BIGGS & MATHEWS ENVIRONMENTAL
Consulting Engineers • Hydrogeologists
Mansfield • Wichita Falls

November 21, 2019

Arten J. Avakian, P.G.
MC 124
Project Manager
Municipal Solid Waste Permits Section
Texas Commission on Environmental Quality
12100 Park 35 Circle, Bldg. F
Austin, Texas 78753

Re: Permit Modification – Attachment 5 and Attachment 14
McCommas Bluff Landfill, TCEQ Permit No. 62
Dallas County, Texas

Dear Mr. Avakian:

On behalf of our client, the City of Dallas, Biggs and Mathews Environmental is pleased to submit the enclosed permit modification for the above referenced facility. This modification includes changes to the permit related to landfill gas collection and groundwater. This modification is being submitted pursuant to 30 TAC §305.70(k)(3) and 30 TAC §305.70(k)(4), which require public notice.

First, this permit modification addresses changes to **Attachment 5 – Groundwater Characterization Report and Groundwater Monitoring Plan**. Specifically, proposed monitoring wells 23, 24, and 25 are being relocated and accordingly the point of compliance is being relocated. This change is necessitated by a previous permit modification approved by TCEQ in 2015 that revised the waste footprint. This modification relocates the referenced monitoring wells and point of compliance to the east of the revised footprint for Sector 7A. The new monitoring well locations maintain well spacing that is less than 600 feet between wells. This modification also incorporates the installation data for previously installed monitoring wells 3R and 11R which were installed in 2014.

In addition, this permit modification updates the site's existing **Attachment 14 – Landfill Gas Management Plan** (LGMP) to incorporate previously completed and planned upgrades to the existing landfill gas (LFG) collection and control system (GCCS). The purpose of these upgrades is to address LFG that has been detected in several groundwater monitoring wells on the south side of the site. The previously completed upgrades included the installation of 11 LFG extraction wells within the waste and the conversion of 11 geoprobe locations to passive vents outside the waste.

The planned future upgrades include redrilling three of the existing passive vents to provide a larger pipe casing for improved gas venting, as well as the installation of eleven additional passive vents to tighten the spacing of the passive vents. The locations of the extraction wells and passive vents are shown on Drawing 2A.

Under separate cover, a revised LFG Remediation Plan has also been submitted to provide additional information on the remediation progress to date and future remediation plans.

Please process this permit modification request per 30 TAC §305.70(k)(3) and 30 TAC §305.70(k)(4). One original and one copy of the permit modification are provided for your use and distribution. To facilitate your review, we have included copies of the permit revisions in both clean and redline/strikeout formats. In addition, one copy has been provided to the appropriate regional office. A copy of this submittal has also been placed in the site operating record.

Please contact us if you have any questions or comments regarding this submittal.

Sincerely,

BIGGS & MATHEWS ENVIRONMENTAL

Michael Snyder, P.G.
Principal Hydrogeologist

J. Heath Parker, P.E.
Principal Engineer

Attachment 1: Permit Modification Application Form
Attachment 2: Land Ownership List/Map
Attachment 3: Permit Replacement Pages (Redline/Strikeout Format)
Attachment 4: Permit Replacement Pages

cc: TCEQ Region 4
Dennis Ware, City of Dallas
Richard Akin, City of Dallas

ATTACHMENT 1

PERMIT MODIFICATION APPLICATION FORM

Facility Name: McCommas Bluff Landfill
Permittee/Registrant Name: City of Dallas
MSW Authorization #: 62
Initial Submittal Date: 11/21/2019
Revision Date:

Texas Commission on Environmental Quality

Permit/Registration Modification and Temporary Authorization Application Form for an MSW Facility

1. Reason for Submittal

☒ Initial Submittal ☐ Notice of Deficiency (NOD) Response

2. Authorization Type

☒ Permit ☐ Registration

3. Application Type

☒ Modification with Public Notice ☐ Modification without Public Notice
☐ Temporary Authorization (TA) ☐ Modification for Name Change/Transfer

4. Application Fees

☐ Pay by Check ☒ Online Payment

If paid online, e-Pay Confirmation Number: 582EA000366088

5. Application URL

Is the application submitted for a permit/registration modification with public notice?

☒ Yes ☐ No

If the answer is "Yes", enter the URL address of a publicly accessible internet web site where the application and all revisions to that application will be posted in the space provided: https://www.dallascityhall.com/departments/sanitation/DCH Documents/MBLF Permit Modification 2019.pdf

6. Confidential Documents

Does the application contain confidential documents?

☐ Yes ☒ No

If "Yes", cross-reference the confidential documents throughout the application and submit as a separate attachment in a binder clearly marked "CONFIDENTIAL."

7. General Facility Information

Facility Name: McCommas Bluff Landfill

MSW Authorization No.: 62

Regulated Entity Reference No.: RN100752146

Physical or Street Address (if available): 5100 Youngblood Road

City: Dallas County: Dallas State: TX Zip Code: 75241

(Area code) Telephone Number: 214-671-0230

Latitude: 32°40'59.5596" N Longitude: -96°43'29.1324" W

8. Facility Type(s)

- [x] Type I
- [ ] Type IV
- [ ] Type V
- [ ] Type I AE
- [ ] Type IV AE
- [ ] Type VI

9. Description of the Revisions to the Facility

Provide a brief description of all revisions to the permit/registration conditions and supporting documents referred by the permit/registration, and a reference to the specific provisions under which the modification/temporary authorization application is being made. Also, provide an explanation of why the modification/temporary authorization is requested:

The purpose of this permit modification is to modify two attachments in the McCommas Bluff Landfill's Site Development Plan, Attachment 5 - Groundwater Characterization Report and Groundwater Monitoring Plan and Attachment 14 - Landfill Gas Management Plan.

Attachment 5 is being updated to address the relocation of three groundwater monitoring wells due to a previous landfill modification to the waste cell boundaries. This update relocates the point of compliance out of the permitted waste footprint. Attachment 14 is being updated to incorporate Landfill Gas (LFG) extraction wells and passive vents installed for the purpose of mitigating LFG migration into nearby groundwater monitoring wells.

This permit modification is being submitted under §305.70(k)(3) and §305.70(k)(4).

10. Facility Contact Information

Site Operator (Permittee/Registrant) Name: City of Dallas

Customer Reference No. (if issued)*: CN 600331730

Mailing Address: 3112 Canton Street

City: Dallas County: Dallas State: TX Zip Code: 75226

(Area Code) Telephone Number: 214-671-0230

E-mail Address: dennis.ware@dallascityhall.com

TX Secretary of State (SOS) Filing Number:

*If the Site Operator (Permittee/Registrant) does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Site Operator (Permittee/Registrant) as the Customer.

Operator Name[1]: Same as Site Operator (Permittee/Registrant)

Customer Reference No. (if issued)*: CN

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-mail Address:

Charter Number:

[1]If the Operator is the same as Site Operator/Permittee type "Same as "Site Operator (Permittee/Registrant)".
*If the Operator does not have this number, complete a TCEQ Core Data Form (TCEQ-10400) and submit it with this application. List the Operator as the customer.

Consultant Name (if applicable): Biggs and Mathews Environmental

Texas Board of Professional Engineers Firm Registration Number: F-256

Mailing Address: 1700 Robert Road, Suite 100

City: Mansfield County: Tarrant State: TX Zip Code: 76063

(Area Code) Telephone Number: 817-563-1144

E-Mail Address: hparker@biggsandmathews.com

Agent in Service Name (required only for out-of-state):

Mailing Address:

City: County: State: Zip Code:

(Area Code) Telephone Number:

E-Mail Address:

11. Ownership Status of the Facility

Is this a modification that changes the legal description, the property owner, or the Site Operator (Permittee/Registrant)?

☐ Yes ■ No

If the answer is "No", skip this section.

Does the Site Operator (Permittee/Registrant) own all the facility units and all the facility property?

☐ Yes ☐ No

If "No", provide the information requested below for any additional ownership.

Owner Name:

Street or P.O. Box:

City: County: State: Zip Code:

(Area Code) Telephone Number:

Email Address (optional):

Charter Number:

Signature Page

I, Joey Zapata, Assistant City Manager,
(Site Operator (Permittee/Registrant)'s Authorized Signatory) (Title)

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

Signature: _____ Date: 11-08-19

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 Joey Zapata
On this 13th day of November, 2019
My commission expires on the 23rd day of August, 2020
_____
Notary Public in and for
Dallas County, Texas
(Note: Application Must Bear Signature & Seal of Notary Public)

CRISTINA M. BUSTILLOS
My Notary ID # 129098224
Expires August 23, 2020

Permit/Registration Modification with Public Notice

(See Instructions for P.E. seal requirements.)

Required Attachments	Attachment No.
Land Ownership Map	2
Land Ownership List	2
Marked (Redline/Strikeout) Pages	3
Unmarked Revised Pages	4

Additional Attachments as Applicable- Select all those apply and add as necessary

☐ Signatory Authority
☐ Fee Payment Receipt
☐ Confidential Documents

ATTACHMENT 2

LAND OWNERSHIP LIST/MAP

McCommas Landfill
Adjacent Property Owners
Dallas Central Appraisal District, November 19, 2019

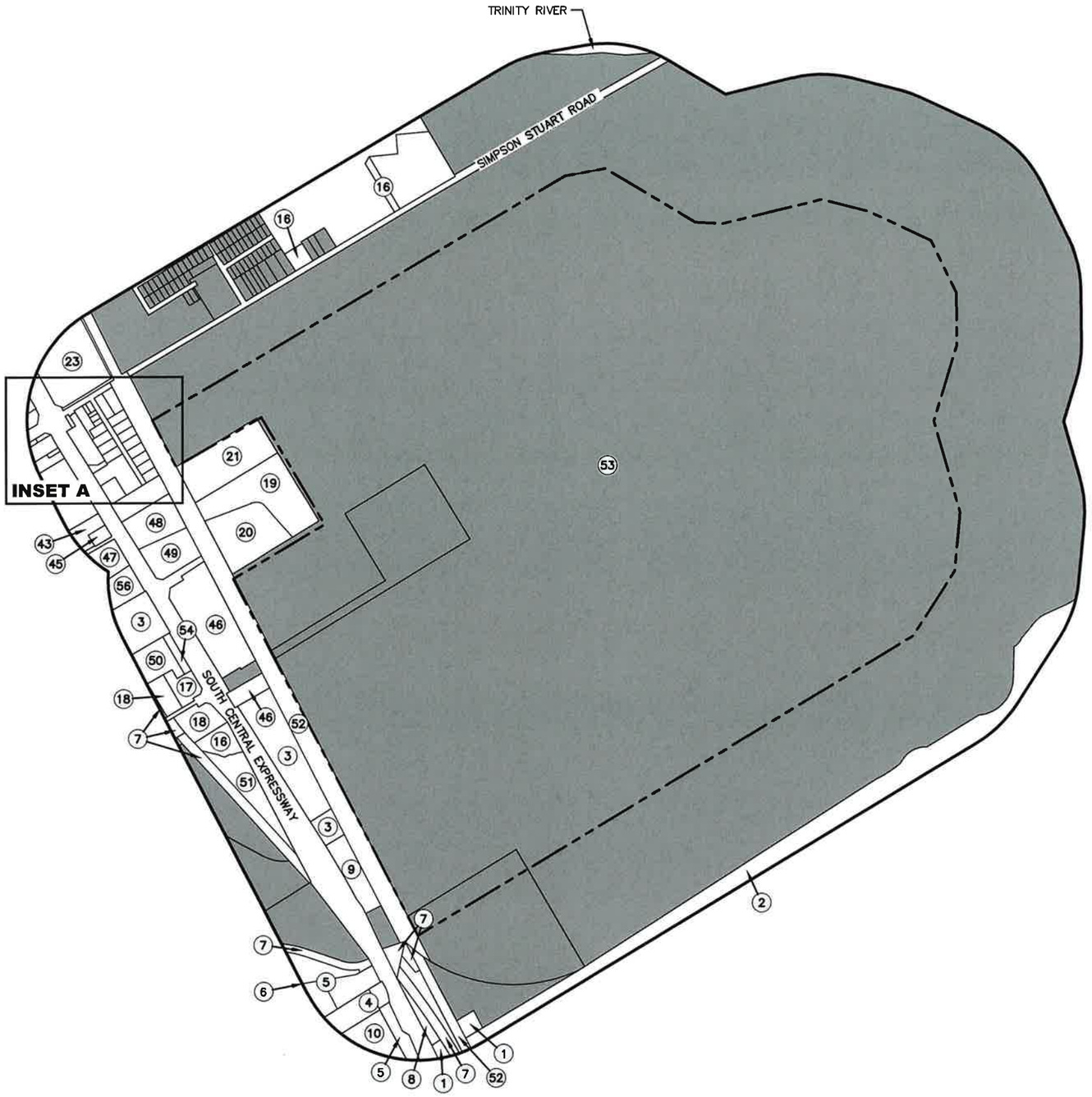
1	QUALITY AUTO RECYCLERS LLC 1001 W PLEASANT RUN RD DESOTO TX 75115-2801	13	JOSE H VALDEZ & MARIA DELCARMEN VALDEZ 3922 SHINDOLL ST DALLAS TX 75216-4027
2	DP RESOURCES LLC 9727 STONE RIDGE CIRCLE DALLAS TX 75231	14	MARTIN RAMIRO AVILA 3104 POINT EAST DR MESQUITE TX 75150-2638
3	BROWN FAMILY LEWISVILLE RR FAMILY 1ST LP 5610 HARBOR TOWN DR DALLAS TX 75287-7413	15	440 EQUIPMENT LLC 5111 GREENVILLE AVE #601655 DALLAS TX 75360-0680
4	LLOYD E MILLER 10305 S CENTRAL EXPY DALLAS TX 75241-7316	16	COUNTY OF DALLAS 411 ELM ST DALLAS TX 75202-3301
5	JACK & LOIS APPERSON 1113 GREENBRIAR DR GARLAND TX 75043-5321	17	NICKS BIG TRUCK SALES 417 SUNFLOWER ST RED OAK TX 75154-4221
6	BRUCE & GAY FRAZER 2929 WESTMINSTER AVE DALLAS TX 75205-1508	18	COMET AUTO SALVAGE INC PO BOX 711 HUTCHINS TX 75141-0711
7	ONCOR ELECTRIC DELIVERY COMPANY PO BOX 139100 DALLAS TX 75313-9100	19	ENVIRONMENTAL INVESTMENTS LP 3048 HIGH RIDGE DR GRAPEVINE TX 76051-6807
8	METROPOLITAN SAND & GRAVEL CO LLC 10 MARYVIEW LN SAINT LOUIS MO 63124-1247	20	CASA FLORA INC PO BOX 41140 DALLAS TX 75241-0140
9	ELISEO J & AMAPOLA MARTINEZ 1201 SHADY GROVE IRVING TX 75060-6219	21	ANGELA ONEAL ET AL 9734 SOPHORA CIR DALLAS TX 75249-1422
10	PRESTIGE GRAM VENTURE LLC 7045 PORTOBELLO DR PLANO TX 75024-7570	22	SOUTHERN PACIFIC TRANS CO 1400 DOUGLAS ST STOP 1640 OMAHA NE 68179-1001
11	GERALDINE G CANGELOSE 804 KELLI CIR SULPHUR SPRINGS TX 75482-5078	23	UTSI FINANCE INC 12755 E 9 MILE RD WARREN MI 48089-2621
12	MARGARITO HERNANDEZ LOPEZ 2758 GLADSTONE DR DALLAS TX 75211-5205	24	SOUTHWEST PERENNIALS INC P O BOX 170867 DALLAS TX 75217-0867

McCommas Landfill
Adjacent Property Owners
Dallas Central Appraisal District, November 19, 2019

25	CALVIN H SHAHAN 1600 NOKOMIS RD LANCASTER TX 75146-5547	37	RANDALL RHODES 462 LOMA LINDA PALMER TX 75152-8149
26	GERALDINE GENEVA 804 KELLI CIR SULPHUR SPRINGS TX 75482-5078	38	MULAT AHMED MUHAMED 2513 REDBROOK DR GARLAND TX 75040-3740
27	SONIA MARILU GARCIA MELENDEZ 9919 BERMUDA DR DALLAS, TX 75241-7342	39	GAYTAN PROPERTIES LTD 801 PELLEGRINO CT LAREDO TX 78045-8216
28	U S REALTY HOLDINGS LTD 2415 W NORTHWEST HWY STE 105 DALLAS TX 75220-4446	40	RUIBAL FARMS LP 601 S PEARL EXPWY DALLAS TX 75201-6013
29	OMAR ACEITUNOFUENTES 9319 BERMUNDA RD DALLAS TX 75241	41	LEONARDO ANDRADE PO BOX 571 HUTCHINS TX 75141-0571
30	HUFFHINES PROPANE LLC PO BOX 709 HUTCHINS TX 75141-0709	42	CAMILO RODEA 9430 BERMUDA RD DALLAS TX 75241-7338
31	ANASTACIO SAMPAYO & SONIA SANCHEZ 3006 RUIDODO AVE DALLAS TX 75228	43	ADALBERTO YANEZ FLORES 9433 S CENTRAL EXPY DALLAS TX 75241-7325
32	MARY LOU COULSTON LF EST 9325 BERMUDA RD DALLAS TX 75241-7342	44	METROPOLITAN SERVICES LLC 2717 WICKHAM CT PLANO TX 75093
33	JACOBO HERNANDEZ & MARIA DEL ROSARIO 9331 BERMUDA RD DALLAS TX 75241-7342	45	LU ROS MACHINE INC. 9449 S CENTRAL EXPY DALLAS TX 75241-7325
34	CAR REY INC 9303 CORIANDER PL DALLAS TX 75217-8656	46	DESEV INVESTMENT GROUP LLC 310 OXFORD DR RICHARDSON TX 75080-5411
35	GENARO VINIEGRA 9339 BERMUDA RD DALLAS TX 75241-7342	47	ALMIRA INDUSTRIAL & TRADING CORP PO BOX 143343 IRVING TX 75014-3343
36	HELIODORO VINIEGRA & MARIA VINIEGRA 9340 BERMUDA RD DALLAS TX 75241-7337	48	GACHMAN METAL & RECYCLING INC. PO BOX 308 FORT WORTH TX 76101-0308

McCommas Landfill
Adjacent Property Owners
Dallas Central Appraisal District, November 19, 2019

49	US DELIVERY LLC 302 BROOKWOOD DR RICHARDSON TX 75080-4730
50	THE NELAN COMPANY PO BOX 180101 DALLAS TX 75218-0101
51	IRENE VAZQUEZ 9915 S CENTRAL EXPY DALLAS TX 75241-7320
52	UNION PACIFIC RR CO 1400 DOUGLAS ST STOP 1640 OMAHA NE 68179-1001
53	CITY OF DALLAS 1500 MARILLA ST DALLAS TX 75201
54	ASTEROID AUTO SALVAGE INC. 10701 CF HAWN FWY DALLAS TX 75217-8049
55	WHITE ANDRE 9255 S. CENTRAL EXPY DALLAS TX 75241-7512
56	CCR EQUITY HOLDINGS ONE LLC 906 W MCDERMOTT DRIVE STE 116-321 ALLEN TX 75013-6510



0 1/8 1/4
SCALE IN MILES

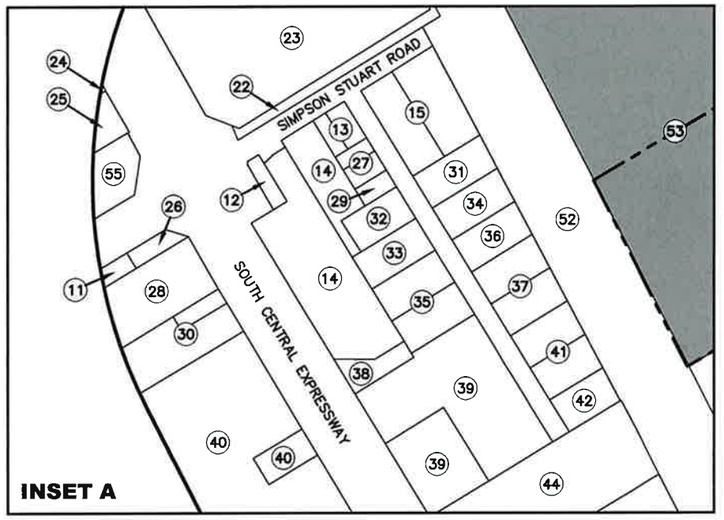
LEGEND

PERMIT BOUNDARY

1 LAND OWNERSHIP IDENTIFICATION

LAND OWNED BY THE CITY OF DALLAS

1/4 MILE RADIUS



STATE OF TEXAS
J. HEATH PARKER
94764
LICENSED
PROFESSIONAL ENGINEER

11/21/19

FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

PROPERTY OWNERS WITHIN 1/4 MILE

CITY OF DALLAS
McCOMMAS BLUFF LANDFILL

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

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. JHP	DATE : 11/19	DRAWING 1
DWN. SRC	SCALE : GRAPHIC	
CHK. JHP	DWG : QuarterMileOwnership.DWG	

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ATTACHMENT 3

PERMIT REPLACEMENT PAGES
(REDLINE/STRIKEOUT FORMAT)

SITE DEVELOPMENT PLAN

ATTACHMENT 5

MCCOMMAS BLUFF LANDFILL
DALLAS COUNTY, TEXAS
TCEQ PERMIT NO. MSW 62

PERMIT MODIFICATION

ATTACHMENT 5
GROUNDWATER CHARACTERIZATION REPORT AND GROUNDWATER MONITORING PLAN

Prepared for

City of Dallas

February 2009
Revised June 2009
Revised June 2014

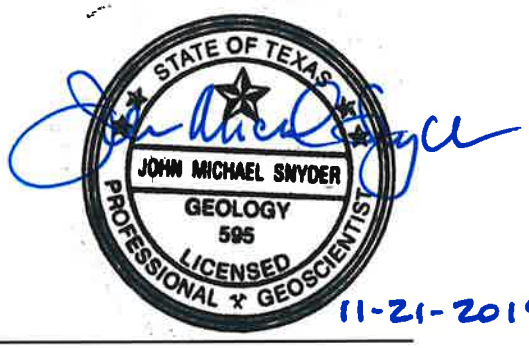
Revised November 2019

Prepared by

BIGGS & MATHEWS ENVIRONMENTAL
1700 Robert Road, Suite 100 • Mansfield, Texas 76063 • 817-563-1144

TEXAS BOARD OF PROFESSIONAL ENGINEERS
FIRM REGISTRATION NO. F-256

TEXAS BOARD OF PROFESSIONAL GEOSCIENTISTS
FIRM REGISTRATION NO. 50222



11-21-2019

CONTENTS

LIST OF TABLES

Table **Page**

2 GROUNDWATER MONITORING SYSTEM

2.1 Monitoring Well Locations

A revised monitoring system is herein proposed and shown on Figure 5B.1 that meets the spacing requirements of Subchapter J. Spacing between all wells in the proposed system is less than 600 feet.

The existing groundwater monitoring system monitors the Alluvium overlying the Austin Chalk. The existing approved system consists of 16 wells (3 upgradient and 13 downgradient wells) that are currently installed. The remaining wells in the approved system are to be phased in as cell development progresses in the northeast part of the site. The location of the approved monitoring plan is shown on Figure 5B.3.

The system will ultimately consist of 29 monitoring wells. MW-1, MW-2, and MW-10 are existing upgradient wells. MW-3R, MW-4, MW-5, MW-6, MW-7R, MW-11R, MW-12, MW-13, MW-14R, MW-15, MW-16, MW-17, MW-18, MW-19, MW-20, and MW-21 are currently installed. ~~MW-3R and MW-11R (which will replace existing MW-3 and MW-11) will be installed following approval of this modification.~~

The other proposed wells will be installed in a phased approach tied to future cell development. Specifically, MW-22 through MW-25 will be installed prior to waste filling in Cell 7A, MW-26 through MW-28 will be installed prior to waste filling in Cell 8, and MW-29 through MW-31 will be installed prior to waste filling in Cell 9. The monitoring well locations are shown on Figure 5B.1. The monitoring well details are included on Figure 5B.2.

There will be no lapse in detection monitoring while background is obtained for new wells. Wells in the existing monitoring system that are proposed to be plugged and abandoned will continue in detection monitoring until detection monitoring can begin in the modified monitoring system.

2.2 Monitoring Well Design

Groundwater monitoring well details are shown on Figure 5B.2 of this attachment. Typically, the wells consist of 4-inch diameter, flush-threaded PVC (Schedule 40) with 0.01-inch slotted PVC screens. Monitoring wells will have 10-foot screens. The filter pack sand will be a 20-40 grade silica sand and will be placed from total well depth to about 3 feet above the top of the well screen. A 3-foot-thick bentonite seal consisting of bentonite pellets will be hydrated in place on top of the filter pack sand. The remainder of the well boring is pressure grouted with bentonite grout to within 2 feet of the surface.

Table 3
McCommas Bluff Landfill
Monitoring Well Details

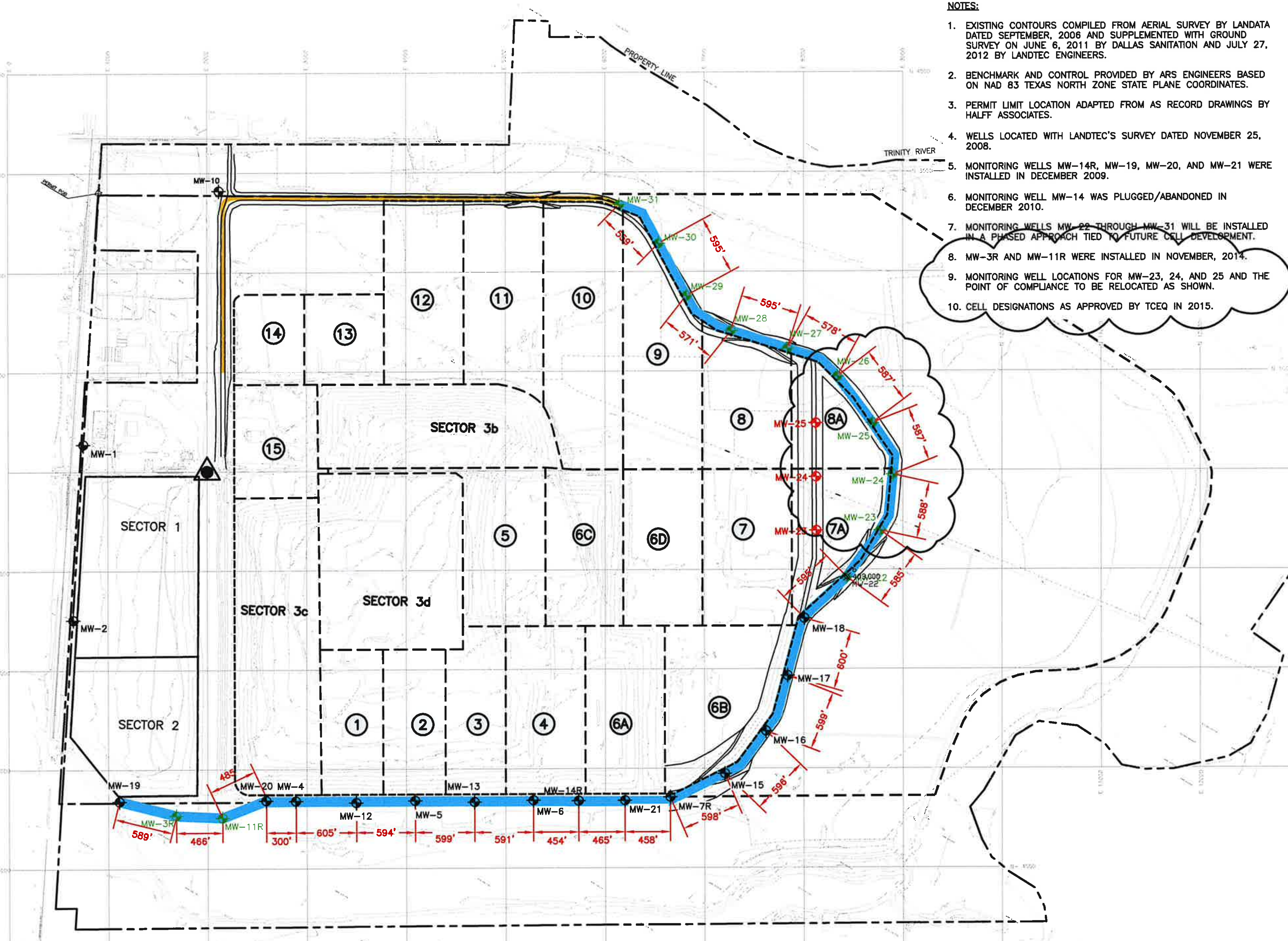
Monitoring Well No.	Northing	Easting	Ground Elevation	Total Well Depth		Top of Casing Elevation	Depth to Groundwater	Screened Interval (ft)		Filter Pack Interval (ft)	
			(ft/msl)	(ft/msl)	(ft)	(ft/msl)	(ft)	From	To	From	To
Currently Approved Monitoring Wells											
MW-1	274.43	757.33	398.90	370.40	28.50	400.73	12.40	17.50	27.50	12.00	28.50
MW-2	-1493.27	652.26	397.75	349.25	48.50	399.82	30.00	36.50	46.50	18.00	48.50
~~MW-3~~	~~-3330.70~~	~~1694.48~~	~~390.95~~	~~359.95~~	~~31.00~~	~~394.95~~	~~17.50~~	~~20.00~~	~~30.00~~	~~12.00~~	~~31.00~~
MW-4	-3320.27	2888.79	408.98	353.59	55.39	412.36	34.00	44.69	55.19	42.89	55.39
MW-3R	-3466.32	1682.19	387.65	358.65	29.0	389.96	19.02	18.50	28.50	16.50	29.0
MW-5	-3318.03	4087.43	410.03	353.03	57.00	413.47	40.30	46.10	56.60	45.00	57.00
MW-6	-3316.26	5277.17	410.74	353.59	57.15	413.47	33.00	46.65	57.15	44.65	57.15
MW-7R	-3287.13	6654.99	404.00	324.00	80.00	406.44	37.30	69.00	79.00	35.00	80.00
MW-10	2819.11	2121.16	408.23	367.73	40.50	410.70	19.00	29.40	39.90	27.50	40.50
~~MW-11~~	~~-3282.88~~	~~2230.41~~	~~412.06~~	~~357.06~~	~~55.00~~	~~415.80~~	~~44.00~~	~~37.00~~	~~55.00~~	~~35.00~~	~~55.00~~
MW-11R	-3487.80	2148.53	385.73	359.23	26.5	388.30	17.28	16.00	26.00	14.00	26.5
MW-12	-3337.86	3493.64	409.58	347.53	62.05	413.39	34.00	39.05	62.05	37.05	62.05
MW-13	-3332.73	4686.08	406.00	348.88	57.12	409.24	42.00	32.12	57.12	27.12	57.12
MW-14R	-3322.64	5731.55	407.40	357.90	49.50	409.86	37.00	39.50	49.50	34.50	49.50
MW-15	-3051.76	7204.41	403.00	321.00	82.00	405.85	37.83	72.00	82.00	40.00	82.00
MW-16	-2623.38	7618.84	403.10	346.10	57.00	406.60	34.37	47.00	57.00	29.00	57.00
MW-17	-2065.75	7838.63	403.00	343.00	60.00	406.73	35.58	50.00	60.00	30.00	60.00
MW-18	-1489.56	8007.27	403.10	341.10	62.00	406.77	36.05	52.00	62.00	32.00	62.00
MW-19	-3282.78	1152.39	402.57	351.57	51.00	405.18	27.18	41.00	51.00	36.00	51.00
MW-20	-3315.26	2588.15	410.03	360.53	49.50	412.36	36.00	39.50	49.50	34.00	49.50
MW-21	-3319.98	6196.52	407.23	355.23	52.00	409.63	37.05	42.00	52.00	36.50	52.00
MW-22*	-1077.06	8436.07	403.00	337.00	63.00	402.00	19.00	53.00	63.00	47.50	63.00
MW-23*	-605.89	8776.11	402.00	343.00	47.00	392.00	17.00	37.00	47.00	31.50	47.00
MW-24*	-43.63	8900.70	401.00	347.00	37.65	386.65	11.00	27.65	37.65	22.15	37.65
MW-25*	475.09	8696.34	402.00	353.00	31.01	386.01	11.00	21.01	31.01	15.51	31.01
MW-26*	944.39	8343.37	400.00	350.00	50.00	402.00	27.00	40.00	50.00	34.50	50.00
MW-27*	1224.85	7837.83	400.00	345.00	55.00	402.00	27.00	45.00	55.00	39.50	55.00
MW-28*	1403.41	7270.25	400.00	345.00	55.00	402.00	27.00	45.00	55.00	39.50	55.00
MW-29*	1757.04	6821.33	400.00	355.00	45.00	402.00	27.00	35.00	45.00	29.50	45.00
MW-30*	2280.86	6539.12	400.00	365.00	35.00	402.00	27.00	25.00	35.00	19.50	35.00
MW-31*	2673.68	6141.32	400.00	370.00	30.00	402.00	27.00	20.00	30.00	14.50	30.00
~~*Proposed Monitoring Wells*~~											
~~MW-3R~~	~~-3466.32~~	~~1682.19~~	~~390.00~~	~~360.00~~	~~30.00~~	~~392.00~~	~~17.00~~	~~20.00~~	~~30.00~~	~~14.50~~	~~30.00~~
~~MW-11R~~	~~-3487.80~~	~~2148.53~~	~~390.00~~	~~360.00~~	~~30.00~~	~~392.00~~	~~17.00~~	~~20.00~~	~~30.00~~	~~14.50~~	~~30.00~~

*Wells will be installed prior to waste filling in Cells 7A, 8, and 9

MCCOMMAS BLUFF LANDFILL

APPENDIX 5B

GROUNDWATER MONITORING SYSTEM



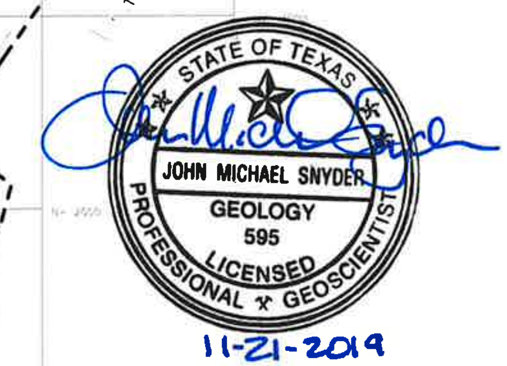
NOTES:

1. EXISTING CONTOURS COMPILED FROM AERIAL SURVEY BY LANDATA DATED SEPTEMBER, 2006 AND SUPPLEMENTED WITH GROUND SURVEY ON JUNE 6, 2011 BY DALLAS SANITATION AND JULY 27, 2012 BY LANDTEC ENGINEERS.
2. BENCHMARK AND CONTROL PROVIDED BY ARS ENGINEERS BASED ON NAD 83 TEXAS NORTH ZONE STATE PLANE COORDINATES.
3. PERMIT LIMIT LOCATION ADAPTED FROM AS RECORD DRAWINGS BY HALFF ASSOCIATES.
4. WELLS LOCATED WITH LANDTEC'S SURVEY DATED NOVEMBER 25, 2008.
5. MONITORING WELLS MW-14R, MW-19, MW-20, AND MW-21 WERE INSTALLED IN DECEMBER 2009.
6. MONITORING WELL MW-14 WAS PLUGGED/ABANDONED IN DECEMBER 2010.
7. ~~MONITORING WELLS MW-22 THROUGH MW-31 WILL BE INSTALLED IN A PHASED APPROACH TIED TO FUTURE CELL DEVELOPMENT.~~
8. MW-3R AND MW-11R WERE INSTALLED IN NOVEMBER, 2014.
9. MONITORING WELL LOCATIONS FOR MW-23, 24, AND 25 AND THE POINT OF COMPLIANCE TO BE RELOCATED AS SHOWN.
10. CELL DESIGNATIONS AS APPROVED BY TCEQ IN 2015.

LEGEND

- BENCHMARK
- PROPERTY LINE
- PERMIT BOUNDARY
- WASTE LIMIT
- SITE GRID
- POINT OF COMPLIANCE
- SLURRY WALL
- MW-2 MONITORING WELL
- MW-21 TO BE INSTALLED MONITORING WELL
- MW-24 PREVIOUSLY APPROVED MONITORING WELL LOCATION
- 9 CELL NUMBER

0 500 1000
SCALE IN FEET



ISSUED FOR PERMITTING PURPOSES

GROUNDWATER MONITORING SYSTEM

CITY OF DALLAS
McCOMMAS BLUFF LANDFILL
ATTACHMENT 5 – PERMIT MODIFICATION

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

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

REVISIONS						
	11/19	PERMIT MOD-RELOCATE WELLS	BBB	JMS	EAL	JMS
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DSN. EAS	DATE : 11/19	FIGURE	
DWN. BBB	SCALE : GRAPHIC	5B.1	
CHK. JMS	DWG : 5B-1_REVISED.dwg		

J:\203\01\103\5B-1_REVISED.dwg Layout: REDLINE User: HParker

Groundwater Monitoring System Design Certification

General Site Information

Site: McCommas Bluff Landfill

Site Location: Dallas County, Texas

MSW Permit No.: 62

Qualified Groundwater Scientist Statement

I, Michael Snyder, am a registered professional geologist in the State of Texas and a qualified groundwater scientist as defined in §330.3. I have reviewed the groundwater monitoring system and supporting data contained herein. In my professional opinion, the groundwater monitoring system is in compliance with the groundwater monitoring requirements specified in 30 TAC §330.401 through §330.409. This system has been designed for specification application to the McCommas Bluff Landfill (Permit No. MSW 62). I warranty 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 made or intended.

Firm/Address: Biggs and Mathews Environmental, Inc.
1700 Robert Rd. Suite 100
Mansfield, TX 76063

Signature: _____
Michael Snyder, P.G. No. 595 - Texas

STATE OF TEXAS
JOHN MICHAEL SNYDER
GEOLOGY
595
LICENSED
PROFESSIONAL GEOSCIENTIST

Date: 11-21-2019

FIGURE 5B.4

SITE DEVELOPMENT PLAN

ATTACHMENT 14

ATTACHMENT 14

LANDFILL GAS MANAGEMENT PLAN

McCOMMAS BLUFF LANDFILL
PERMIT NO. MSW-62
CITY OF DALLAS

DALLAS COUNTY, TEXAS

Prepared by Robert W. Mosley, P.E.

March 1994

Revised

July 1998
June 2001
February 2002
September 2006
May 2016
November 2019

FOR PERMIT MODIFICATION
REVISIONS TO SECTION 6 AND
APPENDIX 1

LANDFILL GAS MANAGEMENT PLAN

McCOMMAS BLUFF LANDFILL

Table of Contents

FOR PERMIT MODIFICATION
REVISIONS TO SECTION 6

6.0 LANDFILL GAS COLLECTION

Existing LFG Collection and Control System

Currently, the site has an active LFG collection and control system (GCCS), as shown in Appendix D of Appendix 1 on Drawing 1. The existing GCCS consists of vertical LFG extraction wells, a piping network, a condensate management system, and a blower/flare facility, and a landfill gas-to-energy (LFGTE) facility. The existing blowers provide vacuum to the extraction wells through the LFG collection piping network. The extracted LFG is routed from the collection points to the LFGTE facility. Any remaining extracted LFG not sent to the LFGTE facility is diverted to an on-site flare where the gas is combusted.

From 2000-2015, approximately 265 wells were drilled, 119 wells were redrilled, and 35 horizontal collectors were added to the GCCS. These wells and horizontals are shown on Drawing 2 in Appendix D of Appendix 1.

In 2015, 5 remediation wells were installed in Sector 3C to limit migration of LFG in this area. In 2016, 6 additional remediation wells were installed in Sector 3C. All of these wells were completed similar to typical extraction wells at the site, except that they were drilled to within 5 feet of the bottom of waste. Following the installation of the remediation wells, 11 existing geoprobes outside of waste near the edge of Sector 3C and Cell 1 were converted to passive vents. The locations of the remediation wells and passive vents is shown on Drawing 2A in Appendix D of Appendix 1.

In 2020, three of the existing converted passive vents (PV-1, PV-4, and PV-5) will be removed and replaced with passive vents with a larger diameter casing. Also, eight additional passive vents will be added in the area between PV-2 and PV-6 to provide a closer spacing between the vents in order to better intercept any potential migrating LFG. Three additional passive vents will also be added near MW-13. These additional passive vents are also shown on Drawing 2A in Appendix D of Appendix 1.

In addition, a shallow clay cutoff trench has been constructed on the south side of the site adjacent to Sector 3C, Cell 1, and Cell 2. This trench was installed near the limits of waste, above the anchor trench, to serve as a barrier to prevent potential migration of LFG using the liner protective cover layer as a pathway. To install the trench, all of the soil above the anchor trench, including the protective cover, was excavated. This area was then backfilled with compacted clay to ground surface.

As additional waste is placed, the existing LFG extraction wells will be extended and/or redrilled as necessary.

Future GCCS Expansions

As the site develops, additional extraction wells will be installed as needed to reduce the buildup of internal gas pressures caused by the increased generation of LFG. Additional blowers and piping network will be installed as needed to provide the vacuum and capacity to handle the flow rate of LFG in the future.

Operation and Maintenance

Wellhead and system monitoring will be performed on a routine basis to monitor overall system performance. As needed, system adjustments will be made to optimize the extraction of LFG from the landfill to control LFG migration, odors, and greenhouse gases. In addition, the system will be routinely visually inspected for any evidence of needed repairs or other maintenance. General maintenance procedures will include the following:

- Each wellhead will be monitored and adjusted as needed to control LFG while reducing oxygen intrusion into the landfill.
- Condensate sumps will be checked for proper operation.
- Blowers and flares will be inspected for proper operation.

LANDFILL GAS COLLECTION AND CONTROL SYSTEM
DESIGN PLAN REPORT
CITY OF DALLAS
MUNICIPAL SOLID WASTE
LANDFILL – MSW PERMIT No. 62

Appendix 1 to Attachment 14

Prepared for City of Dallas

Dallas, TX

Original Report July 1998

Revised June 2001

Supplement to June 2001 Revision-February 2002

Revised September 2006

Revised May 2016

Revised November 2019

FOR PERMIT MODIFICATION
REVISIONS TO APPENDIX 1

0 300 600
SCALE IN FEET

LEGEND

- PERMIT BOUNDARY
- LIMIT OF WASTE
- SITE GRID
- EXISTING CONTOUR
- D63 EXISTING LFG EXTRACTION WELL
- EXISTING LFG COLLECTION PIPING
- EXISTING HORIZONTAL COLLECTOR ACCESS RISER/CENTER
- EXISTING HORIZONTAL COLLECTOR WELLHEAD/EAST END
- EXISTING HORIZONTAL COLLECTOR WEST END
- S15 EXISTING CONDENSATE SUMP OR BAROMETRIC TRAP
- EXISTING LFG ISOLATION VALVE
- EXISTING REMOTE WELLHEAD
- EXISTING CONDENSATE FORCEMAIN
- EXISTING LCR CONNECTION
- CLAY CUTOFF TRENCH
- PV-1 EXISTING PASSIVE VENT

NOTE:

1. CONTOURS AND ELEVATIONS COMPILED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 3, 2014.
2. LOCATION OF EXISTING LFG COMPONENTS PROVIDED BY SCS ENGINEERS.

STATE OF TEXAS
J. HEATH PARKER
94764
LICENSED
PROFESSIONAL ENGINEER

J. Heath Parker
11/21/19

FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	11/19	ADDED COMPONENTS	SRC	ALM	JHP	JHP

EXISTING GCCS

CITY OF DALLAS
McCOMMAS BLUFF LANDFILL

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. ALM DATE : 11/19
DWN. SRC SCALE : GRAPHIC
CHK. JHP DWG : 1-ExGCCS.dwg
DRAWING 1

J:\203\01\900\2018 Permit Mod\1-ExGCCS.dwg Layout: REDLINE User: HParker

ATTACHMENT 4

PERMIT REPLACEMENT PAGES

SITE DEVELOPMENT PLAN

ATTACHMENT 5

MCCOMMAS BLUFF LANDFILL
DALLAS COUNTY, TEXAS
TCEQ PERMIT NO. MSW 62

PERMIT MODIFICATION

ATTACHMENT 5
GROUNDWATER CHARACTERIZATION REPORT AND GROUNDWATER MONITORING PLAN

Prepared for

City of Dallas

February 2009
Revised June 2009
Revised June 2014

Revised November 2019

11-21-2019

Prepared by

BIGGS & MATHEWS ENVIRONMENTAL
1700 Robert Road, Suite 100 • Mansfield, Texas 76063 • 817-563-1144

TEXAS BOARD OF PROFESSIONAL ENGINEERS
FIRM REGISTRATION NO. F-256

TEXAS BOARD OF PROFESSIONAL GEOSCIENTISTS
FIRM REGISTRATION NO. 50222

11-21-2019

CONTENTS

LIST OF TABLES

Table **Page**

1 SITE HYDROGEOLOGY

1.1 Site Geology

McCommas Bluff Landfill is located in south Dallas near the intersection of Interstate 45 and Interstate 20. It is situated in the Trinity River Valley just to the west of the Trinity River, which flows to the south.

More than 100 borings, piezometers, and monitoring wells have been drilled during various site exploration and permitting events since the 1970s. Lithologic logs from the borings and wells have been used to characterize the site geology and stratigraphy.

The landfill is located in alluvial clay, silt, and sand deposits of Quaternary Age. The alluvial materials overlie the limestone beneath the site. The alluvium consists of from 20 to more than 60 feet of clay and silty, sandy clay near the surface. At the base of the clayey portion of the alluvium most of the site is a silty, fine to medium sand that contains gravel in places. This sand zone ranges in thickness from 1 foot to more than 25 feet in thickness. An isopach map of the Alluvial Sand is shown on Figure 5A.2.

The alluvial materials were deposited by the ancestral Trinity River and its tributaries as they incised the underlying limestone. This eroded limestone surface is shown on Figure 5A.3. The southeastern and southward slope of the top of the eroded limestone reflects the general southeastward flow of surface water in the ancestral Trinity River Basin and the direction of groundwater flow to the southeast in the present. The Austin Chalk (Limestone) and the underlying Eagle Ford Shale comprise several hundred feet of low permeability material between the base of the Alluvium and the Woodbine Aquifer beneath the Eagle Ford. Figure 5A.5 is a geologic cross section that shows the relationship between the clay, alluvial sand, and the limestone.

1.2 Hydrogeologic Units

1.2.1 Alluvial Sands – Uppermost Aquifer

Groundwater occurs in the sands found at the lower part of the alluvium that overlies the Austin Chalk (Limestone). A geologic cross section depicting the stratigraphic relationships is shown on Figure 5A.5. Groundwater in the alluvium is unconfined.

This sand interval consists of coarse to fine, light gray to tan sand and silty sand with occasional clayey sand and gravel. The sand unit ranges in thickness from 1 foot to more than 25 feet and occurs across most of the site. The sand is absent in a few areas along the south and east sides of the site. However, in its place, within the same interval

Table 3
McCommas Bluff Landfill
Monitoring Well Details

Monitoring Well No.	Northing	Easting	Ground Elevation	Total Well Depth		Top of Casing Elevation	Depth to Groundwater	Screened Interval (ft)		Filter Pack Interval (ft)	
			(ft/msl)	(ft/msl)	(ft)	(ft/msl)	(ft)	From	To	From	To
Currently Approved Monitoring Wells											
MW-1	274.43	757.33	398.90	370.40	28.50	400.73	12.40	17.50	27.50	12.00	28.50
MW-2	-1493.27	652.26	397.75	349.25	48.50	399.82	30.00	36.50	46.50	18.00	48.50
MW-4	-3320.27	2888.79	408.98	353.59	55.39	412.36	34.00	44.69	55.19	42.89	55.39
MW-3R	-3466.32	1682.19	387.65	358.65	29.0	389.96	19.02	18.50	28.50	16.50	29.0
MW-5	-3318.03	4087.43	410.03	353.03	57.00	413.47	40.30	46.10	56.60	45.00	57.00
MW-6	-3316.26	5277.17	410.74	353.59	57.15	413.47	33.00	46.65	57.15	44.65	57.15
MW-7R	-3287.13	6654.99	404.00	324.00	80.00	406.44	37.30	69.00	79.00	35.00	80.00
MW-10	2819.11	2121.16	408.23	367.73	40.50	410.70	19.00	29.40	39.90	27.50	40.50
MW-11R	-3487.80	2148.53	385.73	359.23	26.5	388.30	17.28	16.00	26.00	14.00	26.5
MW-12	-3337.86	3493.64	409.58	347.53	62.05	413.39	34.00	39.05	62.05	37.05	62.05
MW-13	-3332.73	4686.08	406.00	348.88	57.12	409.24	42.00	32.12	57.12	27.12	57.12
MW-14R	-3322.64	5731.55	407.40	357.90	49.50	409.86	37.00	39.50	49.50	34.50	49.50
MW-15	-3051.76	7204.41	403.00	321.00	82.00	405.85	37.83	72.00	82.00	40.00	82.00
MW-16	-2623.38	7618.84	403.10	346.10	57.00	406.60	34.37	47.00	57.00	29.00	57.00
MW-17	-2065.75	7838.63	403.00	343.00	60.00	406.73	35.58	50.00	60.00	30.00	60.00
MW-18	-1489.56	8007.27	403.10	341.10	62.00	406.77	36.05	52.00	62.00	32.00	62.00
MW-19	-3282.78	1152.39	402.57	351.57	51.00	405.18	27.18	41.00	51.00	36.00	51.00
MW-20	-3315.26	2588.15	410.03	360.53	49.50	412.36	36.00	39.50	49.50	34.00	49.50
MW-21	-3319.98	6196.52	407.23	355.23	52.00	409.63	37.05	42.00	52.00	36.50	52.00
MW-22*	-1077.06	8436.07	403.00	337.00	63.00	402.00	19.00	53.00	63.00	47.50	63.00
MW-23*	-605.89	8776.11	402.00	343.00	47.00	392.00	17.00	37.00	47.00	31.50	47.00
MW-24*	-43.63	8900.70	401.00	347.00	37.65	386.65	11.00	27.65	37.65	22.15	37.65
MW-25*	475.09	8696.34	402.00	353.00	31.01	386.01	11.00	21.01	31.01	15.51	31.01
MW-26*	944.39	8343.37	400.00	350.00	50.00	402.00	27.00	40.00	50.00	34.50	50.00
MW-27*	1224.85	7837.83	400.00	345.00	55.00	402.00	27.00	45.00	55.00	39.50	55.00
MW-28*	1403.41	7270.25	400.00	345.00	55.00	402.00	27.00	45.00	55.00	39.50	55.00
MW-29*	1757.04	6821.33	400.00	355.00	45.00	402.00	27.00	35.00	45.00	29.50	45.00
MW-30*	2280.86	6539.12	400.00	365.00	35.00	402.00	27.00	25.00	35.00	19.50	35.00
MW-31*	2673.68	6141.32	400.00	370.00	30.00	402.00	27.00	20.00	30.00	14.50	30.00

*Wells will be installed prior to waste filling in Cells 7A, 8, and 9

MCCOMMAS BLUFF LANDFILL

APPENDIX 5B

GROUNDWATER MONITORING SYSTEM

NOTES:

1. EXISTING CONTOURS COMPILED FROM AERIAL SURVEY BY LANDATA DATED SEPTEMBER, 2006 AND SUPPLEMENTED WITH GROUND SURVEY ON JUNE 6, 2011 BY DALLAS SANITATION AND JULY 27, 2012 BY LANDTEC ENGINEERS.
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LEGEND

- BENCHMARK
- PROPERTY LINE
- PERMIT BOUNDARY
- WASTE LIMIT
- SITE GRID
- POINT OF COMPLIANCE
- SLURRY WALL
- MW-2 MONITORING WELL
- MW-21 TO BE INSTALLED MONITORING WELL
- (9) CELL NUMBER

0 500 1000
SCALE IN FEET

PROPERTY LINE
TRINITY RIVER
POWER POLE
SECTOR 1
SECTOR 2
SECTOR 3b
SECTOR 3c
SECTOR 3d
MW-1
MW-2
MW-10
MW-19
MW-3R
MW-20
MW-4
MW-11R
MW-12
MW-13
MW-5
MW-14R
MW-6
MW-21
MW-7R
MW-15
MW-16
MW-17
MW-18
MW-22
MW-23
MW-24
MW-25
MW-26
MW-27
MW-28
MW-29
MW-30
MW-31
589'
485'
466'
300'
605'
594'
599'
591'
454'
465'
458'
598'
596'
600'
595'
585'
588'
587'
578'
571'
595'
559'

STATE OF TEXAS
JOHN MICHAEL SNYDER
GEOLOGY
595
LICENSED
PROFESSIONAL GEOSCIENTIST
11-21-2019

ISSUED FOR PERMITTING PURPOSES

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY
	11/19	PERMIT MOD-RELOCATE WELLS	BBB	JMS	EAL	JMS

GROUNDWATER MONITORING SYSTEM

CITY OF DALLAS
McCOMMAS BLUFF LANDFILL
ATTACHMENT 5 – PERMIT MODIFICATION

BIGGS & MATHEWS ENVIRONMENTAL
CONSULTING ENGINEERS
MANSFIELD
DALLAS • WICHITA FALLS
817-563-1144
TBPE FIRM NO. F-256 TBPG FIRM NO. 50222

DSN. EAS	DATE : 11/19	FIGURE	
DWN. BBB	SCALE : GRAPHIC	5B.1	
CHK. JMS	DWG : 5B-1_REVISED.dwg		

J:\203\01\103\5B-1_REVISED.dwg Layout: CLEAN User: HParker

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Firm/Address: Biggs and Mathews Environmental, Inc.
1700 Robert Rd. Suite 100
Mansfield, TX 76063

Signature: _____
Michael Snyder, P.G. No. 595 - Texas

STATE OF TEXAS
JOHN MICHAEL SNYDER
GEOLOGY
595
LICENSED
PROFESSIONAL GEOSCIENTIST

Date: 11-21-2019

FIGURE 5B.4

SITE DEVELOPMENT PLAN

ATTACHMENT 14

ATTACHMENT 14

LANDFILL GAS MANAGEMENT PLAN

McCOMMAS BLUFF LANDFILL
PERMIT NO. MSW-62
CITY OF DALLAS

DALLAS COUNTY, TEXAS

Prepared by Robert W. Mosley, P.E.

March 1994

Revised

July 1998
June 2001
February 2002
September 2006
May 2016
November 2019

FOR PERMIT MODIFICATION REVISIONS TO SECTION 6 AND APPENDIX 1

LANDFILL GAS MANAGEMENT PLAN

McCOMMAS BLUFF LANDFILL

Table of Contents

FOR PERMIT MODIFICATION
REVISIONS TO SECTION 6

11/21/19

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- Blowers and flares will be inspected for proper operation.

LANDFILL GAS COLLECTION AND CONTROL SYSTEM
DESIGN PLAN REPORT
CITY OF DALLAS
MUNICIPAL SOLID WASTE
LANDFILL – MSW PERMIT No. 62

Appendix 1 to Attachment 14

Prepared for City of Dallas

Dallas, TX

Original Report July 1998

Revised June 2001

Supplement to June 2001 Revision-February 2002

Revised September 2006

Revised May 2016

Revised November 2019

FOR PERMIT MODIFICATION
REVISIONS TO APPENDIX 1

0 300 600

SCALE IN FEET

LEGEND

- PERMIT BOUNDARY
- LIMIT OF WASTE
- SITE GRID
- EXISTING CONTOUR
- D63 EXISTING LFG EXTRACTION WELL
- EXISTING LFG COLLECTION PIPING
- EXISTING HORIZONTAL COLLECTOR ACCESS RISER/CENTER
- EXISTING HORIZONTAL COLLECTOR WELLHEAD/EAST END
- EXISTING HORIZONTAL COLLECTOR WEST END
- S15 EXISTING CONDENSATE SUMP OR BAROMETRIC TRAP
- EXISTING LFG ISOLATION VALVE
- EXISTING REMOTE WELLHEAD
- EXISTING CONDENSATE FORCEMAIN
- EXISTING LCR CONNECTION
- CLAY CUTOFF TRENCH
- PV-1 EXISTING PASSIVE VENT

NOTE:

1. CONTOURS AND ELEVATIONS COMPILED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 3, 2014.
2. LOCATION OF EXISTING LFG COMPONENTS PROVIDED BY SCS ENGINEERS.

STATE OF TEXAS
J. HEATH PARKER
94764
LICENSED
PROFESSIONAL ENGINEER

J. Heath Parker
11/21/19

FOR PERMITTING PURPOSES ONLY

REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

EXISTING GCCS

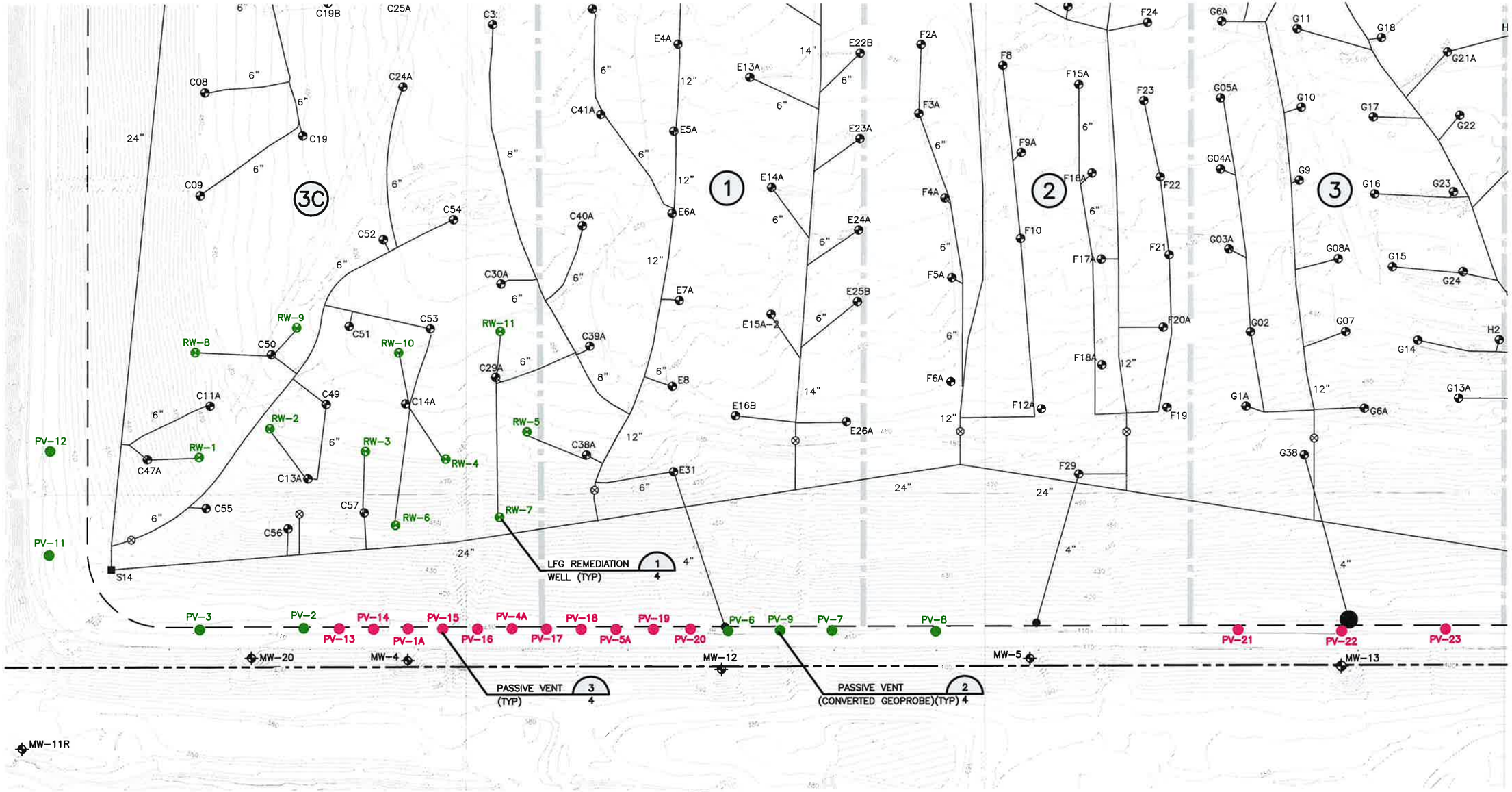
CITY OF DALLAS
McCOMMAS BLUFF LANDFILL

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

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. ALM	DATE : 11/19		DRAWING
DWN. SRC	SCALE : GRAPHIC		1
CHK. JHP	DWG : 1-ExGCCS.dwg		

J:\203\01\900\2018 Permit Mod\1-ExGCCS.dwg Layout: CLEAN User: HParker



LEGEND

- PERMIT BOUNDARY
- LIMIT OF WASTE
- SITE GRID
- EXISTING CONTOUR
- CELL BOUNDARY
- (1) CELL DESIGNATION
- MW-11R MONITORING WELL
- F22 EXISTING LFG EXTRACTION WELL
- EXISTING LFG COLLECTION PIPING
- S14 EXISTING CONDENSATE SUMP OR BAROMETRIC TRAP
- EXISTING LFG ISOLATION VALVE
- EXISTING LCR CONNECTION
- RW-8 INSTALLED LFG EXTRACTION WELL
- PV-8 INSTALLED PASSIVE VENT
- PV-14 PROPOSED PASSIVE VENT

STATE OF TEXAS
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11/21/19

NOTES:

1. CONTOURS AND ELEVATIONS COMPILED BY DALLAS AERIAL SURVEYS, INC. FROM AERIAL PHOTOGRAPHY FLOWN JANUARY 3, 2014.

0 100 200
SCALE IN FEET

FOR PERMITTING PURPOSES ONLY

REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

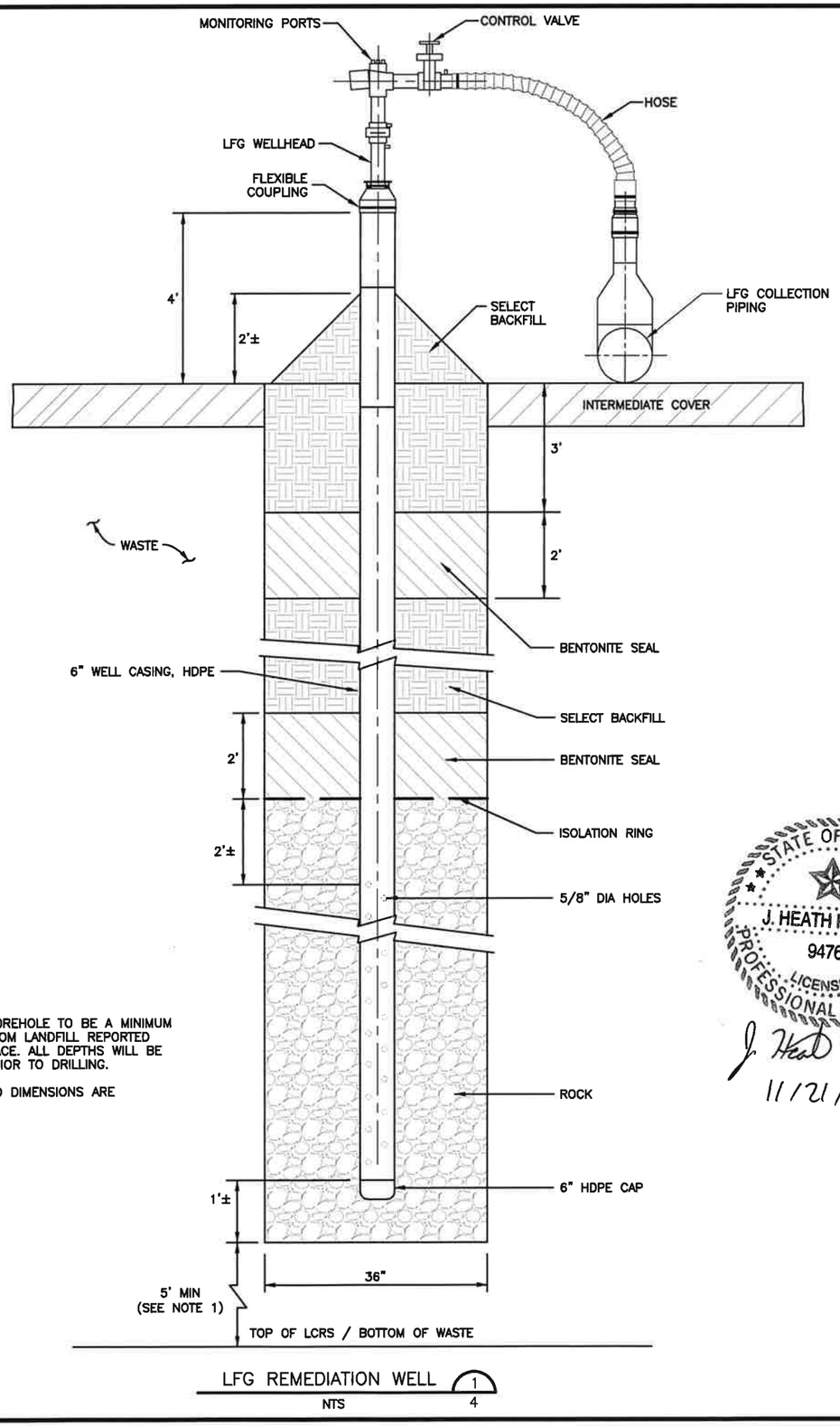
LFG REMEDIATION UPGRADES (2015 – 2020)

CITY OF DALLAS
McCOMMAS BLUFF LANDFILL

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

TBPE FIRM NO. F-256 | TBPG FIRM NO. 50222

DSN. ALM	DATE : 11/19	DRAWING	2A
DWN. SRC	SCALE : GRAPHIC		
CHK. JHP	DWG : 2A-LFGRemediationUpgrades.dwg		



LFG REMEDIATION WELL 1/4
NTS

NOTES:

1. BOTTOM OF BOREHOLE TO BE A MINIMUM OF 5 FEET FROM LANDFILL REPORTED BOTTOM SURFACE. ALL DEPTHS WILL BE CONFIRMED PRIOR TO DRILLING.
2. ALL SIZES AND DIMENSIONS ARE APPROXIMATE.

STATE OF TEXAS
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94764
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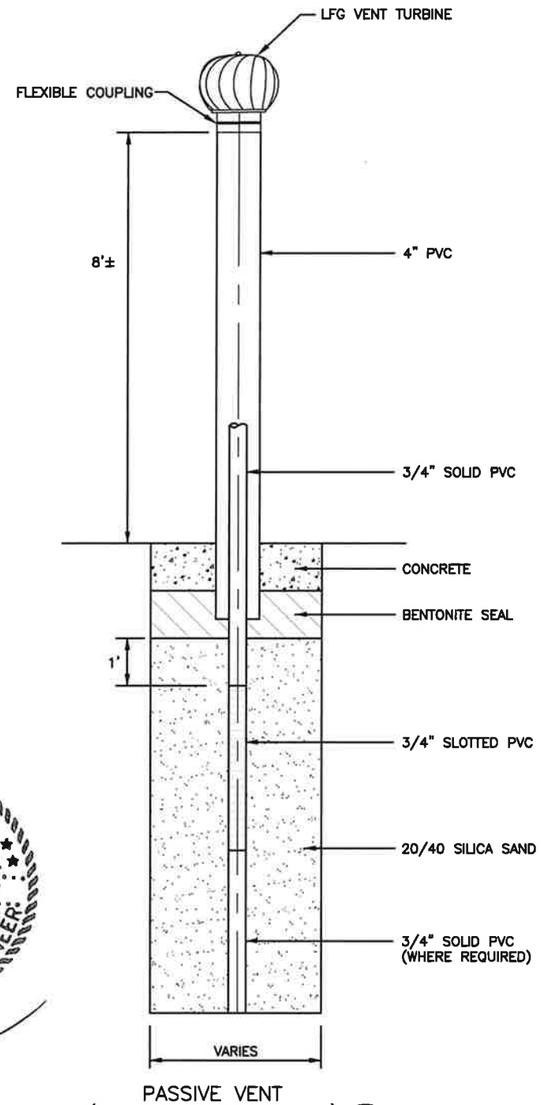
PROFESSIONAL ENGINEER

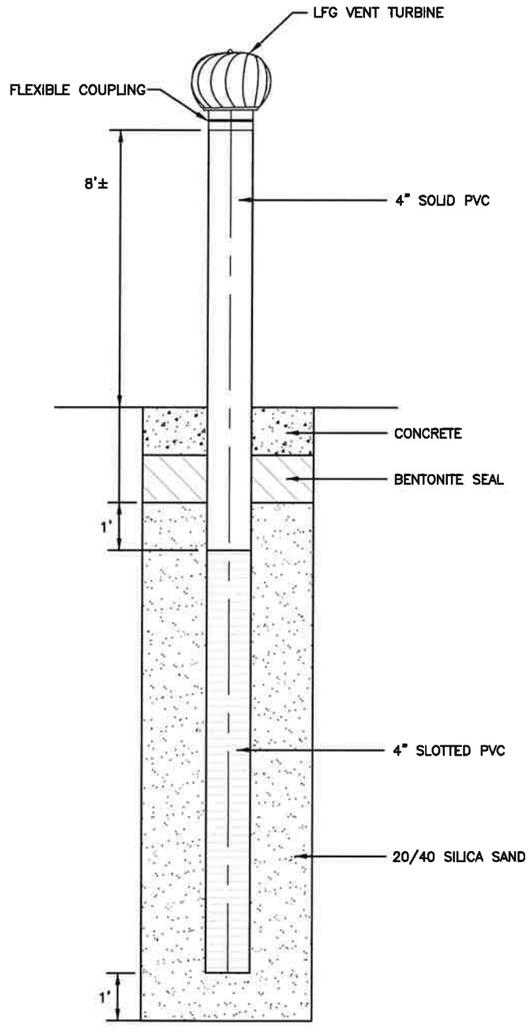
11/21/19



PASSIVE VENT (CONVERTED GEOPROBE) 2/4
NTS

NOTE:

1. ALL SIZES AND DIMENSIONS ARE APPROXIMATE.



PASSIVE VENT 3/4
NTS

NOTE:

1. ALL SIZES AND DIMENSIONS ARE APPROXIMATE.

LFG REMEDIATION DETAILS

CITY OF DALLAS
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REVISIONS						
REV	DATE	DESCRIPTION	DWN BY	DES BY	CHK BY	APP BY

DSN. JHP	DATE : 11/19	DRAWING
DWN. SRC	SCALE : GRAPHIC	4
CHK. JHP	DWG : 4-RemediationWellDet.dwg	

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