a shallower portion of the uppermost aquifer and the 'D' indicates the well is screened in a deeper portion of the uppermost aquifer. One existing background well pair (MW-2 and MW-2A) will be removed at the time of new well installations – as only two sets of background wells are needed for statistical evaluation purposes.

In accordance with an agreement with the TCEQ, the point of compliance (POC) monitor wells will have two separate monitoring targets. Consistent with the original monitoring system design, six POC wells will have well screens that straddle the adjacent leachate collection sump elevations when the landfill is fully developed and have well names ending in a 'D'. These sump wells include existing monitor wells MW-5D (former MW-5A) and MW-6D (former MW-6A), and future monitor wells MW-4D, MW-7D, MW-8D and MW-16D. These wells are spaced more than 600 feet apart as are the adjacent sumps to be monitored and are located where the nearby permitted excavations are not founded in the unweathered marl beneath the site. The remaining 21 POC detection monitoring wells will be shallow wells (with names ending in an

'S') that have inter-well spacing of 600 feet or less along the POC as shown on Figure 10. The construction details of these wells are shown on Figures 11 and 12.

Within 90 days following the approval of this permit modification, the facility will install monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-6RS, MW-7 and MW-7D, and begin new well background data collection within 90 days following installation. Following the evaluation of these wells' background data, the detection monitoring system will be comprised of background wells MW-1, MW-1A, MW-3 and MW-3A, and point of compliance monitoring wells MW-2RS, MW-4RS, MW-4RD, MW-5S, MW-5D, MW-6RS, MW-6D, MW-7S and MW-7D. Additional POC wells will be installed at least two years before waste is placed up groundwater gradient of the applicable future well location in future disposal cells. This will facilitate the completion of future monitor well background data collection prior to the placement of up gradient waste. For example, at least two years prior to the placement of waste to the west of its current limits in cell 6 (i.e., the construction of cells 7 and 8), the facilitate will likely require the installation of monitoring wells MW-8S, MW-8D, and MW-9 (depending on the westward extent of waste placement in the new up gradient waste disposal cells). The facility experiences little variability in the groundwater flow regime as shown on Figures 6, 7, 8, 9, 13, and 14.

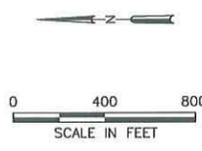
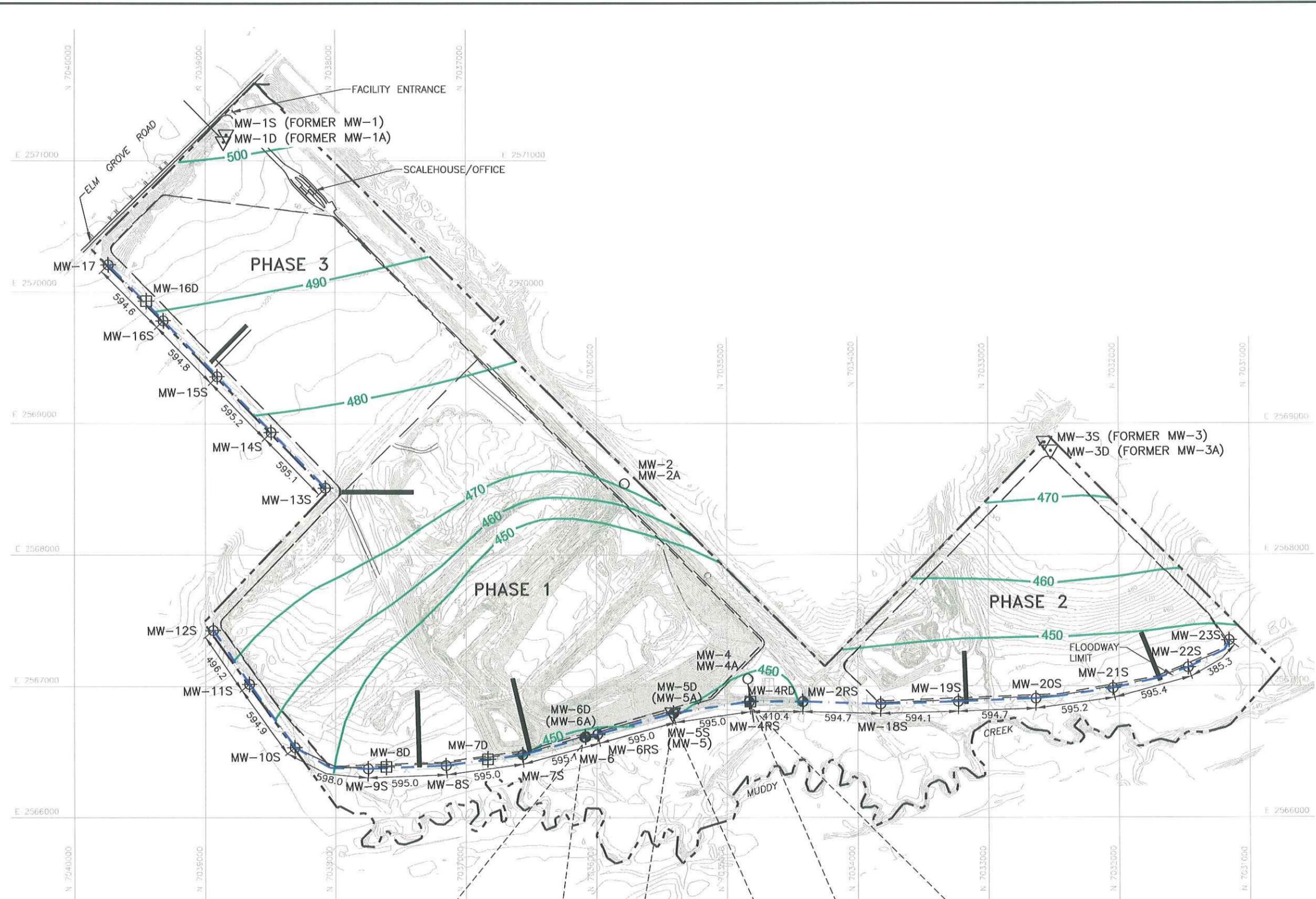
The proposed monitoring wells will be constructed of two-inch inside diameter, schedule 40 or 80 PVC flush-threaded casing with O-ring seals. The well screen size will consist of 0.01-inch slots and 10 feet in length. A washed silica 20/40 mesh sand filter pack will be used to fill the annular space between the borehole wall and well screen. The filter pack will extend about 2 feet above the top of the screen. A minimum 2 foot thickness of bentonite seal will be placed above the filter pack, and the remainder of the annulus will be filled with a bentonite grout to within 1 to 2 feet of surface. The tops of the monitor wells will extend approximately three feet above ground and will be protected with a metal locking cover. A concrete pad measuring 4'x4'x6" with wire-mesh reinforcement will be constructed around the well heads. Steel bollards measuring a minimum of 3 inches in diameter and extending about 3 feet above grade will be installed as needed.

The elevations of the tops of the PVC well casings and ground surface adjacent to the wells will

be surveyed by a licensed surveyor to nearest 0.01 foot using the on site datum for control. Each new monitoring well will be developed until field indicator parameters (pH, conductivity and temperature) have stabilized. A well installation report will be submitted to the TCEQ within 60 days of new well installation. The sampling and analysis program will follow the Groundwater Sampling and Analysis Plan presented in Attachment 11 of this application.

A certification of the proposed groundwater monitoring well system is presented in Appendix 2 of Attachment 5.

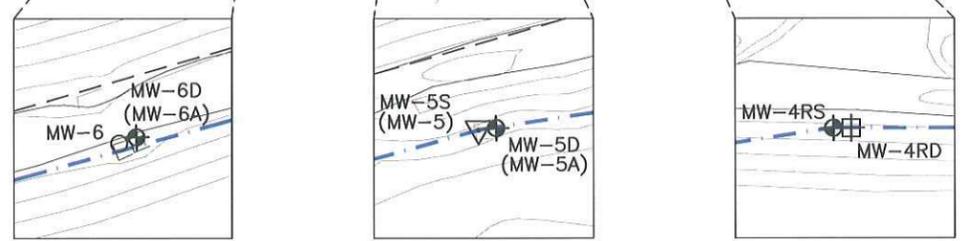
P:\Groundwater\Garland\600 FT Well Spacing Mod 09\10-PROPOSED SYSTEM LAYOUT.dwg, 3/25/2010 2:55:39 PM, r-sellers



- LEGEND**
- PERMIT BOUNDARY
  - LIMITS OF WASTE
  - PHASE BOUNDARY
  - POINT OF COMPLIANCE
  - 450 SHALLOW ZONE GROUNDWATER CONTOUR (FT-MSL)
  - LETDOWN STRUCTURE
  - MW-5R SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED IN 2010
  - MW-8 FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS FACILITY IS DEVELOPED
  - MW-4 EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION
  - MW-6AS EXISTING GROUNDWATER MONITORING WELL TO REMAIN
  - MW-4RD FUTURE GROUNDWATER MONITORING DEEP WELL SUMP TO BE PHASED IN AS FACILITY IS DEVELOPED
  - MW-6A (MW-6D) EXISTING DEEP ZONE SUMP ZONE MONITORING WELL TO REMAIN WITH OLD WELL NAME IN PARENTHESIS

- NOTES:**
1. EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 9-8-2008. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-9-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  2. SHALLOW ZONE GROUNDWATER GRADIENT PRODUCED USING JUNE 1, 2009 DETECTION MONITORING GROUNDWATER ELEVATIONS GAUGED ON JUNE 1, 2009.

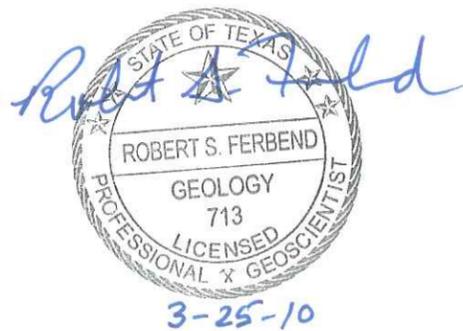
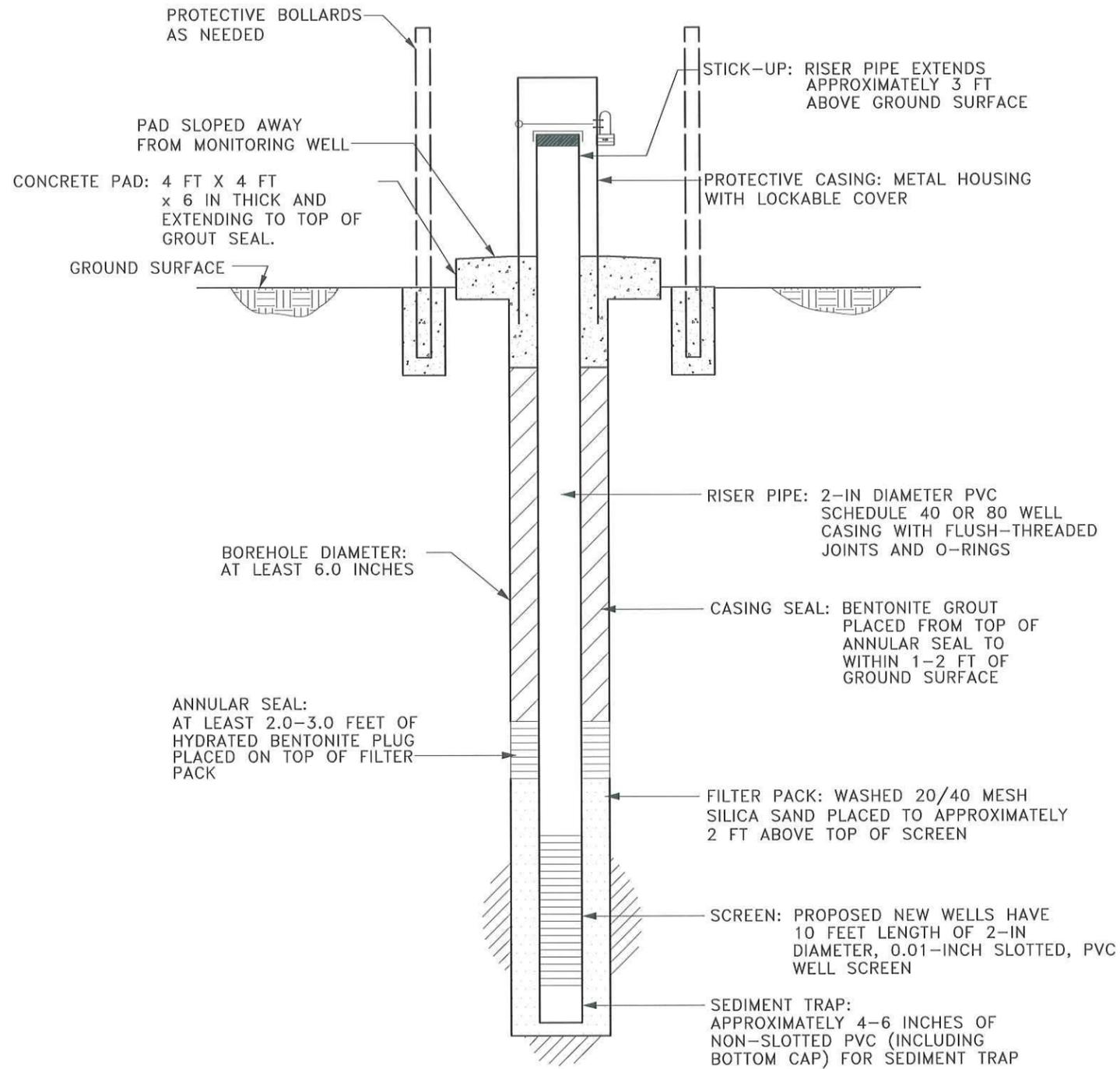
*Robert S. Ferbend*  
 STATE OF TEXAS  
 ROBERT S. FERBEND  
 GEOLOGY  
 713  
 LICENSED  
 PROFESSIONAL GEOSCIENTIST  
 3-25-10



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DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 10.DWG	DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF	REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	DESCRIPTION									
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PERMIT MODIFICATION PROPOSED MONITORING WELL SYSTEM CHARLES M. HINTON JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS <i>Weaver Boos Consultants</i> TBPE REGISTRATION NO. F-3727		
CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO	FORT WORTH, TX (817) 735-9770	GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO

**FIGURE 10**

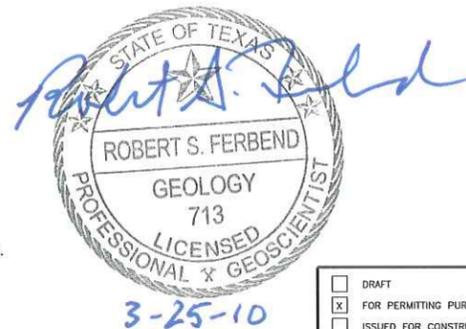


<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR		PERMIT MODIFICATION TYPICAL MONITORING WELL DETAILS  CHARLES M. HINTON JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS	
	CITY OF GARLAND			
DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 11.DWG	DRAWN BY: VRS DESIGN BY: RSF REVIEWED BY: RSF	REVISIONS		
		NO.	DATE	DESCRIPTION
REUSE OF DOCUMENTS <small>THIS DOCUMENT, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WEAVER BOOS &amp; GORDON, INC., AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF WEAVER BOOS &amp; GORDON, INC.</small>		WEAVER BOOS CONSULTANTS TBPE REGISTRATION NO. F-3727		
<small>CHICAGO, IL          NAPERVILLE, IL          COLUMBUS, OH          DENVER, CO</small>		<small>FORT WORTH, TX          (817) 735-9770</small>	<small>GRIFFITH, IN          SOUTH BEND, IN          SPRINGFIELD, IL          ST. LOUIS, MO</small>	FIGURE 11

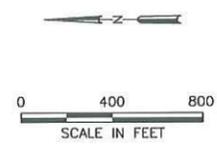
WELL NUMBER	NORTHING	EASTING	INSTALL DATE	GROUND ELEVATION <sup>1</sup>	TOP OF CASING ELEVATION	TOTAL BOREHOLE DEPTH	DEPTH TOP OF UNWEATHERED MARL	NEAREST SUMP ELEVATION	FILTER PACK ELEVATION		WELL SCREEN ELEVATION		FILTER PACK DEPTH		WELL SCREEN DEPTH		GROUNDWATER ELEVATION <sup>1,11</sup>	DEPTH TO GROUNDWATER
									TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM	TOP	BOTTOM		
EXISTING GROUNDWATER MONITORING WELLS <sup>10</sup>																		
MW-1 <sup>4</sup>	7038879	2571178	06/14/01	511.2	513.30	38.5	NA	467	487.3	474.8	485.3	475.3	26.0	38.5	28.0	38.0	502.12	9.1
MW-1A <sup>4</sup>			08/25/00	510.8	513.94	58	44.5	467	468.9	455.9	466.9	456.9	45.0	58.0	47.0	57.0	502.26	8.5
MW-2 <sup>7</sup>	7035784	2568543	8/28/00	490.3	493.33	40	NA	446	467.0	453.3	463.8	453.8	26.3	40.0	29.5	39.5	470.61	19.7
MW-2A <sup>7</sup>			06/18/01	491.1	493.13	68	50.0	446	438.3	425.1	436.1	426.1	54.8	68.0	57.0	67.0	429.29	61.8
MW-3 <sup>4</sup>	7032501	2568777	08/28/00	486	489.09	35	NA	459	468.1	454.1	465.1	455.1	21.0	35.0	24.0	34.0	472.16	13.8
MW-3A <sup>4</sup>			06/19/01	486.8	489.70	73	54.0	459	429.7	416.7	427.7	417.7	60.0	73.0	62.0	72.0	446.64	40.2
MW-4 <sup>7</sup>	7034832	2567070	06/20/01	458.3	460.52	33	NA	431	441.0	427.5	438.4	428.4	19.5	33.0	22.1	32.1	449.22	9.1
MW-4A <sup>7</sup>			06/20/01	458.3	460.69	48.5	33.0	431	425.7	412.2	422.6	412.6	35.0	48.5	38.1	48.1	449.12	9.2
MW-5 (MW-5S) <sup>5</sup>	7035418	2566796	06/20/01	458.7	461.00	32	NA	433	442.0	429.0	440.0	430.0	19.0	32.0	21.0	31.0	451.77	6.9
MW-5A <sup>4</sup> (MW-5D) <sup>5</sup>			06/19/01	458.8	461.10	47	32.0	433	427.1	414.1	425.1	415.1	34.0	47.0	36.0	46.0	449.48	9.3
MW-6 <sup>7</sup>	7036090	2566612	07/07/03	460.6	464.23	31	25.0	430	442.6	429.3	439.6	429.6	18.0	31.3	21.0	31.0	446.6	14.0
MW-6A (MW-6D) <sup>5</sup>	7036082	2566615	07/07/03	460.5	464.14	49.3	25.0	430	424.5	411.2	421.5	411.5	36.0	49.3	39.0	49.0	420.34	40.2
PROPOSED NEW GROUNDWATER MONITORING SHALLOW ZONE WELLS <sup>3</sup>																		
MW-2RS <sup>8</sup>	7034419	2566883	NEW	460	NEW	35.0	34.7	431	437.5	425.0	435.5	425.5	22.5	35.0	24.5	34.5	451	9.0
MW-4RS <sup>8</sup>	7034829	2566884	NEW	458	NEW	33.5	33.0	431	437.0	424.5	435.0	425.0	21.0	33.5	23.0	33.0	452	6.0
MW-6RS <sup>8</sup>	7035991	2566636	NEW	461	NEW	28.5	25.0	430	445.0	432.5	443.0	433.0	16.0	28.5	18.0	28.0	448	13.0
MW-7S <sup>8</sup>	7036565	2566479	NEW	460	NEW	25.5	22.0	428	447.0	434.5	445.0	435.0	13.0	25.5	15.0	25.0	450	10.0
MW-8S <sup>9</sup>	7037154	2566398	NEW	464	NEW	30.5	28.0	426	446.0	433.5	444.0	434.0	18.0	30.5	20.0	30.0	449	15.0
MW-9S <sup>9</sup>	7037749	2566373	NEW	464	NEW	32.5	32.0	426	444.0	431.5	442.0	432.0	20.0	32.5	22.0	32.0	449	15.0
MW-10S <sup>9</sup>	7038311	2566535	NEW	458	NEW	21.0	20.5	436	449.5	437.0	447.5	437.5	8.5	21.0	10.5	20.5	455	3.0
MW-11S <sup>9</sup>	7038660	2567017	NEW	464	NEW	27.0	26.5	440	449.5	437.0	447.5	437.5	14.5	27.0	16.5	26.5	462	2.0
MW-12S <sup>9</sup>	7038940	2567426	NEW	468	NEW	31.0	30.5	444	449.5	437.0	447.5	437.5	18.5	31.0	20.5	30.5	466	2.0
MW-13S <sup>9</sup>	7038075	2568510	NEW	492	NEW	47.5	47.0	449	457.0	444.5	455.0	445.0	35.0	47.5	37.0	47.0	475	17.0
MW-14S <sup>9</sup>	7038492	2568934	NEW	496	NEW	51.5	51.0	451	457.0	444.5	455.0	445.0	39.0	51.5	41.0	51.0	478	18.0
MW-15S <sup>9</sup>	7038909	2569358	NEW	498	NEW	55.5	55.0	452	455.0	442.5	453.0	443.0	43.0	55.5	45.0	55.0	485	13.0
MW-16S <sup>9</sup>	7039325	2569784	NEW	502	NEW	49.5	49.0	455	465.0	452.5	463.0	453.0	37.0	49.5	39.0	49.0	489	13.0
MW-17S <sup>9</sup>	7039741	2570208	NEW	508	NEW	39.5	39.0	455	481.0	468.5	479.0	469.0	27.0	39.5	29.0	39.0	494	14.0
MW-18S <sup>9</sup>	7033825	2566864	NEW	455	NEW	30.0	29.5	431	437.5	425.0	435.5	425.5	17.5	30.0	19.5	29.5	448	7.0
MW-19S <sup>9</sup>	7033231	2566883	NEW	454	NEW	29.5	29.0	431	437.0	424.5	435.0	425.0	17.0	29.5	19.0	29.0	448	6.0
MW-20S <sup>9</sup>	7032637	2566906	NEW	454	NEW	27.5	27.0	433	439.0	426.5	437.0	427.0	15.0	27.5	17.0	27.0	448	6.0
MW-21S <sup>9</sup>	7032047	2566985	NEW	453	NEW	24.5	24.0	435	441.0	428.5	439.0	429.0	12.0	24.5	14.0	24.0	448	5.0
MW-22S <sup>9</sup>	7031473	2567142	NEW	451	NEW	26.5	26.0	437	437.0	424.5	435.0	425.0	14.0	26.5	16.0	26.0	448	3.0
MW-23S <sup>9</sup>	7031159	2567349	NEW	450	NEW	25.5	25.0	437	437.0	424.5	435.0	425.0	13.0	25.5	15.0	25.0	448	2.0
PROPOSED NEW GROUNDWATER MONITORING SUMP WELLS <sup>3</sup>																		
MW-4D <sup>10</sup>	7034822	2566884	NEW	458	NEW	39.0	33.0	431	431.5	419.0	429.5	419.5	26.5	39.0	28.5	38.5	452	6.0
MW-7D <sup>10</sup>	7036833	2566445	NEW	460	NEW	38.0	22.0	428	434.5	422.0	432.5	422.5	25.5	38.0	27.5	37.5	449	11.0
MW-8D <sup>10</sup>	7037610	2566388	NEW	464	NEW	43.0	29.0	427	433.5	421.0	431.5	421.5	30.5	43.0	32.5	42.5	449	15.0
MW-16D <sup>10</sup>	7039454	2569932	NEW	504	NEW	55.0	44.0	455	461.5	449.0	459.5	449.5	42.5	55.0	44.5	54.5	489	15.0

NOTES:

- NEW WELL GROUND ELEVATIONS ESTIMATED FROM SITE TOPOGRAPHIC MAP.
- ELEVATIONS LISTED ABOVE IN FEET ABOVE MEAN SEA LEVEL, ALL DEPTHS LISTED IN FEET BELOW GROUND SURFACE.
- PROPOSED GROUNDWATER MONITORING WELL DETAILS ARE ESTIMATED FROM EXISTING BORING LOGS. ACTUAL DEPTHS AND ELEVATIONS OF DETAILS TO BE DETERMINED IN FIELD BASED ON ACTUAL GROUND ELEVATIONS AND DEPTH TO TOP OF UNWEATHERED MARL.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN.
- EXISTING GROUNDWATER MONITORING WELL TO REMAIN AS A SUMP MONITORING WELL WITH NEW WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE CONVERTED TO AN OBSERVATION WELL WITH OBSERVATION WELL NAME IN PARENTHESIS.
- EXISTING GROUNDWATER MONITORING WELL TO BE REMOVED AFTER NEW WELL BACKGROUND DATA EVALUATION.
- SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- FUTURE SHALLOW ZONE GROUNDWATER MONITORING WELL TO BE PHASED IN AS THE FACILITY IS DEVELOPED.
- GROUNDWATER MONITORING SUMP WELL TO BE INSTALLED FOLLOWING PERMIT MODIFICATION APPROVAL.
- GROUNDWATER ELEVATIONS FOR EXISTING WELLS OBTAINED FROM THE FACILITY'S GROUNDWATER MONITORING DATABASE FROM JUNE 2009 GROUNDWATER MEASUREMENTS.
- ALL EXISTING WELLS ARE 4-INCH INSIDE DIAMETER, PROPOSED NEW WELL INSTALLATIONS WILL BE 2-INCH INSIDE DIAMETER.



<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR <b>CITY OF GARLAND</b>		<b>PERMIT MODIFICATION          MORE MONITORING WELL DETAILS</b>												
	DATE: 03/2010 FILE: 0647-02-14 CAD: FIGURE 12.dwg		REVISIONS <table border="1"> <thead> <tr> <th>NO.</th> <th>DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>		NO.	DATE	DESCRIPTION								
NO.	DATE	DESCRIPTION													
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<small>COPYRIGHT © 2010 WEAVER BOOS CONSULTANTS, LLC-SOUTHWEST. ALL RIGHTS RESERVED.</small>			CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO												
			FORT WORTH, TX (817) 735-9770												
			GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO												
			<b>FIGURE 12</b>												



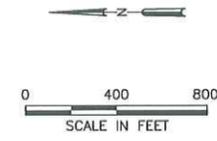
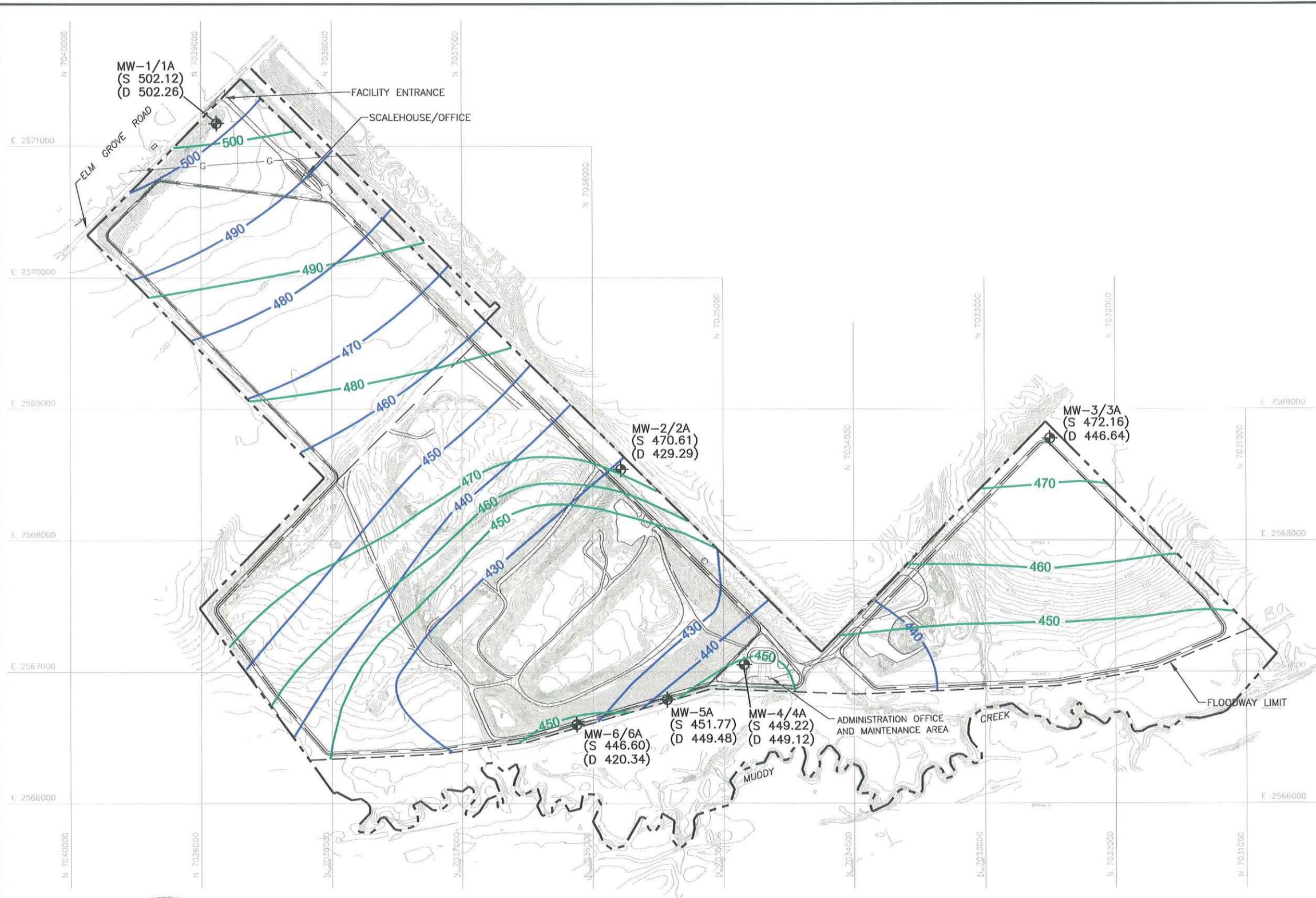
- LEGEND**
- TOE OF LEVEE
  - - - PERMIT BOUNDARY
  - - - PHASE BOUNDARY
  - 450— SHALLOW GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - 450— DEEPER GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - ⊕ MW-4/4A (S 449.99) (D 450.33) EXISTING MONITORING WELL PAIR WITH GROUNDWATER ELEVATIONS FOR SHALLOW (S) AND DEEPER (D) SCREENED WELLS

- NOTE:**
- EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 8-01-2007. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-09-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  - GROUNDWATER LEVELS MEASURED ON 12-08-2008 POSTED IN FT-MSL BY MEASUREMENT LOCATION.

*Robert S. Ferbend*  
 STATE OF TEXAS  
 ROBERT S. FERBEND  
 GEOLOGY  
 713  
 LICENSED  
 PROFESSIONAL GEOSCIENTIST  
 3-25-10

<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR INFORMATION PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR <b>CITY OF GARLAND</b>		<b>DECEMBER 2008 MONITORING EVENT          POTENTIOMETRIC SURFACES MAP</b>	
	DATE: 01/2009 FILE: 0647-02-14 CAD: FIGURE 13.DWG		CHARLES M. HINTON LANDFILL DALLAS COUNTY, TEXAS	
DRAWN BY: SRF DESIGN BY: AKE REVIEWED BY: RSF	REVISIONS			
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CHICAGO, IL MAPERVILLE, IL COLUMBUS, OH DENVER, CO		FORT WORTH, TX (817) 735-9770	GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO	<b>Weaver Boos Consultants</b> <b>FIGURE 13</b>

P:\Groundwater\Garland\600 FT Well Spacing Mod 09\FIGURE 5-31.dwg, 3/25/2010 2:57:25 PM, rsellers



- LEGEND**
- TOE OF LEVEE
  - - - PERMIT BOUNDARY
  - - - PHASE BOUNDARY
  - 450— SHALLOW GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - 450— DEEPER GROUNDWATER ELEVATION CONTOUR (FT-MSL)
  - ⊕ MW-4/4A (S 449.22) (D 449.12) EXISTING MONITORING WELL PAIR WITH GROUNDWATER ELEVATIONS FOR SHALLOW (S) AND DEEPER (D) SCREENED WELLS. GROUNDWATER ELEVATIONS POSTED IN FT-MSL.

- NOTE:**
- EXISTING CONTOURS AND ELEVATIONS FOR CELL 1, CELL 2, CELL 3, AND CELL 4 PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 9-8-2008. REMAINING CONTOURS AND ELEVATIONS PROVIDED BY DALLAS AERIAL SURVEYS, INC. COMPILED FROM AERIAL PHOTOGRAPHY FLOWN 6-9-2006. COORDINATE SYSTEM BASED ON STATE PLANE NAD 83, TEXAS NORTH CENTRAL.
  - GROUNDWATER LEVELS MEASURED ON 06-01-2009 POSTED IN FT-MSL BY MEASUREMENT LOCATION.

*Robert S. Ferbend*  
 STATE OF TEXAS  
 ROBERT S. FERBEND  
 GEOLOGY  
 713  
 LICENSED  
 PROFESSIONAL GEOSCIENTIST  
 3-25-10

<input type="checkbox"/> DRAFT	PREPARED FOR
<input checked="" type="checkbox"/> FOR INFORMATION PURPOSES ONLY	CITY OF GARLAND
<input type="checkbox"/> ISSUED FOR CONSTRUCTION	
<input type="checkbox"/> CLIENT APPROVAL BY:	
DATE: 07/2009	DRAWN BY: SRF
FILE: 0647-02-14	DESIGN BY: AKE
CAD: FIGURE 14.DWG	REVIEWED BY: RSF

REVISIONS		
NO.	DATE	DESCRIPTION

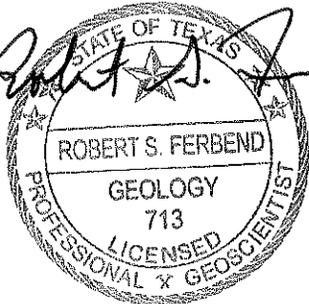
JUNE 2009 MONITORING EVENT  
 POTENTIOMETRIC SURFACES MAP  
 CHARLES M. HINTON LANDFILL  
 DALLAS COUNTY, TEXAS

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*Weaver Boos Consultants*  
 CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO  
 FORT WORTH, TX (817) 735-9770  
 GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO  
**FIGURE 14**

**APPENDIX 2**  
**GROUNDWATER MONITORING SYSTEM CERTIFICATION**

*Robert S. Ferbend*



ROBERT S. FERBEND  
GEOLOGY  
713  
PROFESSIONAL & GEOSCIENTIST

3-25-10

# GROUNDWATER MONITORING SYSTEM CERTIFICATION

## General Site Information

Site: Charles M. Hinton Jr. Regional Landfill

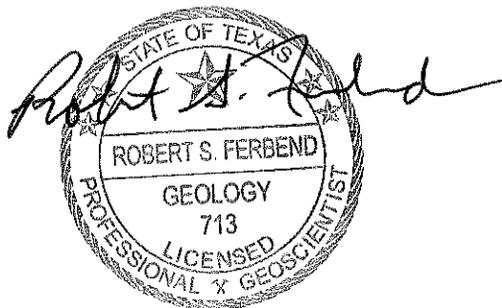
Site Location: Dallas County

MSW Permit No.: 1895A

## Qualified Groundwater Scientist Statement

I, Robert S. Ferbend, am a registered professional geoscientist in the State of Texas and a qualified groundwater scientist as defined in Title 30 TAC §330.3(120). I have reviewed the groundwater monitoring system and supporting details contained herein. In my professional opinion, the groundwater monitoring system design and construction details are in compliance with the groundwater monitoring requirements specified in Title 30 TAC §§330.401, 330.403, 330.405, and 330.421. This system has been designed for the Charles M. Hinton Jr. Regional Landfill. The only warranty made by me in connection with this document is that I have used that degree of care and skill ordinarily exercised under similar conditions by reputable members of my profession, practicing in the same or similar locality. No other warranty, expressed or implied, is intended.

Firm/Address: Weaver Boos Consultants, LLC–Southwest  
6420 Southwest Boulevard, Suite 206  
Fort Worth, Texas 76019



Signature: Robert S. Ferbend, P.G., Texas License No. 713

Date: 3-25-10

**APPENDIX C**

**TCEQ PART I APPLICATION FORM 0650/APPLICANT  
CERTIFICATION**



# Texas Commission on Environmental Quality

## Permit or Registration Application for Municipal Solid Waste Facility

### Part I

#### A. General Information

Facility Name:	Charles M. Hinton Jr. Regional Landfill			
Physical or Street Address (if available):	3175 Elm Grove Road			
(City) (County) (State) (Zip Code):	Rowlett	Dallas	TX	75089
(Area Code) Telephone Number:	(972) 205-3684			
Charter Number:				

If the application is submitted on behalf of a corporation, provide the Charter Number as recorded with the Office of the Secretary of State for Texas.

Operator Name <sup>1</sup> :	City of Garland			
Mailing Address:	P.O. Box 469002			
(City) (County) (State) (Zip Code):	Garland	Dallas	TX	75046
(Area Code) Telephone Number:	(972) 205-3684			
(Area Code) FAX Number:	(972) 205-3671			
Charter Number:				

If the permittee is the same as the operator, type "Same as Operator".

Permittee Name:	Same as Operator			
Physical or Street Address (if available):				
(City) (County) (State) (Zip Code):				
(Area Code) Telephone Number:				
Charter Number:				

If the application is submitted by a corporation or by a person residing out of state, the applicant must register an Agent in Service or Agent of Service with the Texas Secretary of State's office and provide a complete mailing address for the agent. The agent must be a Texas resident.

Agent Name:	Lonnie R. Banks			
Mailing Address:	PO Box 469002			
(City) (County) (State) (Zip Code):	Garland	Dallas	TX	75040
(Area Code) Telephone Number:	(972) 205-3675			
(Area Code) FAX Number:	(972) 205-3671			

#### Application Type:

<input checked="" type="checkbox"/> Permit	<input type="checkbox"/> Major Amendment	<input type="checkbox"/> Minor Amendment
<input type="checkbox"/> Registration	<input checked="" type="checkbox"/> Modification	<input type="checkbox"/> Temporary Authorization
	<input checked="" type="checkbox"/> w/Public Notice	
	<input type="checkbox"/> w/out Public Notice	<input type="checkbox"/> Notice of Deficiency Response

<sup>1</sup> The operator has the duty to submit an application if the facility is owned by one person and operated by another [30 TAC 305.43(b)]. The permit will specify the operator and the owner who is listed on this application [Section 361.087 Texas Health and Safety Code].

Facility Classification:

<input checked="" type="checkbox"/> Type I	<input type="checkbox"/> Type IV	<input type="checkbox"/> Type V	<input type="checkbox"/> Type IX
<input type="checkbox"/> Type I AE	<input type="checkbox"/> Type IV AE	<input type="checkbox"/> Type VI	

Activities covered by this application (check all that apply):

<input type="checkbox"/> Storage	<input type="checkbox"/> Processing	<input checked="" type="checkbox"/> Disposal
----------------------------------	-------------------------------------	--

Waste management units covered by this application (check all that apply):

<input type="checkbox"/> Containers	<input type="checkbox"/> Tanks	<input type="checkbox"/> Surface Impoundments	<input checked="" type="checkbox"/> Landfills
<input type="checkbox"/> Incinerators	<input type="checkbox"/> Composting	<input type="checkbox"/> Type IV Demonstration Unit	<input type="checkbox"/> Type IX Energy/Material Recovery
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Other (Specify)	
<input type="checkbox"/> Other (Specify)		<input type="checkbox"/> Other (Specify)	

Is this submittal part of a Consolidated Permit Processing request, in accordance with 30 TAC Chapter 33?

Yes  No

If yes, state the other TCEQ program authorizations requested.

Provide a brief description of the portion of the facility covered by this application. For amendments, modifications, and temporary authorizations, provide a brief description of the exact changes to the permit or registration conditions and supporting documents referenced by the permit or registration. Also, provide an explanation of why the amendment, modification, or temporary authorization is requested.

The purpose of this permit modification is to revise the facility's monitor well spacing in accordance with the Title 30 TAC §330 rule revisions of 2006.

Does the application contain confidential Material?  Yes  No

If yes, cross-reference the confidential material *throughout the application* and submit as a separate document or binder conspicuously marked "CONFIDENTIAL."

**Alternative Language Notice Instructions (Not Applicable)**

For certain permit applications, public notice in an alternate language is required. If an elementary school or middle school nearest to the facility offers a bilingual program, notice may be required to be published in an alternative language. The Texas Education Code, upon which the TCEQ alternative language notice requirements are based, trigger a bilingual education program to apply to an entire school district should the requisite alternative language speaking student population exist. However, there may not exist any bilingual students at a particular school within a district which is required to offer the bilingual education program. For this reason, the requirement to publish notice in an alternative language is triggered if the nearest elementary or middle school, as a part of a larger school district, is required to make a bilingual education program available to qualifying students and either the school has students enrolled at such a program on-site, or has students who attend such a program at another location in satisfaction of the school's obligation to provide such a program as a member of a triggered district.

If it is determined that an alternative language notice is required, the applicant is responsible for ensuring that the publication in the alternate language is complete and accurate in that language. Electronic versions of the Spanish template examples are available from the TCEQ to help the applicant complete

the publication in the alternative language.

Alternative Language Notice Application Form:

Alternative language notice confirmation for this application:

1. Is a bilingual program required by the Texas Education Code in the school district where the facility is located?  YES  NO

(If NO, alternative language notice publication not required)

2. If YES to question 1, are students enrolled in a bilingual education program at either the elementary school or the middle school nearest to the facility?  YES  NO

(If YES to questions 1 and 2, alternative language publication is required; If NO to question 2, then consider the next question)

3. If YES to question 1, are there students enrolled at either the elementary school or the middle school nearest to the facility who attend a bilingual education program at another location?  YES  NO

(If Yes to questions 1 and 3, alternative language publication is required; If NO to question 3, then consider the next question)

4. If YES to question 1, would either the elementary school or the middle school nearest to the facility be required to provide a bilingual education program but for the fact that it secured a waiver from this requirement, as available under 19 TAC '89.1205(g)?  YES  NO

(If Yes to questions 1 and 4, alternative language publication is required; If NO to question 4, alternative language notice publication not required)

If a bilingual education program(s) is provided by either the elementary school or the middle school nearest to the facility, which language(s) is required by the bilingual program?

Note: Applicants for new permits and major amendments must make a copy of the administratively complete application available at a public place in the county where the facility is, or will be, located for review and copying by the public.

Public place where administratively complete permit application will be located.			
Public Place (e.g., public library, county court house, city hall, etc.):	Not Applicable		
Mailing Address:			
(City) (County) ( State) ( Zip Code):			
(Area Code) Telephone Number:			

**B. Facility Location**

Except for Type I AE and Type IV AE landfill facilities, for permits, registrations, amendments, and modifications requiring public notice, provide the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted.  
<http://www.ci.garland.tx.us/Home/Departments/Utility+Services/Environmental+Waste+Services/>

Local Government Jurisdiction:	Not Applicable
Within City Limits of:	
Within Extraterritorial Jurisdiction of City of:	
Is the proposed municipal or industrial solid waste disposal or processing facility located in an area in which the governing body of the municipality or county has prohibited the disposal or processing of municipal or industrial solid waste? (If YES, provide a copy of the ordinance or order):	
<input type="checkbox"/> YES <input type="checkbox"/> NO	

Provide a description of the location of the facility with respect to known or easily identifiable landmarks.
Not Applicable

Detail the access routes from the nearest United States or state highway to the facility.
Not Applicable

Provide the latitudinal and longitudinal geographic coordinates of the facility.

Latitude	Not Applicable
Longitude	
Elevation (above msl)	

Is the facility within the Coastal Management Program boundary?	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
---	------------------------------	--

Texas Department of Transportation District Location:

TXDOT District Name & Number:	Not Applicable
District Engineer's Name:	
Street or P. O. Box:	
(City) (County) (State) (Zip Code):	
(Area Code) Telephone Number:	
(Area Code) FAX Number:	

The local governmental authority or agency responsible for road maintenance:

Agency Name	Not Applicable
Contact Person's Name:	
Street or P. O. Box:	
(City) (County) (State) (Zip Code):	
(Area Code) Telephone Number:	
(Area Code) FAX Number:	

State Representative:

District Number:	Not Applicable
State Representative's Name:	
District Office Address:	
(City) (County) (State) (Zip Code):	
(Area Code) Telephone Number:	
(Area Code) FAX Number:	

State Senator:

District Number:	Not Applicable		
State Senator's Name:			
District Office Address:			
(City) (County) (State) ( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

Council of Government (COG) Information:

COG Name:	Not Applicable		
COG Representative's Name:			
COG Representative's Title:			
Street or P. O. Box:			
(City) (County) ( State) ( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

River Basin Information:

River Authority:	Not Applicable		
Contact Person's Name:			
Watershed Sub-Basin Name:			
Street or P. O. Box:			
(City) (County) ( State) ( Zip Code):			
(Area Code) Telephone Number:			
(Area Code) FAX Number:			

This site is located in the following District of the U.S. Army Corps of Engineers:			
<input type="checkbox"/> Albuquerque, NM	<input type="checkbox"/> Ft. Worth, TX	<input type="checkbox"/> Galveston, TX	<input type="checkbox"/> Tulsa, OK

**C. Maps (Not Applicable)**

General

For permits, registrations, and amendments only, submit a topographic map, ownership map, county highway map, or a map prepared by a registered professional engineer or a registered surveyor which shows the facility and each of its intake and discharge structures and any other structure or location regarding the regulated facility and associated activities. Maps must be of material suitable for a permanent record, and shall be on sheets 8-1/2 inches by 14 inches or folded to that size, and shall be on a scale of not less than one inch equals one mile. The map shall depict the approximate boundaries of the tract of land owned or to be used by the applicant and shall extend at least one mile beyond the tract boundaries sufficient to show the following:

- each well, spring, and surface water body or other water in the state within the map area;
- the general character of the areas adjacent to the facility, including public roads, towns and the nature of development of adjacent lands such as residential, commercial, agricultural, recreational, undeveloped, etc;
- the location of any waste disposal activities conducted on the tract not included in the application; and
- the ownership of tracts of land adjacent to the facility and within a reasonable distance from the proposed point or points of discharge, deposit, injection, or other place of disposal or activity.

## General location maps

For permits, registrations, and amendments only, submit at least one general location map at a scale of one-half inch equals one mile. This map shall be all or a portion of a county map prepared by Texas Department of Transportation (TxDOT). If TxDOT publishes more detailed maps of the proposed facility area, the more detailed maps shall also be included in Part I. Use the latest revision of all maps.

## Land ownership map

Provide a map that locates the property owned by adjacent and potentially affected landowners. The maps should show all property ownership within 1/4 mile of the facility, on-site facility easement holders, and all mineral interest ownership under the facility.

## Landowners list

Provide the adjacent and potentially affected landowners' list, keyed to the land ownership map with each property owner's name and mailing address. The list shall include all property owners within 1/4 mile of the facility, easement holders, and all mineral interest ownership under the facility. Provide the property, easement holders', and mineral interest owners' names and mailing addresses derived from the real property appraisal records as listed on the date that the application is filed. Provide the list in electronic form, as well.

### **D. Property owner information (Not Applicable)**

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operator only, provide the following:

- (1) the legal description of the facility;
  - (A) the abstract number as maintained by the Texas General Land Office for the surveyed tract of land;
  - (B) the legal description of the property and the county, book, and page number or other generally accepted identifying reference of the current ownership record;
  - (C) for property that is platted, the county, book, and page number or other generally accepted identifying reference of the final plat record that includes the acreage encompassed in the application and a copy of the final plat, in addition to a written legal description;
  - (D) a boundary metes and bounds description of the facility signed and sealed by a registered professional land surveyor;
  - (E) on-site easements at the facility, and
  - (F) drawings of the boundary metes and bounds description; and
- (2) a property owner affidavit signed by the owner.

### **E. Legal authority (Not Applicable)**

Provide verification of the legal status of the owner and operator, such as a one-page certificate of incorporation issued by the secretary of state. List all persons having over a 20% ownership in the proposed facility.

Indicate Ownership status of the facility:									
<input type="checkbox"/>	Private	<input type="checkbox"/>	Corporation	<input type="checkbox"/>	Partnership	<input type="checkbox"/>	Proprietorship	<input type="checkbox"/>	Non-Profit Organization
<input type="checkbox"/>	Public	<input type="checkbox"/>	Federal	<input type="checkbox"/>	Military	<input type="checkbox"/>	State	<input type="checkbox"/>	Regional
<input type="checkbox"/>	County	<input checked="" type="checkbox"/>	Municipal	<input type="checkbox"/>	Other (Specify)				

Does the operator own the facility units and the facility property?	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
---	---	-----------------------------

If "No," for permits, registrations, amendments, and modifications that changes the legal description, a change in owner, or a change in operators submit a copy of the lease for the use of or the option to buy the facility units or facility property, as appropriate, and identify:

Owner Name:	Not Applicable
Street or P. O. Box:	
(City) (County) (State) ( Zip Code):	
(Area Code) Telephone Number:	
(Area Code) FAX Number:	
Charter Number:	

**F. Evidence of competency (Not Applicable)**

For permits, registrations, amendments, and modifications that change the legal description, a change in owner, or a change in operators submit a list of all Texas solid waste sites that the owner and operator have owned or operated within the last ten years.

Site Name	Site Type	Permit/Reg. No.	County	Dates of Operation
Not Applicable				

Submit a list of all solid waste sites in all states, territories, or countries in which the owner and operator have a direct financial interest.

Site Name	Location	Dates of Operation	Regulatory Agency (Name & Address)
Not Applicable			

A licensed solid waste facility supervisor, as defined in 30 TAC Chapter 30, Occupational Licenses and Registrations will be employed before commencing facility operation.

Provide the names of the principals and supervisors of the owner's and operator's organization, together with previous affiliations with other organizations engaged in solid waste activities.

Name	Previous Affiliation	Other Organization
Not Applicable		

For landfill permit applications only, evidence of competency to operate the facility shall also include landfilling and earthmoving experience if applicable, and other pertinent experience, or licenses as described in 30 TAC Chapter 30 possessed by key personnel. The number and size of each type of equipment to be dedicated to facility operation will be specified in greater detail on Part IV of the application within the site operating plan.

Landfilling/Earthmoving Equipment Types	Personnel Experience or Licenses
Not Applicable	

For mobile liquid waste processing units, submit a list of all solid waste, liquid waste, or mobile waste units that the owner and operator have owned or operated within the past five years. Submit a list of any final enforcement orders, court judgments, consent decrees, and criminal convictions of this state and the federal government within the last five years relating to compliance with applicable legal requirements relating to the handling of solid or liquid waste under the jurisdiction of the commission or the United States Environmental Protection Agency. Applicable legal requirement means an environmental law, regulation, permit, order, consent decree, or other requirement.

Solid waste, liquid waste, or mobile waste units owned or operated within past 5 years	Texas and federal final enforcement orders, court judgments, consent decrees, and criminal convictions
Not Applicable	

#### G. Appointments (Not Applicable)

Provide documentation that the person signing the application meets the requirements of 30 TAC §305.44, Signatories to Applications. If the authority has been delegated, provide a copy of the document issued by the governing body of the owner or operator authorizing the person that signed the application to act as agent for the owner or operator.

#### H. Application Fees

For a new permit, registration, amendment, modification, or temporary authorization, submit a \$150 application fee.

For authorization to construct an enclosed structure over an old, closed municipal solid waste landfill in accordance with 30 TAC 330 Subchapter T, submit a \$2,500 application fee.

If paying by check, send payment to:

Texas Commission on Environmental Quality  
Financial Administration Division, MC 214  
P. O. Box 13087  
Austin, Texas 78711-3087

Payment maybe made online using TCEQ e-pay at <a href="http://www.tceq.state.tx.us/e-services/">www.tceq.state.tx.us/e-services/</a>	
E-pay confirmation number	582EA000061272

**PROPERTY OWNER AFFIDAVIT (NOT APPLICABLE)**

"I, \_\_\_\_\_,  
(property owner)

acknowledge that the State of Texas may hold me either jointly or severally responsible for the operation, maintenance, and closure and post-closure care of the facility. For a facility where waste will remain after closure, I acknowledge that I have a responsibility to file with the county deed records an affidavit to the public advising that the land will be used for a solid waste facility prior to the time that the facility actually begins operating as a municipal solid waste landfill facility, and to file a final recording upon completion of disposal operations and closure of the landfill units in accordance with Title 30 Texas Administrative Code §330.19, Deed Recordation. I further acknowledge that I or the operator and the State of Texas shall have access to the property during the active life and post-closure care period, if required, after closure for the purpose of inspection and maintenance."

\_\_\_\_\_  
(Owner signature)

\_\_\_\_\_  
(Date)

Signature Page

I, Lonnie R. Banks, Managing Director, City of Garland Environmental Waste Services,  
(Operator) (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: Lonnie R. Banks Date: 3-22-10

-----  
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.

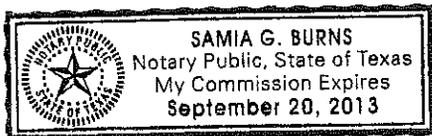
\_\_\_\_\_  
Printed or Typed Name of Operator or Principal Executive Officer

\_\_\_\_\_  
Signature

-----  
SUBSCRIBED AND SWORN to before me by the said Lonnie R. Banks

On this 22<sup>nd</sup> day of March, 2010

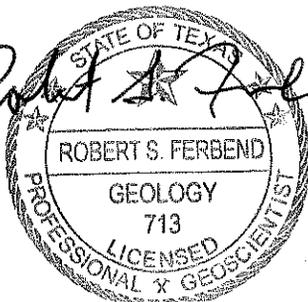
My commission expires on the 20<sup>th</sup> day of September, 2013



Samia G. Burns  
Notary Public in and for  
Dallas County, Texas

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

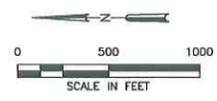
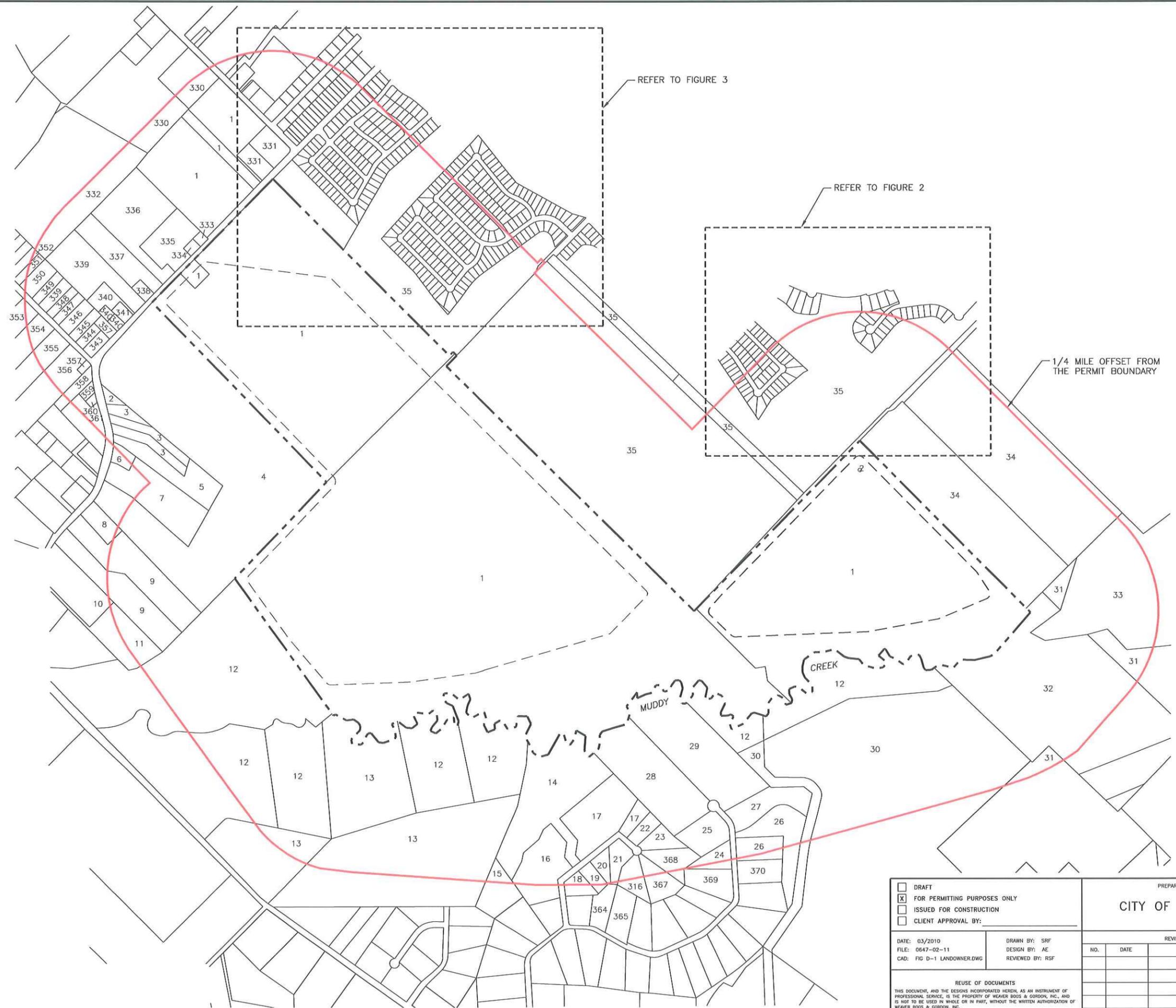
APPENDIX D  
LAND OWNERSHIP MAP AND ADDRESS LIST



*Robert S. Ferbend*

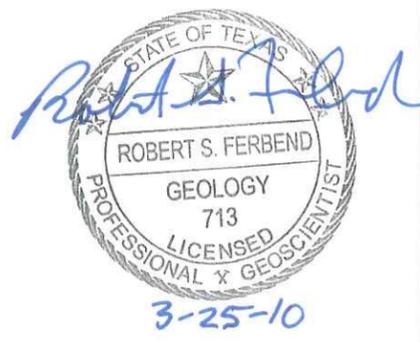
3-25-10

D:\0647\02\600-FT WELL SPACING (02-10)\FIG D-1-LANDOWNER MAP.dwg, 3/25/2010 2:33:58 PM, r sellers



**LEGEND**

	PERMIT BOUNDARY
	LIMITS OF WASTE
	1/4-MILE OFFSET
	PROPERTY OWNER NUMBER

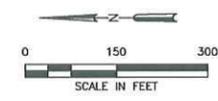


<input type="checkbox"/> DRAFT	<input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY
<input type="checkbox"/> ISSUED FOR CONSTRUCTION	<input type="checkbox"/> CLIENT APPROVAL BY: _____
DATE: 03/2010	DRAWN BY: SRF
FILE: 0647-02-11	DESIGN BY: AE
CAD: FIG D-1 LANDOWNER.DWG	REVIEWED BY: RSF

PREPARED FOR		
CITY OF GARLAND		
REVISIONS		
NO.	DATE	DESCRIPTION

ADJACENT LANDOWNERS MAP	
CHARLES M. HINTON, JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS	
<i>Weaver Boos Consultants</i>	
TBPE REGISTRATION NO. F-3727	
CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO	FORT WORTH, TX SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO
FIGURE D-1	

D:\0647\02\600-FT WELL SPACING (02-10)\FIG D-1-LANDOWNER MAP.dwg, 3/25/2010 2:34:35 PM, r sellers



**LEGEND**

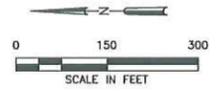
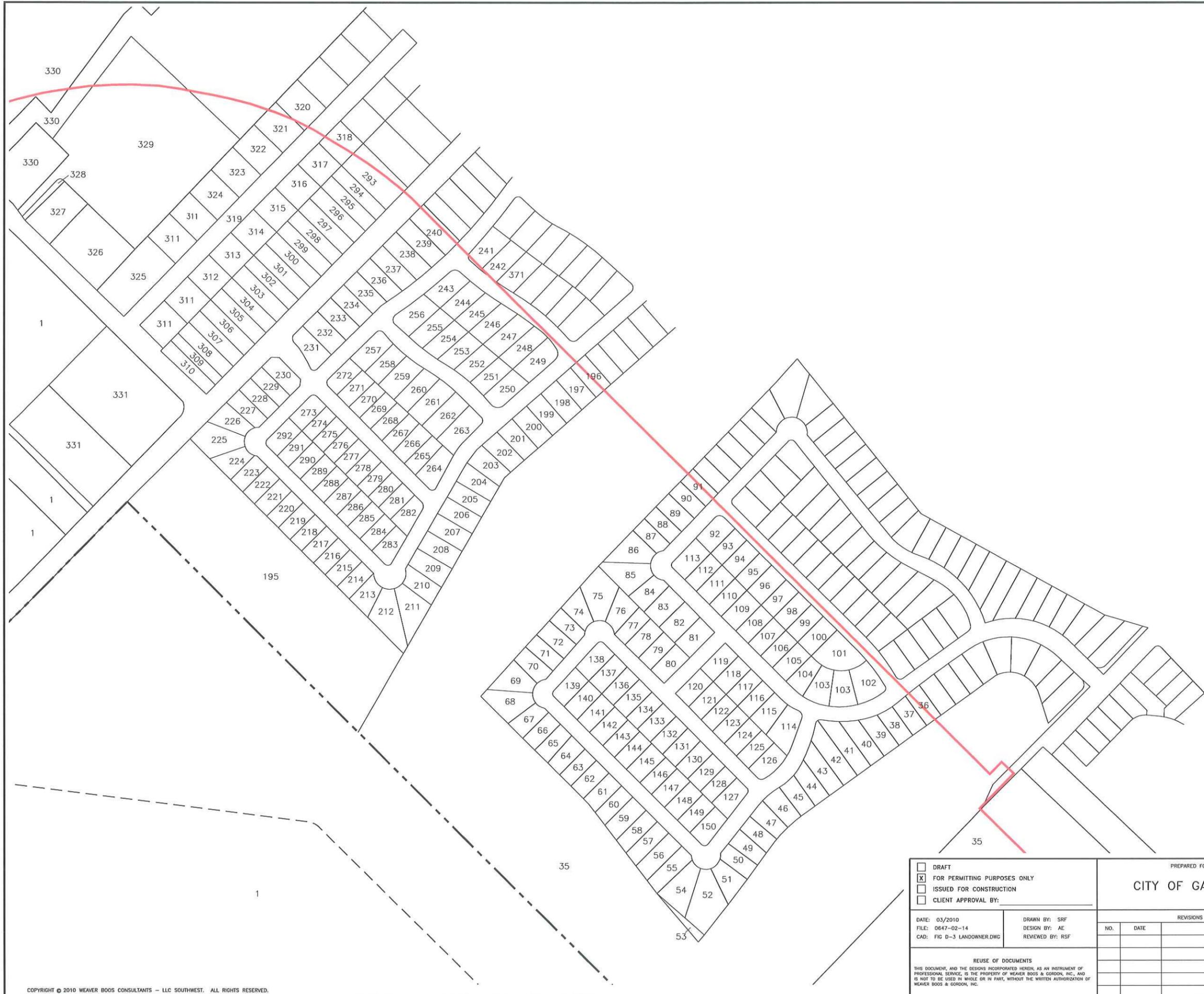
- PERMIT BOUNDARY
- LIMITS OF WASTE
- 1/4-MILE OFFSET FROM PERMIT BOUNDARY
- PROPERTY OWNER NUMBER



*Robert S. Ferbend*  
 3-25-10

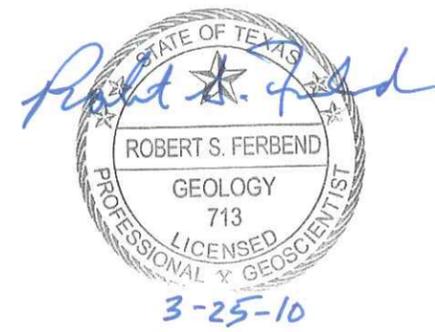
<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR <b>CITY OF GARLAND</b>	<b>ADJACENT LAND OWNERS MAP</b>  CHARLES M. HINTON, JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS																		
DATE: 03/2010 FILE: 0647-02-11 CAD: FIG D-2 LANDOWNER.DWG	DRAWN BY: SRF DESIGN BY: AE REVIEWED BY: RSF	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3">REVISIONS</th> </tr> <tr> <th style="width: 10%;">NO.</th> <th style="width: 10%;">DATE</th> <th>DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS			NO.	DATE	DESCRIPTION												
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CHICAGO, IL NAPERVILLE, IL COLUMBUS, OH DENVER, CO		FORT WORTH, TX (817) 735-9770																		
GRIFFITH, IN SOUTH BEND, IN SPRINGFIELD, IL ST. LOUIS, MO		<b>Weaver Boos Consultants</b> TBPE REGISTRATION NO. F-3727 <b>FIGURE D-2</b>																		

O:\0647\02\600-FT WELL SPACING (02-10)\FIG D-1-LANDOWNER MAP.dwg, 3/25/2010 2:40:47 PM, r sellers



**LEGEND**

- PERMIT BOUNDARY
- LIMITS OF WASTE
- 1/4-MILE OFFSET FROM PERMIT BOUNDARY
- 1 PROPERTY OWNER NUMBER



<input type="checkbox"/> DRAFT <input checked="" type="checkbox"/> FOR PERMITTING PURPOSES ONLY <input type="checkbox"/> ISSUED FOR CONSTRUCTION <input type="checkbox"/> CLIENT APPROVAL BY: _____	PREPARED FOR <p style="text-align: center;"><b>CITY OF GARLAND</b></p>	<p style="text-align: center;"><b>ADJACENT LANDOWNERS MAP</b></p> <p style="text-align: center;">CHARLES M. HINTON, JR. REGIONAL LANDFILL DALLAS COUNTY, TEXAS</p> <p style="text-align: center;"><i>Weaver Boos Consultants</i> TBPE REGISTRATION NO. F-3727</p>															
DATE: 03/2010 FILE: 0647-02-14 CAD: FIG D-3 LANDOWNER.DWG	DRAWN BY: SRF DESIGN BY: AE REVIEWED BY: RSF	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th colspan="3" style="text-align: center;">REVISIONS</th> </tr> <tr> <th style="width: 10%;">NO.</th> <th style="width: 10%;">DATE</th> <th style="width: 80%;">DESCRIPTION</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>	REVISIONS			NO.	DATE	DESCRIPTION									
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NO.	DATE	DESCRIPTION															
<p style="text-align: center;"><b>REUSE OF DOCUMENTS</b></p> <p style="text-align: center;">THIS DOCUMENT, AND THE DESIGNS INCORPORATED HEREIN, AS AN INSTRUMENT OF PROFESSIONAL SERVICE, IS THE PROPERTY OF WEAVER BOOS &amp; GORDON, INC., AND IS NOT TO BE USED IN WHOLE OR IN PART, WITHOUT THE WRITTEN AUTHORIZATION OF WEAVER BOOS &amp; GORDON, INC.</p>			<table border="0" style="width: 100%;"> <tr> <td style="width: 33%;">CHICAGO, IL</td> <td style="width: 33%;">FORT WORTH, TX</td> <td style="width: 33%;">GRIFFITH, IN</td> </tr> <tr> <td>NAPERVILLE, IL</td> <td>SOUTH BEND, IN</td> <td>SPRINGFIELD, IL</td> </tr> <tr> <td>COLUMBUS, OH</td> <td>(817) 735-9770</td> <td>ST. LOUIS, MO</td> </tr> <tr> <td>DENVER, CO</td> <td></td> <td></td> </tr> </table>	CHICAGO, IL	FORT WORTH, TX	GRIFFITH, IN	NAPERVILLE, IL	SOUTH BEND, IN	SPRINGFIELD, IL	COLUMBUS, OH	(817) 735-9770	ST. LOUIS, MO	DENVER, CO				
CHICAGO, IL	FORT WORTH, TX	GRIFFITH, IN															
NAPERVILLE, IL	SOUTH BEND, IN	SPRINGFIELD, IL															
COLUMBUS, OH	(817) 735-9770	ST. LOUIS, MO															
DENVER, CO																	

## LANDOWNER'S LIST AND MAP

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The following list and figures (Figures 1 through 3) lists the names, mailing addresses, and location of the "Adjacent and Potentially Affected Landowners" within ¼ mile of the site. Refer to Figures 1 through 3, Land Ownership Maps, for location of the properties. The numbering on the land ownership list corresponds to the numbers listed on Figures 1 through 3. The list was compiled by Weaver Boos Consultants in 2009. The list is based on records of the Dallas County Appraisal District, posted on the Dallas County Appraisal District website <http://www.dallascad.org/>. In accordance with Title 30 Texas Administrative Code §330.59(c)(3), the availability of mineral ownership beneath the facility has been investigated. Based on conversation with the Dallas County Appraisal District, they do not maintain mineral ownership records.

## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

---

1. GARLAND CITY OF  
4TH FLOOR  
200 N 5TH ST  
GARLAND, TEXAS 750406314
2. DICKERSON GARY L ET AL  
2710 ELM GROVE RD  
WYLIE, TEXAS 750986244
3. HOOTEN FREDDIE WAYNE  
2690 ELM GROVE ROAD  
WYLIE, TEXAS 750986242
4. HSB HOLDINGS INC  
1501 W SHADY GROVE RD  
GRAND PRAIRIE, TEXAS 750507120
5. MARTINEZ HERMILO & IRMAR  
1925 COUNTY ROAD 4200  
GREENVILLE, TEXAS 754016228
6. TRIMBLE JAMES C JR  
2520 ELM GROVE RD  
WYLIE, TEXAS 750986240
7. HERNANDEZ MANUEL &  
DONA ELTON  
2420 ELM GROVE RD  
WYLIE, TEXAS 750986238
8. J & D JV  
% DAVE DOUTHEY  
2400 ELM GROVE RD  
WYLIE, TEXAS 750986238
9. BADHIWALA SHAMJI  
2362 ELM GROVE RD  
WYLIE, TEXAS 750986236
10. PHILLIPS MARK S & CRYSTAL  
2320 ELM GROVE RD  
WYLIE, TEXAS 750986236
11. KAMILAR CHRISTOPHER &  
HEIDI  
7208 FIELDLARK DR  
SACHSE, TEXAS 750482143
12. DALLAS COUNTY OF  
ATTN PUBLIC WORKS DEPT  
411 ELM ST  
DALLAS, TEXAS 752023301
13. GARLAND I S D  
PO BOX 461407  
GARLAND, TEXAS 750461407
14. RAMIZE ENTERPRISES  
3323 BRIAROAKS DR  
GARLAND, TEXAS 750447331
15. LLOYD JEFF D & MARTHA C  
6605 EASTVIEW DR  
SACHSE, TEXAS 750485201
16. DIMAURO ANTHONY F &  
CAROL JAN  
6609 VALLEY VIEW LN  
SACHSE, TEXAS 750485205
17. PROCTOR RAYMOND E &  
KITTY G  
6705 VALLEY VIEW LN  
SACHSE, TEXAS 750485207
18. VILLESAS DOMINIC A &  
KAREN  
6606 VALLEY VIEW LN  
SACHSE, TEXAS 750485204

\*In accordance with 330.59(c)(3), the availability of mineral ownership beneath the facility has been investigated. Based on conversations with the Dallas County Appraisal District, their records do not include mineral ownership.

## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 19. | JOHNSON CURTIS R & PAULA<br>6614 VALLEY VIEW LN<br>SACHSE, TEXAS 750485204                   | 29. | POST BERRY D & JOY L<br>6808 EASTVIEW DR<br>SACHSE, TEXAS 750485214                    |
| 20. | FERNANDEZ EUGENE &<br>ROBIN LYNN FERNANDEZ<br>6620 VALLEY VIEW LN<br>SACHSE, TEXAS 750485204 | 30. | NORTH TEXAS TOLLWAY<br>AUTHORITY<br>PO BOX 190369<br>DALLAS, TEXAS 752190369           |
| 21. | BISHOP DENNIS L &<br>SHANNON A<br>6704 VALLEY VIEW LN<br>SACHSE, TEXAS 750485206             | 31. | MCENTEE FAMILY LIMITED<br>7701 MERRITT RD<br>ROWLETT, TEXAS 750892122                  |
| 22. | GRANT PATRICK M &<br>PATRICE M<br>6709 VALLEY VIEW LN<br>SACHSE, TEXAS 750485207             | 32. | GWB FREEWAY PARTNERS JOINT<br>VENTURE<br>806 SINGLETON ST<br>ROWLETT, TEXAS 750884986  |
| 23. | PRIOLO CHERYLE J<br>6713 VALLEY VIEW LN<br>SACHSE, TEXAS 750485207                           | 33. | DALLAS CITY OF<br>ROOM 2B SOUTH<br>1500 MARILLA ST<br>DALLAS, TEXAS 752016318          |
| 24. | LOTT WALTER PAUL<br>6711 EASTVIEW DR<br>SACHSE, TEXAS 750485203                              | 34. | ROWLETT 2000 LTD<br>SUITE 103<br>12890 HILLCREST RD STE 103<br>DALLAS, TEXAS 752306553 |
| 25. | ARNETT KEVIN & TERRI<br>6801 EASTVIEW DR<br>SACHSE, TEXAS 750485215                          | 35. | ROWLETT CITY OF<br>4000 MAIN ST<br>ROWLETT, TEXAS 750885077                            |
| 26. | KERBY KENNETH<br>6718 EASTVIEW DR<br>SACHSE, TEXAS 750485202                                 | 36. | BOLLMAN RIPPY<br>10413 AUGUSTA LN<br>ROWLETT, TEXAS 750898304                          |
| 27. | KINSLER LANNE<br>1901 MISSOURI AVE<br>MENA, ARKANSAS 719532151                               | 37. | SHARMA AJAIEY<br>9340 BENBOW DR<br>GILROY, CALIFORNIA 950208117                        |
| 28. | HALTOM JEREMY &<br>KELLY<br>3616 POTOMAC DR<br>SACHSE, TEXAS 750484436                       | 38. | DUNLAP THOMAS D &<br>SONYA D DUNLAP<br>10501 AUGUSTA LN<br>ROWLETT, TEXAS 750898430    |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 39. | JAMES STEPHANIE<br>10505 AUGUSTA LN<br>ROWLETT, TEXAS 750898430                | 49. | ECKEBERGER MICAH &<br>JEANA VERNON<br>10705 WOLFCREEK LN<br>ROWLETT, TEXAS 750898422         |
| 40. | HEWITT CLARKE N &<br>DOROTHA J<br>10509 AUGUSTA LN<br>ROWLETT, TEXAS 750898430 | 50. | FARMER GREGORY M<br>150 NE 6TH AVE APT R<br>DELRAY BEACH,<br>FLORIDA 334835468               |
| 41. | HENRY JOHN<br>10513 AUGUSTA LN<br>ROWLETT, TEXAS 750898430                     | 51. | WINN ARZO JR &<br>JACQUETTA C JACKSON<br>10713 WOLFCREEK LN<br>ROWLETT, TEXAS 750898422      |
| 42. | TUTTLE KRISHNA S<br>10517 WOLFCREEK LN<br>ROWLETT, TEXAS 750898431             | 52. | MAYS RANDY E SR & DONNA L<br>10717 WOLFCREEK LN<br>ROWLETT, TEXAS 750898422                  |
| 43. | KLICS RICHARD F<br>10601 WOLFCREEK LN<br>ROWLETT, TEXAS 750898421              | 53. | CENTEX HOMES<br>ASSOC INC<br>7801 KINGS CT<br>ROWLETT, TEXAS 750897818                       |
| 44. | ROSE TONI L<br>10605 WOLFCREEK LN<br>ROWLETT, TEXAS 750898421                  | 54. | HINES MARIA A<br>10601 GLENEAGLES LN<br>ROWLETT, TEXAS 750898420                             |
| 45. | TUCKER LORI LYNN<br>10609 WOLFCREEK LN<br>ROWLETT, TEXAS 750898421             | 55. | HEIDENREICH RICHARD C &<br>CONSTANCE C<br>10605 GLENEAGLES LN<br>ROWLETT, TEXAS 750898420    |
| 46. | PARKER LYNN<br>10613 WOLFCREEK LN<br>ROWLETT, TEXAS 750898421                  | 56. | JARAMILLO JOY<br>10609 GLENEAGLES LN<br>ROWLETT, TEXAS 750898420                             |
| 47. | BRADY THOMAS P JR<br>9314 INVERNESS DR<br>ROWLETT, TEXAS 750899595             | 57. | VINET DANIEL PAUL &<br>VICTORIA JEAN<br>2731 QUICKSILVER DR<br>CHESTERTON, INDIANA 463049178 |
| 48. | SIMPSON ROY A<br>10701 WOLFCREEK LN<br>ROWLETT, TEXAS 750898422                |     |  |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 58. | BAYMACK HOLDINGS LLC<br>16 FAIR CT<br>GARDEN CITY, NEW<br>YORK 115301712               | 67. | MAYS RANDY E JR &<br>MELISSA A<br>10813 GLENEAGLES LN<br>ROWLETT, TEXAS 750898401                 |
| 59. | RAMEY BRYAN G II &<br>JOANNA<br>10701 GLENEAGLES LN<br>ROWLETT, TEXAS 750899580        | 68. | DARDEN TIMOTHY R &<br>STEPHENIE<br>10817 GLENEAGLES LN<br>ROWLETT, TEXAS 750898401                |
| 60. | BITTINGER DONNA A &<br>DONALD R JR<br>10705 GLENEAGLES LN<br>ROWLETT, TEXAS 750899580  | 69. | COOK WILLIAM A & ZOHRA E<br>APT 102<br>10314 VENITIA REAL AVE APT 102<br>TAMPA, FLORIDA 336474023 |
| 61. | HARTNETT DEAN &<br>MARIA R<br>10709 GLENEAGLES LN<br>ROWLETT, TEXAS 750899580          | 70. | WILSON APRIL E & STEPHEN<br>10702 NEWCASTLETON LN<br>ROWLETT, TEXAS 750898404                     |
| 62. | NAVALES EVANGELINE<br>10061 RIVERSIDE DR # 444<br>TOLUCA LAKE,<br>CALIFORNIA 916022560 | 71. | CALLIS JAMES A &<br>JAMIE<br>10618 NEWCASTLETON LN<br>ROWLETT, TEXAS 750898402                    |
| 63. | DUNCAN DAWN K<br>10717 GLENEAGLES LN<br>ROWLETT, TEXAS 750899580                       | 72. | LICHTY DENNIS E &<br>LISA D<br>3400 NEWCASTLETON LN<br>ROWLETT, TEXAS 750890000                   |
| 64. | IBRAHIM TEWEDIDA A &<br>10801 GLENEAGLES LN<br>ROWLETT, TEXAS 750898401                | 73. | WHITTINGTON KENYA L<br>10610 NEWCASTLETON LN<br>ROWLETT, TEXAS 750898402                          |
| 65. | HILL STACEY & MICHELLE<br>10805 GLENEAGLES LN<br>ROWLETT, TEXAS 750898401              | 74. | NOBLE STEVEN D &<br>MELISSA A<br>10606 NEWCASTLETON LN<br>ROWLETT, TEXAS 750898402                |
| 66. | UPCHURCH RYAN &<br>TRISTAN MONK<br>10809 GLENEAGLES LN<br>ROWLETT, TEXAS 750898401     |     |   |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 75. | EDWARDS JEFFREY &<br>MELANI L<br>10602 NEWCASTLETON LN<br>ROWLETT, TEXAS 750898402     | 84. | MERRITT BRIAN S<br>10713 AUGUSTA LN<br>ROWLETT, TEXAS 750898343                         |
| 76. | PARKS MELANIE R<br>10806 LANSDOWNE LN<br>ROWLETT, TEXAS 750898345                      | 85. | LAPUZ JOHN & JEANETTE<br>10717 AUGUSTA LN<br>ROWLETT, TEXAS 750898343                   |
| 77. | SHINDLE JESSICA & CHAD<br>10802 LANSDOWNE LN<br>ROWLETT, TEXAS 750898345               | 86. | SANDERS GERALD &<br>CHERRY<br>8406 SEAFIELD LN<br>ROWLETT, TEXAS 750898406              |
| 78. | MCBRIDE LEE V &<br>DARA N<br>10718 LANSDOWNE LN<br>ROWLETT, TEXAS 750898389            | 87. | HOLL DAVID C &<br>LEAH S HOLL<br>8410 SEAFIELD LN<br>ROWLETT, TEXAS 750898406           |
| 79. | PAGE TINA R<br>10714 LANSDOWNE LN<br>ROWLETT, TEXAS 750898389                          | 88. | MUNNERLYN MARK S &<br>HEIDI A JIMENEZ<br>8414 SEAFIELD LN<br>ROWLETT, TEXAS 750898406   |
| 80. | FLEMING MARVIN E &<br>MELINDA K<br>10710 LANSDOWNE LN<br>ROWLETT, TEXAS 750898389      | 89. | RENER JAMES W &<br>KIMBERLEY A<br>8502 SEAFIELD LN<br>ROWLETT, TEXAS 750898311          |
| 81. | LEE LINDA B<br>10701 AUGUSTA LN<br>ROWLETT, TEXAS 750898343                            | 90. | MERRIGAN DAVE &<br>TIFFANY RENE GREGORY<br>8506 SEAFIELD LN<br>ROWLETT, TEXAS 750890000 |
| 82. | BOCANEGRA BERNADETTE F &<br>RODOLFO JR<br>10705 AUGUSTA LN<br>ROWLETT, TEXAS 750898343 | 91. | RADEBAUGH SHARON<br>8510 SEAFIELD LN<br>ROWLETT, TEXAS 750898311                        |
| 83. | BRYANT KEVIN J<br>10709 AUGUSTA LN<br>ROWLETT, TEXAS 750898343                         | 92. | MARTIN BRADLEY C &<br>BOBBI J<br>541 CEDARBIRD TRL<br>MURPHY, TEXAS 750943862           |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 93. EIDO MICHAEL<br>10609 GREENBRIAR LN<br>ROWLETT, TEXAS 750898310             | 104. KELLEY BRENT W & ANGELA M<br>10602 AUGUSTA LN<br>ROWLETT, TEXAS 750898344             |
| 94. GRUBER LINDA<br>2614 BOSTON ST<br>MUSKOGEE, OKLAHOMA 74401511               | 105. LANGFORD JASON & MELISSA<br>10606 AUGUSTA LN<br>ROWLETT, TEXAS 750898344              |
| 95. GREEN BRENDA<br>10601 GREENBRIAR LN<br>ROWLETT, TEXAS 750898310             | 106. HARRIS VIVIAN A<br>10610 AUGUSTA LN<br>ROWLETT, TEXAS 750898344                       |
| 96. ESPINDOLA NESTOR<br>10521 GREENBRIAR LN<br>ROWLETT, TEXAS 750898308         | 107. DECIPULO JODY P &<br>DINNA L DECIPULO<br>10614 AUGUSTA LN<br>ROWLETT, TEXAS 750898344 |
| 97. SCHNAUBELT MARY<br>10517 GREENBRIAR LN<br>ROWLETT, TEXAS 750898308          | 108. BELL DAVID<br>1208 RIESLING CIR<br>LIVERMORE, CALIFORNIA 94550                        |
| 98. GUY BILL & CHRISTELLA<br>10513 GREENBRIAR LN<br>ROWLETT, TEXAS 750898308    | 109. BOYD STEPHEN B & SUSAN E<br>10702 AUGUSTA LN<br>ROWLETT, TEXAS 750898340              |
| 99. CLEARFIELD COURTNEY B<br>10509 GREENBRIAR LN<br>ROWLETT, TEXAS 750898308    | 110. BOGART STEVEN T & CYNTHIA<br>10706 AUGUSTA LN<br>ROWLETT, TEXAS 750898340             |
| 100. UKWU CHARLIE O<br>10725 GREENCASTLE ST<br>SANTEE, CALIFORNIA 920711938     | 111. BEYENE KASSAHUN Y<br>10710 AUGUSTA LN<br>ROWLETT, TEXAS 75089                         |
| 101. MONTENEGRO RAMON F<br>10501 GREENBRIAR LN<br>ROWLETT, TEXAS 750898308      | 112. BRACKE BOB &<br>MOZELL BRACKE<br>10714 AUGUSTA LN<br>ROWLETT, TEXAS 750898340         |
| 102. GIRARD MICHAEL<br>10502 AUGUSTA LN<br>ROWLETT, TEXAS 750898339             | 113. VRANA RACHEL<br>6106 PASEO TESORO<br>CARLSBAD, CALIFORNIA 920092235                   |
| 103. PETRY MARK S &<br>REBECCA A<br>8401 TERENCE DR<br>ROWLETT, TEXAS 750894871 |  |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 114. ABERNATHY ANTOINE M &<br>KIMBERLY<br>10601 AUGUSTA LN<br>ROWLETT, TEXAS 750898342        | 124. LOCICERO NICK & ELISA<br>10610 LANSDOWNE LN<br>ROWLETT, TEXAS 750898387                 |
| 115. ARISE AYELE F &<br>GADA ADANECH<br>10605 AUGUSTA LN<br>ROWLETT, TEXAS 750898342          | 125. CARRANZA JORGE E & LINDA<br>10606 LANSDOWNE LN<br>ROWLETT, TEXAS 750898387              |
| 116. TAMEZ JOHN & SUSAN<br>10609 AUGUSTA LN<br>ROWLETT, TEXAS 750898342                       | 126. SOTO JOSE A JR<br>10602 LANSDOWNE LN<br>ROWLETT, TEXAS 750898387                        |
| 117. VILLANIA JUNEFE A &<br>ROLAND G<br>10613 AUGUSTA LN<br>ROWLETT, TEXAS 750898342          | 127. OBRIEN COLM & KAREN<br>2 MILDERRHALL ST<br>NOVATO, CALIFORNIA 94949                     |
| 118. BOHNHOFF RACHEL L<br>10617 AUGUSTA LN<br>ROWLETT, TEXAS 750898342                        | 128. IBANA NOVA P &<br>ALEXANDER TANJUAKIO<br>10605 LANSDOWNE LN<br>ROWLETT, TEXAS 750898388 |
| 119. REYNOLDS REGINA D<br>10621 AUGUSTA LN<br>ROWLETT, TEXAS 750898342                        | 129. HOWARD ELLIOT J & LYNNE M<br>8514 RUSSELL DR<br>ROWLETT, TEXAS 750894839                |
| 120. CHAPMAN RICHARD MICHAEL<br>7922 SW 26TH ST<br>TOPEKA, KANSAS 666146115                   | 130. MORRISON STEPHANIE L<br>10613 LANSDOWNE LN<br>ROWLETT, TEXAS 750898388                  |
| 121. NGUYEN EVA YUNG &<br>ADAM WILLIAM DANG<br>10702 LANSDOWNE LN<br>ROWLETT, TEXAS 750898428 | 131. THEMIS JAMES M JR<br>10617 LANSDOWNE LN<br>ROWLETT, TEXAS 750898388                     |
| 122. WHITE MARNIE E<br>10618 LANSDOWNE LN<br>ROWLETT, TEXAS 750898387                         | 132. MILLER HAROLD & MARILYN<br>10701 LANSDOWNE LN<br>ROWLETT, TEXAS 750898390               |
| 123. TERRILL ROBY F &<br>LUARA N TERRILL<br>10614 LANSDOWNE LN<br>ROWLETT, TEXAS 750898387    | 133. MCKINLEY JASON<br>10705 LANSDOWNE LN<br>ROWLETT, TEXAS 750898390                        |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 134. BEKELE SAMUEL S &<br>GENET M GEVREYES<br>10709 LANSDOWNE LN<br>ROWLETT, TEXAS 750898390 | 144. STOCKLOS RONALD L &<br>DEBORAH G<br>10706 GLENEAGLES LN<br>ROWLETT, TEXAS 750899579              |
| 135. ADKINS AMANDA<br>10713 LANSDOWNE LN<br>ROWLETT, TEXAS 750898390                         | 145. DUCKER JAMES ALLEN<br>10702 GLENEAGLES LN<br>ROWLETT, TEXAS 750899579                            |
| 136. OLIVAS RANDALL & CYNTHIA<br>10717 LANSDOWNE LN<br>ROWLETT, TEXAS 750898390              | 146. WANG HAOJIN &<br>XIAHUA LI<br>908 HEBRON DR<br>ALLEN, TEXAS 750134883                            |
| 137. COX BRANDON CHARLES &<br>10801 LANSDOWNE LN<br>ROWLETT, TEXAS 750898346                 | 147. HILL PRESTON JR &<br>NANA HILL<br>10614 GLENEAGLES LN<br>ROWLETT, TEXAS 750898408                |
| 138. WILLIAMS DEBRA &<br>10805 LANSDOWNE LN<br>ROWLETT, TEXAS 750898346                      | 148. SAMMONS CLIFFORD C<br>10610 GLENEAGLES LN<br>ROWLETT, TEXAS 750898408                            |
| 139. OGDEN DONNA<br>10806 GLENEAGLES LN<br>ROWLETT, TEXAS 750898400                          | 149. CASSIDY DEANNE M &<br>MARTIN J<br>10606 GLENEAGLES LN<br>ROWLETT, TEXAS 750898408                |
| 140. BROWN GAYLA &<br>KENNETH BROWN<br>10802 GLENEAGLES LN<br>ROWLETT, TEXAS 750898400       | 150. WHITE KELLY D &<br>MARIBETH<br>10602 GLENEAGLES LN<br>ROWLETT, TEXAS 750898408                   |
| 141. CARBALLO VILMA H<br>10718 GLENEAGLES LN<br>ROWLETT, TEXAS 750899579                     | 151. JURRIES STEVEN G<br>JENNIFER<br>9517 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899530                |
| 142. MILLER MISTI NICOLE<br>10714 GLENEAGLES LN<br>ROWLETT, TEXAS 750899579                  | 152. STEPHENSON ROSS J &<br>THERESA A STEPHENSON<br>9513 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899530 |
| 143. JIMENEZ JESSIE<br>10710 GLENEAGLES LN<br>ROWLETT, TEXAS 750899579                       |   |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 153. WILKINSON GLENN A<br>9509 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899530         | 163. AUSTIN ANGELA J<br>8802 NAIRN ST<br>ROWLETT, TEXAS 750899577                                |
| 154. KENNIMER RICHARD W II<br>9505 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899530     | 164. JAMALUDDIN MOHAMMAD &<br>ZOHRA JAMAL<br>8806 NAIRN ST<br>ROWLETT, TEXAS 750899577           |
| 155. FRIAS GUADALUPE<br>9501 LINDS FAIRWAY DR<br>ROWLETT, TEXAS 750890000           | 165. CHEN JINHUI<br>3825 E CARSON RD<br>PHOENIX, ARIZONA 850426217                               |
| 156. EMERSON JOHN C<br>9421 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899600            | 166. BANG RICHARD C MD<br>9418 GLENSHEE DR<br>ROWLETT, TEXAS 750899547                           |
| 157. BALDEREE EDITH M ETAL<br>8702 NAIRN ST<br>ROWLETT, TEXAS 750899575             | 167. MAYBERRY GLENN D JR &<br>SHELLEY R MAYBERRY<br>9422 GLENSHEE DR<br>ROWLETT, TEXAS 750899547 |
| 158. HJELM KENNETH A &<br>LISA N HJELM<br>8706 NAIRN ST<br>ROWLETT, TEXAS 750899575 | 168. VERGARA AGUSTIN J<br>9502 GLENSHEE DR<br>ROWLETT, TEXAS 750899549                           |
| 159. BUCHANA JOHN JR &<br>TAMMY<br>8710 NAIRN ST<br>ROWLETT, TEXAS 750899575        | 169. HOLMES JACK D<br>9506 GLENSHEE DR<br>ROWLETT, TEXAS 750899549                               |
| 160. CURTIS BOB & JENNIFER<br>8714 NAIRN ST<br>ROWLETT, TEXAS 750899575             | 170. PIERACACOS NICHOLAS &<br>ROSA<br>9510 GLENSHEE DR<br>ROWLETT, TEXAS 750899549               |
| 161. BADEAUX RYAN J<br>8718 NAIRN ST<br>ROWLETT, TEXAS 750899575                    | 171. CIPRIANI MARGARET F<br>9514 GLENSHEE DR<br>ROWLETT, TEXAS 750899549                         |
| 162. TAYLOR ERTHA L<br>8722 NAIRN ST<br>ROWLETT, TEXAS 750899575                    | 172. STARK JENEA C<br>9513 GLENSHEE DR<br>ROWLETT, TEXAS 750899550                               |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 173. SCOTT BILLY R & CHERISH D<br>9509 GLENSHEE DR<br>ROWLETT, TEXAS 750899550              | 183. LANGLE CLEO RAY & CINDY G<br>9614 KINGS LINK CIR<br>ROWLETT, TEXAS 750899557        |
| 174. LEHMANN JEFFREY E &<br>TERI L LEHMANN<br>9505 GLENSHEE DR<br>ROWLETT, TEXAS 750899550  | 184. RINK MARK A & RHONDA K<br>9618 KINGS LINK CIR<br>ROWLETT, TEXAS 750899557           |
| 175. BRAVO MARIA<br>8801 NAIRN ST<br>ROWLETT, TEXAS 750899578                               | 185. CHENG FUZUN &<br>MAN TSU<br>9702 KINGS LINK CIR<br>ROWLETT, TEXAS 750899559         |
| 176. CERNA HEINRICH & MARY V<br>8721 NAIRN ST<br>ROWLETT, TEXAS 750899576                   | 186. STRICKER MICHAEL &<br>CYNTHIA<br>9706 KING LINK LN<br>ROWLETT, TEXAS 75089          |
| 177. CECIL PRESTON L<br>8717 NAIRN ST<br>ROWLETT, TEXAS 750899576                           | 187. YANES DAVID & VIRGINIA<br>9710 KINGS LINK CIR<br>ROWLETT, TEXAS 750899559           |
| 178. YORK CLAY W &<br>STEPHANIE M YORK<br>8713 NAIRN ST<br>ROWLETT, TEXAS 750899576         | 188. Owner withheld per Sec.# 25.025 or<br>25.026 of Texas Property Tax Code             |
| 179. ALSTON NELDA H<br>8709 NAIRN ST<br>ROWLETT, TEXAS 750899576                            | 189. THORNTON MATTHEW B &<br>EMILY S<br>9705 KINGS LINK CIR<br>ROWLETT, TEXAS 750899560  |
| 180. MEJIA LOSCAR T &<br>LAURA A MEJIA<br>9505 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899530 | 190. ALLEN TERRY L & DONNA J<br>9701 KINGS LINK CIR<br>ROWLETT, TEXAS 750899560          |
| 181. CAMACHO AMY M & RUBEN<br>9510 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899529             | 191. ADRIAN GRETE K<br>9617 KINGS LINK CIR<br>ROWLETT, TEXAS 750899558                   |
| 182. AGUERO JOSE M<br>9514 LINKS FAIRWAY DR<br>ROWLETT, TEXAS 750899529                     | 192. BALL JUSTIN D &<br>DIANA M<br>1370 FAIRLAKES POINTE DR<br>ROCKWALL, TEXAS 750872866 |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 193. BRASCH RONALD E & VIKKI R<br>9609 KINGS LINK CIR<br>ROWLETT, TEXAS 750899558          | 202. MORIN DAVID P &<br>LAURENE<br>10409 WENTWORTH DR<br>ROWLETT, TEXAS 750898491        |
| 194. JENKINS CHESTER A &<br>RHONDA E<br>9605 KINGS LINK CIR<br>ROWLETT, TEXAS 750899558    | 203. HALL LYNNETTE M &<br>DAVID G<br>10413 WENTWORTH DR<br>ROWLETT, TEXAS 750898491      |
| 195. WATERVIEW COMMUNITY ASSN<br>ASSOC INC<br>7801 KINGS CT<br>ROWLETT, TEXAS 750897818    | 204. KWAN JOHN H<br>10417 WENTWORTH DR<br>ROWLETT, TEXAS 750898491                       |
| 196. BENTLEY NATALEE<br>10305 WENTWORTH DR<br>ROWLETT, TEXAS 750898492                     | 205. BAEZ SANDI D &<br>TERRY L ELLISON<br>10501 WENTWORTH DR<br>ROWLETT, TEXAS 750898495 |
| 197. FORRESTER JASON A &<br>KAREN DENISE<br>10309 WENTWORTH DR<br>ROWLETT, TEXAS 750898492 | 206. DEFUSCO LOUIS &<br>ELVIRA DEFUSCO<br>10505 WENTWORTH DR<br>ROWLETT, TEXAS 750898495 |
| 198. TALASEK DONALD W & TONI K<br>10313 WENTWORTH DR<br>ROWLETT, TEXAS 750898492           | 207. ARGUETA HUGO<br>10509 WENTWORTH DR<br>ROWLETT, TEXAS 750898495                      |
| 199. YOST DEVON M<br>10317 WENTWORTH DR<br>ROWLETT, TEXAS 750898492                        | 208. HARPER KEVIN G<br>9602 BROADMOOR LN<br>ROWLETT, TEXAS 750898371                     |
| 200. SHUYLER MICHAEL W JR &<br>NIKKI<br>10401 WENTWORTH DR<br>ROWLETT, TEXAS 750898491     | 209. SUTTON JORDAN G & ANDREA L<br>10517 WENTWORTH DR<br>ROWLETT, TEXAS 750898495        |
| 201. NUTT MELANIE & KEVIN<br>10405 WENTWORTH DR<br>ROWLETT, TEXAS 750898491                | 210. CATHERMAN BRANDIE &<br>SEAN M<br>10601 WENTWORTH DR<br>ROWLETT, TEXAS 750898494     |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 211. | SMITH OTHA & VELMA L<br>10605 WENTWORTH DR<br>ROWLETT, TEXAS 750898494               | 221. | ROSEBERRY SAMUEL S<br>10817 NANTUCKET DR<br>ROWLETT, TEXAS 750898469                      |
| 212. | JOHNSON MARC D & SOMMER R<br>10701 NANTUCKET DR<br>ROWLETT, TEXAS 750898471          | 222. | BAINS MICHAEL & CHRISTY<br>10901 NANTUCKET DR<br>ROWLETT, TEXAS 750898467                 |
| 213. | REMAKEL BARBARA &<br>MICHAEL DAVIS<br>10705 NANTUCKET DR<br>ROWLETT, TEXAS 750898471 | 223. | PASSMORE MATTHEW<br>10905 NANTUCKET DR<br>ROWLETT, TEXAS 750898467                        |
| 214. | LE DUNG V<br>10709 NANTUCKET DR<br>ROWLETT, TEXAS 750898471                          | 224. | GRANT GILDA C TR &<br>PATRICK GRANT TR<br>PO BOX 360033<br>MILPITAS, CALIFORNIA 950360033 |
| 215. | WELLS MATTHEW W<br>10713 NANTUCKET DR<br>ROWLETT, TEXAS 750898471                    | 225. | LINDSAY JEREMY & APRIL<br>10606 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898466              |
| 216. | WILLIS KRISTIE<br>10717 NANTUCKET DR<br>ROWLETT, TEXAS 750898471                     | 226. | VALDEZ GERARDO & MELISSA<br>10602 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898466            |
| 217. | PROTAS KERRI B<br>10801 NANTUCKET DR<br>ROWLETT, TEXAS 750898469                     | 227. | MCRAE RUSTY & KAREN<br>10518 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898465                 |
| 218. | ALVAREZ ANA SOFIA<br>10805 NANTUCKET DR<br>ROWLETT, TEXAS 750898469                  | 228. | TRAN MICHAEL<br>10514 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898465                        |
| 219. | WAGNER KEITH & CAROLYN<br>10809 NANTUCKET DR<br>ROWLETT, TEXAS 750898469             | 229. | US BANK NATL ASSN TR<br>6591 IRVINE CENTER DR<br>IRVINE, CALIFORNIA 926182118             |
| 220. | LEDESMA CHRISTINA J J &<br>103 CITRUS RANCH RD<br>SAN DIMAS, CALIFORNIA 917733119    | 230. | BUENVENIDA MARIE ANNE<br>10506 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898465               |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 231. BEAZER HOMES TX LP<br>SUITE 1<br>501 W PRES GEORGE W BUSH<br>RICHARDSON, TEXAS 750801141               | 240. CARRANZA JORGE E &<br>LINDA<br>10306 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898463          |
| 232. K2 REAL ESTATE LP<br>1A 205 CHATELAIN DR<br>ST ALBERT T8N 5A4,<br>ALBERTA 000000000<br>CANADA          | 241. ANAND RUCHI &<br>VIVEK<br>10806 WINGED FOOT DR<br>ROWLETT, TEXAS 750898455                 |
| 233. SAMS BILLY D & NICOLE<br>10414 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898464                            | 242. GEORGEKUTTY SIMON &<br>CHARIS C JAMES<br>10802 WINGED FOOT DR<br>ROWLETT, TEXAS 750898455  |
| 234. HERNANDEZ JOSE E &<br>10410 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898464                               | 243. AHMIS AZRA & ELVIS<br>10805 WINGED FOOT DR<br>ROWLETT, TEXAS 750898456                     |
| 235. CHRISTOPHERSON ERIC &<br>CHRISTIN CHRISTOPHERSON<br>10406 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898464 | 244. RIXTER JERRY D JR &<br>TAMARA A RIXTER<br>10801 WINGED FOOT DR<br>ROWLETT, TEXAS 750898456 |
| 236. SPRANG JONATHAN LESTER &<br>MEAGAN MARIE<br>10402 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898464         | 245. MATHIS FRANCESCA<br>10717 WINGED FOOT DR<br>ROWLETT, TEXAS 750898454                       |
| 237. CORZO CARMEN A<br>10318 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898463                                   | 246. WILLIAMS STEVEN & DIANNE<br>10713 WINGED FOOT DR<br>ROWLETT, TEXAS 750898454               |
| 238. NICHOLS CHARLES R &<br>CARLA A<br>10314 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898463                   | 247. GENTRY JEFFREY<br>10709 WINGED FOOT DR<br>ROWLETT, TEXAS 750898454                         |
| 239. CLAYCOMB TRACY &<br>SEANYN CLAYCOMB<br>10310 SAINT GEORGES DR<br>ROWLETT, TEXAS 750898463              | 248. SMITH LANCE A<br>10705 WINGED FOOT DR<br>ROWLETT, TEXAS 750898454                          |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 249. | RODRIGUEZ ADOLPH A &<br>DEBORAH K SATTERFIELD<br>10701 WINGED FOOT DR<br>ROWLETT, TEXAS 750898454 | 259. | CALDERON WILFREDO &<br>JAZMIN<br>10717 SAINT ANNES DR<br>ROWLETT, TEXAS 750898458           |
| 250. | VANWINKLE ALYSSA G &<br>CHAD S VAN WINKLE<br>10702 SAINT ANNES DR<br>ROWLETT, TEXAS 750898457     | 260. | FOSTER STEPHEN R &<br>ANGELA D<br>10713 SAINT ANNES DR<br>ROWLETT, TEXAS 750898458          |
| 251. | HAZEN JAMES C &<br>MARGARET E<br>10706 SAINT ANNES DR<br>ROWLETT, TEXAS 750898457                 | 261. | MCCRACKIN JAN J<br>10709 SAINT ANNES DR<br>ROWLETT, TEXAS 750898458                         |
| 252. | FORTHMAN PAUL D &<br>JENNIFER G<br>10710 SAINT ANNES DR<br>ROWLETT, TEXAS 750898457               | 262. | LALUMIA STACEY L<br>10705 SAINT ANNES DR<br>ROWLETT, TEXAS 750898458                        |
| 253. | HEROLD THOMAS W<br>10714 SAINT ANNES DR<br>ROWLETT, TEXAS 750898457                               | 263. | BENJAMIN SANTHOSH &<br>SUSAN S PODIMALA<br>10710 SAINT ANNES DR<br>ROWLETT, TEXAS 750898457 |
| 254. | WATSON ROBERT III & ROBIN R<br>10718 SAINT ANNES DR<br>ROWLETT, TEXAS 750898457                   | 264. | RODRIGUEZ MARY &<br>OSWALDO<br>10702 J A FORSTER DR<br>ROWLETT, TEXAS 750898473             |
| 255. | EDNEY KENNETH R &<br>DORIS E<br>10802 SAINT ANNES DR<br>ROWLETT, TEXAS 750898459                  | 265. | LUSAN JASON & SHANA M<br>10706 J A FORSTER DR<br>ROWLETT, TEXAS 750898473                   |
| 256. | Owner withheld per Sec.# 25.025 or<br>25.026 of Texas Property Tax Code                           | 266. | DEAN ELIZABETH N<br>10710 J A FORSTER DR<br>ROWLETT, TEXAS 750898473                        |
| 257. | MOORE MICHAEL A & SONIA C<br>10805 SAINT ANNES DR<br>ROWLETT, TEXAS 750898460                     | 267. | LEMMA MELAKU & MENA MAMO<br>10714 J A FORSTER DR<br>ROWLETT, TEXAS 750898473                |
| 258. | WILSON MICHAEL & TAMMY<br>10801 SAINT ANNES DR<br>ROWLETT, TEXAS 750898460                        | 268. | QUAINTANCE CORY P &<br>SANDRA D<br>10718 J A FORSTER DR<br>ROWLETT, TEXAS 750898473         |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 269. | HARRIS ROBERT III &<br>LASHANDIA<br>10802 J A FORSTER DR<br>ROWLETT, TEXAS 750898475           | 278. | VASQUEZ ANITA<br>10717 J A FORSTER DR<br>ROWLETT, TEXAS 750898474                     |
| 270. | GALAVIZ VERONICA<br>10806 J A FORSTER DR<br>ROWLETT, TEXAS 750898475                           | 279. | GRAVEL DONNA MARIE<br>10713 J A FORSTER DR<br>ROWLETT, TEXAS 750898474                |
| 271. | GRANT GILDA C & TRUST<br>PATRICK<br>1312 CORDILLERAS AVE<br>SUNNYVALE,<br>CALIFORNIA 940874404 | 280. | WALKER BOBBIE LIVING TR<br>10709 J A FORSTER DR<br>ROWLETT, TEXAS 750898474           |
| 272. | DELOSSANTOS CARMEN &<br>GILBERT CALDERON<br>10814 J A FORSTER DR<br>ROWLETT, TEXAS 750898475   | 281. | DUSHION NANCY E<br>10705 J A FORSTER DR<br>ROWLETT, TEXAS 750898474                   |
| 273. | ANDRADE PEDRO M JR<br>10817 J A FORSTER DR<br>ROWLETT, TEXAS 750898476                         | 282. | HARMON STACY<br>10701 J A FORSTER DR<br>ROWLETT, TEXAS 750898474                      |
| 274. | THOMPSON ARNELL B<br>10813 J A FORSTER DR<br>ROWLETT, TEXAS 750898476                          | 283. | REYNOLDS TONNIA LEE<br>10702 NANTUCKET DR<br>ROWLETT, TEXAS 750898470                 |
| 275. | AMOS NATHAN K &<br>SHERRY D<br>10809 J A FORSTER DR<br>ROWLETT, TEXAS 750898476                | 284. | LEE DONG Y<br>10706 NANTUCKET DR<br>ROWLETT, TEXAS 750898470                          |
| 276. | SISSON RUDOLPH BRYANT<br>9452 MARKFIELD WAY<br>SACRAMENTO,<br>CALIFORNIA 958296058             | 285. | PETIT BURNS ANGELA R &<br>JEFFREY S<br>10710 NANTUCKET DR<br>ROWLETT, TEXAS 750898470 |
| 277. | WILLIAMS SABRINA<br>10801 J A FORSTER DR<br>ROWLETT, TEXAS 750898476                           | 286. | KEELEY HAROLD &<br>LATRISHA NOLLEY<br>10714 NANTUCKET DR<br>ROWLETT, TEXAS 750898470  |
|      |  | 287. | SMYTH WILLIAM L<br>10718 NANTUCKET DR<br>ROWLETT, TEXAS 750898470                     |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 288. | GODWIN ERNEST J &<br>MARCIA G<br>10802 NANTUCKET DR<br>ROWLETT, TEXAS 750898468                  | 298. | WILCOX CLINT<br>3391 ELM GROVE RD<br>WYLIE, TEXAS 750986371                               |
| 289. | PENSATA CHRISTOPHER B &<br>PAMELA J<br>10806 NANTUCKET DR<br>ROWLETT, TEXAS 750898468            | 299. | MCGEE PHIL &<br>NANCY<br>121 MCGEE COVE RD<br>ROWLETT, TEXAS 750892393                    |
| 290. | MCCAULEY JONATHAN &<br>BRITNEY<br>10810 NANTUCKET DR<br>ROWLETT, TEXAS 750898468                 | 300. | WHITT ARCHIE RAY JR<br>& NATALIE RAE SEMAN<br>3381 ELM GROVE RD<br>WYLIE, TEXAS 750986371 |
| 291. | GAINES ERIC<br>10814 NANTUCKET DR<br>ROWLETT, TEXAS 750898468                                    | 301. | MILLS JAMES E<br>3371 ELM GROVE RD<br>WYLIE, TEXAS 750986371                              |
| 292. | PACANA OLIVA<br>10818 NANTUCKET DR<br>ROWLETT, TEXAS 750898468                                   | 302. | ESPINOZA HERMINIA<br>3361 ELM GROVE RD<br>WYLIE, TEXAS 750986371                          |
| 293. | ACCORD RENTAL PROP LLC<br>CURTIS JACKSON MANAGER<br>2406 HIGHRIDGE DR<br>SACHSE, TEXAS 750484224 | 303. | JONES VIOLITA<br>3351 ELM GROVE RD<br>WYLIE, TEXAS 750986371                              |
| 294. | STILES MAUREEN<br>3451 ELM GROVE RD<br>WYLIE, TEXAS 750986373                                    | 304. | VARGAS EVANGELINE<br>3341 ELM GROVE RD<br>WYLIE, TEXAS 750986371                          |
| 295. | SEEBOLD KARLA<br>PO BOX 503<br>KAUFMAN, TEXAS 751420503  | 305. | BREEDING CHARLES RAYMOND<br>3331 ELM GROVE RD<br>WYLIE, TEXAS 750986371                   |
| 296. | COONROD NADINE<br>3431 ELM GROVE RD<br>WYLIE, TEXAS 750986373                                    | 306. | ROMAN JONATAN &<br>ISUANET MALDONADO<br>3321 ELM GROVE RD<br>WYLIE, TEXAS 750986371       |
| 297. | MEDINA OFELIA G<br>3421 ELM GROVE RD<br>WYLIE, TEXAS 750986373                                   | 307. | RENER JAMES & KIMBERLEY<br>8502 SEAFIELD LN<br>ROWLETT, TEXAS 750898311                   |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 308. RICORD WAYNOKA L<br>3100 BRIAR LN<br>SOUTHLAKE, TEXAS 760922525                         | 318. NGUYEN MY DUC & MARILYN<br>3336 DOROTHY LN<br>WYLIE, TEXAS 750986380             |
| 309. JONES JAY & ASSOC<br>SUITE 103<br>1621 S JUPITER RD STE 103<br>GARLAND, TEXAS 750427793 | 319. HOLCOMBE CLARENCE R<br>12377 MERIT DR STE 888<br>DALLAS, TEXAS 752512249         |
| 310. FUNK DONNA CLYDELL<br>1210 COUNTY ROAD 142<br>KAUFMAN, TEXAS 751425671                  | 320. RODRIGUEZ DAVID C &<br>MARY N<br>3335 DOROTHY LN<br>ROWLETT, TEXAS 750880000     |
| 311. GOLDEN BROOKS INC<br>PO BOX 359<br>ROWLETT, TEXAS 750300359                             | 321. NEWELL LORI ANNE<br>3331 DOROTHY LN<br>WYLIE, TEXAS 750986381                    |
| 312. GOODNER JAMES BOYD<br>3312 DOROTHY LN<br>WYLIE, TEXAS 750986380                         | 322. WRIGHT CHARLES A &<br>RUBY J WRIGHT<br>3327 DOROTHY LN<br>WYLIE, TEXAS 750986381 |
| 313. PATAPSCO INC<br>8105 RAINBOW DR<br>ROWLETT, TEXAS 750892583                             | 323. CHRISTIAN JAMES B &<br>CHERYL L<br>3323 DOROTHY LN<br>WYLIE, TEXAS 750986381     |
| 314. KAUFFMAN WANDA & DENNIS<br>3320 DOROTHY LN<br>WYLIE, TEXAS 750986380                    | 324. STOUT ALLAN K SR & TORI L<br>3319 DOROTHY LN<br>WYLIE, TEXAS 750986381           |
| 315. MCGARRY GREGORY & VALERIE<br>8261 CHAPEL LANE<br>NEVADA, TEXAS 75173                    | 325. FOSTER GERRY D<br>3530 VINSON RD<br>WYLIE, TEXAS 750986363                       |
| 316. CURRAN DON &<br>CLARA SUE MELTON<br>3328 DOROTHY LN<br>WYLIE, TEXAS 750986384           | 326. REED RALPH L & KAREN<br>3490 VINSON RD<br>WYLIE, TEXAS 750986361                 |
| 317. BYERS JOHN T JR<br>3332 DOROTHY LN<br>WYLIE, TEXAS 750986380                            | 327. ROBERTS DAVID GLENN<br>3484 VINSON RD<br>WYLIE, TEXAS 750986361                  |

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| 328. | GARCIA JOHN<br>PMB125<br>4529 STONEWALL ST<br>GREENVILLE, TEXAS 754015951                        | 337. | THURMON CLAUDIS & LILLIAN<br>2979 ELM GROVE RD<br>WYLIE, TEXAS 750986249          |
| 329. | GARCIA JOHN D II<br>3482 VINSON RD<br>WYLIE, TEXAS 750986361                                     | 338. | SHAW DOROTHY M<br>2975 ELM GROVE RD<br>WYLIE, TEXAS 750986249                     |
| 330. | FOSTER TIMOTHY W<br>PO BOX 180974<br>DALLAS, TEXAS 752180974                                     | 339. | NEILL ROBBY W &<br>KIMBERLY A<br>3420 WHITELEY RD<br>WYLIE, TEXAS 750986270       |
| 331. | TXU ELECTRIC DELIVERY<br>AKA ONCOR ELECTRIC DELIVERY<br>1601 BRYAN ST<br>DALLAS, TEXAS 752013430 | 340. | LEETCH RICHARD A<br>2911 ELM GROVE RD<br>WYLIE, TEXAS 750986249                   |
| 332. | APODACA JERRY B<br>309 BELLMEADE DR<br>GARLAND, TEXAS 750403504                                  | 341. | DAVIS RONNIE M<br>2919 ELM GROVE RD<br>WYLIE, TEXAS 750986249                     |
| 333. | WENDEL JOSHUA L<br>3109 ELM GROVE RD<br>WYLIE, TEXAS 750986253                                   | 342. | WILLIAMS ROBERT E<br>2891 ELM GROVE RD<br>WYLIE, TEXAS 750986247                  |
| 334. | PRUETT ARTHUR PAUL &<br>RUTH A PRUETT<br>PO BOX 2315<br>WYLIE, TEXAS 750982315                   | 343. | ANDERSON JENNIFER<br>KEITH ANDERSON<br>2080 DRESSAGE LN<br>TYLER, TEXAS 757030109 |
| 335. | ARENT HERMAN M<br>EST OF<br>3015 ELM GROVE RD<br>WYLIE, TEXAS 750986251                          | 344. | CHAMBERS TERRY & PEGGY<br>3570 WHITELEY RD<br>WYLIE, TEXAS 750986272              |
| 336. | VOYLES PROPERTY &<br>MANAGEMENT LLC<br>5620 FM 359 RD<br>RICHMOND, TEXAS 774069606               | 345. | LANSING DUANE<br>PO BOX 248<br>WYLIE, TEXAS 750980248                             |
|      |  | 346. | ADAME GEORGE<br>3530 WHITELEY RD<br>WYLIE, TEXAS 750986272                        |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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| 347. | GOSE THOMAS LEE<br>PO BOX 460403<br>GARLAND, TEXAS 750460403                | 357. | SEGURA RIGO B<br>497 ELM GROVE RD<br>WYLIE, TEXAS 75098                                    |
| 348. | THARP ROBERT J &<br>ANNA M<br>3440 WHITELEY RD<br>WYLIE, TEXAS 750986270    | 358. | MORGAN DANIEL S<br>DBA DAN MORGAN DRYWALL<br>9101 LOCHGREEN LN<br>ROWLETT, TEXAS 750899572 |
| 349. | CASTILLO ERNEST C &<br>LOUISE M<br>2813 SACHSE RD<br>WYLIE, TEXAS 750986232 | 359. | YOUNG JAMES R & ROSE M<br>2705 ELM GROVE RD<br>WYLIE, TEXAS 750986245                      |
| 350. | SCHARA MONTE PAUL & A<br>3380 WHITELEY RD<br>WYLIE, TEXAS 750986268         | 360. | LUBURICH KACI &<br>NELSON WALKER<br>2701 ELM GROVE RD<br>WYLIE, TEXAS 750986245            |
| 351. | SCHIE JEFFREY T<br>3360 WHITELEY RD<br>WYLIE, TEXAS 750986268               | 361. | COTTONWOOD CH OF CHRIST<br>% GEORGE TURNER<br>2300 ELM DR<br>WYLIE, TEXAS 750984832        |
| 352. | HARMON ROBYN<br>3340 WHITELEY RD<br>WYLIE, TEXAS 750986268                  | 362. | DAVIS CAMPBELL M<br>9601 KINGS LINK CIR<br>ROWLETT TX 75089-9558                           |
| 353. | MUNOZ FRANCISCO<br>3387 WHITELEY RD<br>WYLIE, TEXAS 750986269               | 363. | CHERUCHERIL GEORGE & MARY<br>9501 WATERVIEW PKWY<br>ROWLETT TX 75089                       |
| 354. | JONES CHRISTOPHER M<br>3435 WHITELEY RD<br>WYLIE, TEXAS 750986271           | 364. | FEDERAL NATIONAL MORTGAGE<br>ASSOC<br>4828 LOOP CENTRAL DR<br>HOUSTON TX 77081-2212        |
| 355. | BENTO RANDY A &<br>MELINDA Y<br>3525 WHITELEY RD<br>WYLIE, TEXAS 750986273  | 365. | GREEN WILLIAM J JR<br>ELIZABETH A<br>6621 EASTVIEW DR<br>SACHSE TX 75048-5216              |
| 356. | HO MINH<br>3577 WHITELEY RD<br>WYLIE, TEXAS 750986273                       |      |  |

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## PROPERTY OWNERS AND MINERAL RIGHTS OWNERS LIST\*

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- 366. BISHOP DENNIS L & SHANNON A  
6704 VALLEY VIEW LN  
SACHSE TX 75048-5206
- 367. RICHARDSON KEVIN L  
6716 VALLEY VIEW LN  
SACHSE TX 75048-5206
- 368. LOTT WALTER PAUL  
6711 EASTVIEW DR  
SACHSE TX 75048-5203
- 369. NAYLOR WILLIAM & CYNTHIA  
6707 EASTVIEW DR  
SACHSE TX 75048-5203
- 370. MCCLEARY JAMES M & JEANNE A  
6714 EASTVIEW DR  
SACHSE TX 75048-5202

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