TOWN OF ADDISON CHANGE ORDER FORM

Change Order Number: 4
Project Name: Belt Line Road Underground Utilities
Project Number(s): 14-10
Project Manager: Kent Power/Ryan Reynolds
Date: 04/23/2015

A. INTENT OF CHANGE ORDER

Change Order incorporates 10 additional days to the project schedule as a result of work stoppage during the investigation of contaminated soils. JBC encountered soil heavy in fuel odor. Work activity in the area was stopped to ensure the safety of any and all personnel on the project.

B. DESCRIPTION OF CHANGE

Refer to Section D

C. REASON FOR CHANGE

Item 1 – Full crew on site to assist with material sampling and construct isolation barrier to contain suspect material.

Item 2 – Disposal of contaminated soils to approved hazardous waste site.

Item 3 – Collection and disposal of contaminated water into Kellway wet-well by vactor.

Item 4 - Add 10 Days to the contract time as a result of work stoppage and material disposal.

D. EFFECT OF CHANGE ON CONTRACT PRICE

This change order will have the following effect on the cost of this project:

Item Number/Description	Quantity		Amount
Additions			
1. Crew Delay - 12/11/14 to Assist w/ Sample, Isolate Matl.	1.00	Day	5,568.00
2. Contaminated Matl. Disposal	3.00	Day	4,680.00
3. Contaminated Water Disposal	1.00	Day	924.00
Deletions			
NONE			
Total			11,172.00
Original Contract Amount			8,789,241.80
Total Contract Amount (Including Previous Change Orders)			8,849,203.80
Amount of this Change Order			11,172.00
Revised Contract Amount			8,860,375.80
Total % Increase/Decrease (Including Previous Change Orders)			0.8%

E. EFFECT OF CHANGE ON CONTRACT TIME

The work required under this change will add the following time to the contract:

The work required under this change will add the following time to th contract:	
Original Contract Time (in days)	468
Total Contract Time Including Previous Change Orders (in days)	648
Increase/Decrease in Time from this Change Order (in days)	10
Revised Contract Time (in days)	658

F. AGREEMENT

By the signatures below, duly authorized agent of the Town of Addison, John Burns Construction Company of Texas, Inc. do hereby agree to append this Change Order Number 4 to the original contract between themselves, dated 01/11/2014 (insert original contract date).

John Burns Construction Company of Texas, Inc.
Company Name

P.O. Box 1117

Lewisville TX 75067
City State Zip

(972) 434-6789
Phone

Project Manager

Contractor's Signature

Department Director

Design Engineer's Signature

Fin. & Strat. Services Representative

Design Engineer's Signature

City Manager

Copies: Contractor (2)
Department
City Secretary
Strategic Services Manager

Council Agenda: Agenda Date _____
(if applicable) Item Number _____
Approved _____

john burns
construction company of Texas, Inc.

P.O. BOX 1117
LEWISVILLE, TEXAS 75067
METRO (972) 434-6789
FAX NO. (972) 221-8301

DRISKOLL TUBBS
Executive Vice President

MIKE BORSTAD
Vice President - Operations

CLAUDIA THOMAS
Secretary

JEROME P. KAMRADT
Treasurer

March 16, 2015

Town of Addison – Infrastructure and Operations Services
16801 Westgrove Dr.
Addison, Texas 75001
Attn: Ms. Lisa Pyles
Re: Belt Line Road Electrical Underground PH I – PCO #4 – Delays associated with Contaminated Materials found at Belt Line and Marsh

Dear Ms. Pyles:

John Burns Construction would like to present this potential change order to add 10 working days to the schedule and add the attached T&M charges to the contract. Contaminated soil was encountered on Belt Line West of Marsh on 12/9/14. This soil was sampled on 12/11/14, and JBCCO was cleared to resume work on 12/19/14 which resulted in a 10 day schedule delay.

JBCCO also incurred several crew delays due to this material. On 12/11/14, an entire crew was required to secure the excavation and assist in sample collection and secure the contaminated material stockpile in the Kellway yard by surrounding it with silt fencing and covering it in plastic.

From 12/17/14 through 12/19/14 an operator, loader, and job truck were required to remove the stockpile in the Kellway yard.

On 12/29/14 an operator and water truck were required to pump out the contaminated water and transfer it to the manhole in the Kellway yard.

This price of this contract change is Eleven Thousand One Hundred Seventy Two Dollars and Zero Cents ($11,172.00). Please see the attached sheet for a unit price break down.

Sincerely,

Kyle Pedigo
Project Manager

Belt Line Infrastructure Improvements
Town of Addison
T&M Associated with Contaminated Matl. @ Marsh and Belt Line

BID ITEM #	DESCRIPTION	QTY	UT	UNIT PRICE	ACTUAL TOTAL
T&M	CREW DELAY - 12/11/14, ASSIST W/ SAMPLE, ISOLATE MATL.	1	DAY	$ 5,568.00	$ 5,568.00
T&M	HAUL OFF CONT. MATL. FROM KELLWAY YARD	3	DAY	$ 1,560.00	$ 4,680.00
T&M	PUMP INTO WATER TRUCK, HAUL TO KELLWAY FOR DISPOSAL	1	DAY	$ 924.00	$ 924.00
	TOTAL				$ 11,172.00

john burns construction company of Texas, Inc.
P.O. Box 1117
Lewisville, Texas 75067
972-434-6789 - 972-221-8301 Fax

DAILY REPORT

OFFICE USE ONLY	
SUPERINTENDENT	
PROJECT MGR	
P & L	
PAYROLL	

Project Name: Beltline Add. SC | Job No: 1412
Su M (T) W Th F Sa | Date: 12-09 | Weather: | Temperature:
Start: | Stop: | Location/Segment: Beltline

Bid Item	Description	Qty	Units	Line	Sta No's / Avg Depth
	Dig bore pit				
	Fing contaminated soil				
	FOUND CONTAMINATED SOIL 12/9/14				

EMPLOYEE	Class	Start	Stop	Job Phase 10	14		99	Total Hours S	OT
Brian Pearce	F	7:00	3:00	8	vacDay			8	
Jose Escot	O	7:00	3:00		8			8	
Juan Solis	O	7:00	3:00		8			8	
Gustavo Ortis	L	7:00	3:00		8			8	
Jose Chaves	L	7:00	3:00		8			8	
Fernando Castillo	L	7:00	3:00		8			8	

EQUIPMENT	JB#	Start	Stop	Job Phase 14			99	Total Hours S	OT
336				8				8	
544				8				8	

Sign: _____ "99" Client Acknowlegdment

ACCIDENTS / INJURIES ____ YES NO ✓ IF YES, CALL OFFICE AND COMPLETE REPORT

DELAYS / POSSIBLE CHANGE ORDER ✓ YES NO ____ IF YES, DESCRIBE IN DETAIL AND CALL SUPERINTENDENT AND PM

contaminated

john burns construction company of Texas, Inc.
P.O. Box 1117
Lewisville, Texas 75067
972-434-6789 - 972-221-8301 Fax

DAILY REPORT

OFFICE USE ONLY	
SUPERINTENDENT	
PROJECT MGR	
P & L	
PAYROLL	

Project Name: TOWN OF ADDISON		Job No: 1412	
Su M T W (Th) F Sa	Date: 12-11-14	Weather: P.C.	Temperature: 60°
Start: 7:00	Stop: 3:30	Location/Segment: BELTLINE @ MARSH	

Bid Item	Description	Qty	Units	Line	Sta No's / Avg Depth
	MEET WITH TESTING LAB & PROVIDE SOIL				
	& GROUND WATER SAMPLES				
	PLACE SILT FENCE AROUND STOCK PILE				
	@ KELLWAY CIRCE YARD.				
	PLACE PLASTIC SHEETING OVER STOCK				
	PIPE @ YARD				
	T&M FOR CREW TO TAKE SAMPLES, AND				
	SECURE CONTAMINATED MATL. STOCK PILE				

EMPLOYEE	Class	Start	Stop	Job Phase 10			99	Total Hours S	OT
J. CAMERON	F	7:00	3:30	8				8	
A. PALACIOS	L	7:00	3:30	8				8	
A. AMBROSIO	O	7:00	3:30	8				8	
F. VASQUEZ	L	7:00	3:30	8				8	

EQUIPMENT	JB#	Start	Stop	Job Phase 10			99	Total Hours S	OT
TRUCK	54	7:00	3:30	8				8	
CAT 336	335								
CAT 314	330								
JD 544	222	7:00	3:30	8				8	

Sign: _____ "99" Client Acknowlegdment

ACCIDENTS / INJURIES _____ YES NO ✓ IF YES, CALL OFFICE AND COMPLETE REPORT

DELAYS / POSSIBLE CHANGE ORDER _____ YES NO _____ IF YES, DESCRIBE IN DETAIL AND CALL SUPERINTENDENT AND PM

john burns construction company of Texas, Inc.
P.O. Box 1117
Lewisville, Texas 75067
972-434-6789 - 972-221-8301 Fax

DAILY REPORT

OFFICE USE ONLY	
SUPERINTENDENT	
PROJECT MGR	
P & L	
PAYROLL	

Project Name: TOWN OF ADDISON		Job No: 1412	
Su M T (W) Th F Sa	Date: 12-17-14	Weather: CLOUDY	Temperature: 45°
Start: 7:00	Stop: 4:30	Location/Segment: BELTLINE @ MARSH	

Bid Item	Description	Qty	Units	Line	Sta No's / Avg Depth
	LOAD TRUCKS FOR HAUL OFF OUT OF				
	KELLWAY CIRCLE YARD.				
	SPREAD FLEX BASE IN YARD.				
	DIG UP & MOVE STREET LIGHT ELEC.				
	LINE IN WAY OF M.H. @ 5+26				
	DISCONNECTION & RECONNECTION OF				
	ELEC. LINE DONE BY TOWN OF				
	ADDISON INFRASTRUCTURE DEPT.				
	T&M FOR 1 OPERATOR AND 1 LOADER TO REMOVE STOCK PILE				

EMPLOYEE	Class	Start	Stop	Job Phase 10	24	25	99	Total Hours S	OT
J. CAMERON	F	7:00	4:30	9				9	
A. PALACIOS	L	7:00	4:30		9			9	
A. AMBROSIO	O	7:00	4:30		9			9	
F. VASQUEZ	L	7:00	4:30		9			9	

EQUIPMENT	JB#	Start	Stop	Job Phase 25			99	Total Hours S	OT
TRUCK	54	7:00	4:30	9				9	
JD 544	222	7:00	4:30	9				9	
CAT 314	330								

Sign: _____ "99" Client Acknowlegdment

ACCIDENTS / INJURIES _____ YES NO ✓ IF YES, CALL OFFICE AND COMPLETE REPORT

DELAYS / POSSIBLE CHANGE ORDER _____ YES NO _____ IF YES, DESCRIBE IN DETAIL AND CALL SUPERINTENDENT AND PM

john burns construction company of Texas, Inc.
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Lewisville, Texas 75067
972-434-6789 - 972-221-8301 Fax

DAILY REPORT

OFFICE USE ONLY	
SUPERINTENDENT	
PROJECT MGR	
P & L	
PAYROLL	

Project Name: TOWN OF ADDISON | Job No: 1412
Su M T W (Th) F Sa | Date: 12-18-14 | Weather: CLOUDY, DRIZZLE | Temperature: 50°
Start: 7:00 Stop: 5:30 Location/Segment: BELTLINE & MARSH

Bid Item	Description	Qty	Units	Line	Sta No's / Avg Depth
	LOAD TRUCKS FOR HAUL OFF				
	PUT TOGETHER 10' BOX W 14' SPREADERS				
	UNLOAD PLATES				
	MOVE #36 FROM WEST OF MARSH TO				
	EAST OF MARSH				
	PUT PINS IN BARRICADES				
	T&M FOR 1 OPERATOR AND 1 LOADER TO REMOVE STOCK PILE				

EMPLOYEE	Class	Start	Stop	Job Phase 10	25		99	Total Hours S	OT
J. CAMERON	F	7:00	5:30	10				10	
A. PALACIOS	L	8:30	4:00		7			7	
A. AMBROSIO	O	7:00	5:30		10			10	
F. VASQUEZ	L	8:30	4:00		7			7	

EQUIPMENT	JB#	Start	Stop	Job Phase 25			99	Total Hours S	OT
TRUCK	54	7:00	5:30	10					
JD 544	222	7:00	5:30	10					

Sign: _____ "99" Client Acknowlegdment

ACCIDENTS / INJURIES _____ YES NO ✓ IF YES, CALL OFFICE AND COMPLETE REPORT

DELAYS / POSSIBLE CHANGE ORDER _____ YES NO _____ IF YES, DESCRIBE IN DETAIL AND CALL SUPERINTENDENT AND PM

john burns construction company of Texas, Inc.
P.O. Box 1117
Lewisville, Texas 75067
972-434-6789 - 972-221-8301 Fax

DAILY REPORT

OFFICE USE ONLY	
SUPERINTENDENT	
PROJECT MGR	
P & L	
PAYROLL	

Project Name: TOWN OF ADDISON **Job No:** 1412

Su M T W Th (F) Sa **Date:** 12-19-14 **Weather:** CLOUDY, RAIN AM **Temperature:**

Start: 7:00 **Stop:** 3:30 **Location/Segment:** BELTLINE @ MARSH

Bid Item	Description	Qty	Units	Line	Sta No's / Avg Depth
	LOAD TRUCKS FOR HAUL OFF				
	DUMP 3/4" ROCK @ MARSH				
	UNLOAD M.H. NECK SECTIONS				
	COVER PIPE WITH PLASTIC				
	DELIVER 16' TRAILER TO RELLWAY CIRCLE				
	YARD.				
	T&M FOR 1 OPERATOR AND 1 LOADER TO REMOVE STOCK PILE				

EMPLOYEE	Class	Start	Stop	Job Phase 10	25		99	Total Hours S	OT
J. CAMERON	F	7:00	3:30	8				8	
A. PALACIOS	L	7:00	3:30		8			8	
A. AMBROSIO	O	7:00	3:30		8			8	
F. VASQUEZ	L	7:00	3:30		8			8	

EQUIPMENT	JB#	Start	Stop	Job Phase 25			99	Total Hours S	OT
TRUCK	54	7:00	3:30	8				8	
JD 544	222	7:00	3:30	8				8	

Sign: _____ "99" Client Acknowlegdment

ACCIDENTS / INJURIES _____ YES NO _____ IF YES, CALL OFFICE AND COMPLETE REPORT

DELAYS / POSSIBLE CHANGE ORDER _____ YES NO _____ IF YES, DESCRIBE IN DETAIL AND CALL SUPERINTENDENT AND PM

john burns construction company of Texas, Inc.
P.O. Box 1117
Lewisville, Texas 75067
972-434-6789 - 972-221-8301 Fax

1-3

DAILY REPORT

OFFICE USE ONLY	
SUPERINTENDENT	
PROJECT MGR	
P & L	
PAYROLL	

Project Name: TOWN OF ADDISON		Job No: 1412	
Su M T W Th F Sa	Date: 12-29-14	Weather: P. C	Temperature: 52
Start: 7:00	Stop: 5:30	Location/Segment: BELTLINE @ MARSH	

Bid Item	Description	Qty	Units	Line	Sta No's / Avg Depth
	LOOK FOR GAS LINE (6" POLY)				
	PUMP WATER FROM BORE PIT INTO WATER TRUCK & TAKE IT TO KELLWAY CIR. YARD & DUMP INTO M.H.				
	T&M FOR 1 OPERATOR, PUMP AND WATER TRUCK TO TAKE WATER TO KELLWAY YARD.				

EMPLOYEE	Class	Start	Stop	Job Phase 10	DST	14	99	Total Hours S	OT
J. CAMERON	F	7:00	5:30	10				10	
A. PALACIOS	L	7:00	5:30			10		10	
A. AMBROSIO	O	7:00	5:30			10		10	
F. VASQUEZ	L	7:00	5:30			10		10	

EQUIPMENT	JB#	Start	Stop	Job Phase DS	14		99	Total Hours S	OT
TRUCK	54	7:00	5:30		10			10	
CAT 336	335	7:00	5:30		10			10	

Sign: _____ "99" Client Acknowledgment

ACCIDENTS / INJURIES _____ YES NO ✓ IF YES, CALL OFFICE AND COMPLETE REPORT

DELAYS / POSSIBLE CHANGE ORDER _____ YES NO _____ IF YES, DESCRIBE IN DETAIL AND CALL SUPERINTENDENT AND PM

SOIL SAMPLE

Project Name: Belt Line Road
Project No: C14-1016-177428

Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

SAMPLE ID: 8 Way Duck Bank at 9+00

BTEX

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
Benzene	EPA 8021B	0.185	0.185	1.000	< 0.185	µg/kg wet	U	VK	12/11/14
Toluene	EPA 8021B	0.225	0.225	1.000	< 0.225	µg/kg wet	U	VK	12/11/14
Ethylbenzene	EPA 8021B	0.155	0.155	1.000	26.07	µg/kg wet		VK	12/11/14
Xylenes, total	EPA 8021B	0.571	0.571	2.000	< 0.571	µg/kg wet	U	VK	12/11/14
Methyl tert-Butyl Ether	EPA 8021B	0.333	0.333	1.000	< 0.333	µg/kg wet	U	VK	12/11/14
Surrogate: 4-Bromofluorobenzene	*EPA 8021B*		*60-140*		95.5 %			VK	12/11/14

TOTAL PETROLEUM HYDROCARBONS

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
>C6-C12	TCEQ1005	1.47	1.46	4.96	< 1.46	mg/kg wet	U	VK	12/11/14
>C12-C28	TCEQ1005	1.45	1.44	4.96	< 1.44	mg/kg wet	U	VK	12/11/14
>C28-C35	TCEQ1005	0.50	0.50	4.96	< 0.50	mg/kg wet	U	VK	12/11/14
Surrogate: 1-Chlorooctane	*TCEQ1005*		*70-130*		91.7 %			VK	12/11/14
Surrogate: 1-Chlorooctadecane	*TCEQ1005*		*70-130*		72.7 %			VK	12/11/14

WATER SAMPLE

Project Name: Belt Line Road
Project No: C14-1016-177428

Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

SAMPLE ID: 8 Way Duck Bank at 9+00

BTEX

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
Benzene	EPA 8021B	0.344	0.344	1.000	< 0.344	µg/L	U	VK	12/11/14
Toluene	EPA 8021B	0.307	0.307	1.000	68.39	µg/L		VK	12/11/14
Ethylbenzene	EPA 8021B	0.276	0.276	1.000	41.78	µg/L		VK	12/11/14
Xylenes, total	EPA 8021B	0.760	0.760	2.000	89.04	µg/L		VK	12/11/14
Methyl tert-Butyl Ether	EPA 8021B	0.363	0.363	1.000	18.61	µg/L		VK	12/11/14
Surrogate: 4-Bromofluorobenzene	*EPA 8021B*		*60-140*		120 %			VK	12/11/14

TOTAL PETROLEUM HYDROCARBONS

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
>C6-C12	TCEQ1005	0.09	0.09	0.48	2.49	mg/L		VK	12/11/14
>C12-C28	TCEQ1005	0.10	0.09	0.48	< 0.09	mg/L	U	VK	12/11/14
>C28-C35	TCEQ1005	0.05	0.05	0.48	< 0.05	mg/L	U	VK	12/11/14
Surrogate: 1-Chlorooctadecane	*TCEQ1005*		*70-130*		73.6 %			VK	12/11/14
Surrogate: 1-Chlorooctane	*TCEQ1005*		*70-130*		98.8 %			VK	12/11/14

December 18, 2014

Mr. Ryan Reynolds, EIT
R.H. Shackelford, Inc.
16051 Addison Road, Ste. 211
Addison, Texas 75001

RE: Subgrade Utility Construction
Belt Line Road at Marsh Lane
Carrollton, TX

Mr. Reynolds,

Alliance Geotechnical Group (AGG) has contracted Farmer Environmental Group, LLC (Farmer) to provide environmental services associated with contamination encountered during the excavation of the trench in the Belt Line Road median on the west side of Marsh Lane, in Carrollton, Texas. A petroleum hydrocarbon odor was detected in the excavation and a slight sheen was observed in the water that had accumulated in the excavation. AGG collected soil and groundwater samples, identified as 8 Way Duck Bank @ 9+00 on 12/11/2014, and submitted those samples to TTI Environmental Laboratories of Arlington, Texas. The samples were laboratory analyzed for Total Petroleum Hydrocarbons (TPH) by Texas Method 1005 and for Benzene, Toluene, Ethyl benzene, Xylenes and Methyl tert-Butyl Ether (BTEX/MtBE) by EPA Method 8021B. A copy of the laboratory report is attached.

Analytical Results
The soil sample analysis detected Ethyl benzene at a concentration of 0.02607 parts per million (ppm). All other analytical results were not detected, or were below the laboratory sample quantitation limit (SQL). The analysis of the groundwater sample detected Toluene at a concentration of 0.06839 ppm, Ethyl benzene at a concentration of 0.04178 ppm, Xylenes at a concentration of 0.08904 ppm, MtBE at a concentration of 0.01861 ppm, and TPH in the $C_6 - C_{12}$ carbon fraction range at a concentration of 2.49 ppm. Benzene and TPH in the $>C_{12} - C_{28}$ and $>C_{28} - C_{35}$ carbon fractions were not detected above their respective SQLs.

Interpretation
Based upon the chemicals of concern (COCs) detected in the soil and groundwater sample, the contamination appears to be a weathered gasoline. Reconnaissance of the intersection reveals the presence of active Petroleum Storage Tank (PST) facilities on three corners of the intersection at Belt Line Road and Marsh Lane, with a Shell gas station formerly occupying the fourth corner of the intersection. Farmer concludes that the contamination is associated with the historical release of gasoline from one or more of the PST facilities.

Comparison of Analytical Results to Regulatory Limits
Soil Sample
The VOC concentration detected in the 8 Way Duck Bank @ 9+00 soil sample was compared to the applicable Texas Commission on Environmental Quality (TCEQ) PST Program Action Levels, revised August 12, 2011. Farmer also references TCEQ Texas Risk Reduction Program (TRRP) Table 1, Tier 1 Residential Soil Protective Concentration Levels (PCLs); last revised November 12, 2014. Per TCEQ guidance, the residential PCLs, protective for the ingestion of Class 1&2 groundwater were referenced as the Residential Assessment Level (RAL) and compared the concentrations of VOCs detected in the soil sample. The comparison is illustrated in the following table:

VOC COCs	Detected Concentration	PST Program Action Levels	TCEQ TRRP Regulatory Limit
Ethyl Benzene	0.02607 ppm	36.8 ppm	7.6 ppm

As illustrated above, the concentration of the VOC analyte or COC Ethyl Benzene detected in the soil sample from the Subject Site is well below the TCEQ PST Action Level.

Groundwater Sample
The VOC concentrations detected in the groundwater sample 8 Way Duck Bank at 9+00 were compared to the applicable TCEQ PST Program Action Levels. Farmer also references TCEQ TRRP Table 3, Tier 1 Groundwater PCLs. Per TCEQ guidance, the residential PCLs, protective for the ingestion of Class 1&2 groundwater were referenced as the Residential Assessment Level (RAL) and compared the concentrations of VOC COCs detected in the groundwater sample. The comparison is illustrated in the following table:

VOC COCs	Detected Concentration	PST Program Action Level	TCEQ TRRP Regulatory Limit
Toluene	0.06839 ppm	1.0 ppm	1.0 ppm
Ethyl Benzene	0.04178 ppm	0.7 ppm	0.7 ppm
Xylenes (total)	0.08904 ppm	10.0 ppm	10.0 ppm
MtBE	0.01861 ppm	0.24 ppm	0.24 ppm
TPH Analysis	**Detected Concentration**	**PST Program Action Level**	**TCEQ TRRP Regulatory Limit**
C_6-C_{12}	2.49 ppm	Not Applicable	0.98 ppm

As illustrated above, the concentrations of the VOC COCs detected in the groundwater samples from the Subject Site are well below the applicable TCEQ PST Action Levels. TPH $\leq C_{12}$ is not regulated under the TCEQ PST program. However, the detected concentration of TPH in the groundwater exceeds the TCEQ TRRP regulatory limit which is protective for the ingestion of groundwater.

Conclusions and Recommendations
Farmer concludes that the contamination detected in the trench excavation on the west side of Marsh Lane at Belt Line Road is associated with a historical release of gasoline from one or more of the adjacent PST facilities. The detected concentrations of petroleum hydrocarbons are below TCEQ PST Action Levels and do not require reporting to the TCEQ or corrective action. However, the presence of regulated COCs dictates that the affected soil and groundwater be properly managed if removed from the site. If the contaminated soil is removed from the excavation, it should be placed on poly sheeting and covered by poly sheeting until disposed. If contaminated soil is to be disposed off-site it should be represented as petroleum hydrocarbon contaminated soil and disposed at a TCEQ permitted land fill or treatment facility. If the petroleum hydrocarbon contaminated groundwater is to be disposed off-site is should be transported to the City of Addison water treatment facility, or other TCEQ permitted disposal or treatment facility.

Farmer appreciates the opportunity to assist R.H. Shackelford, Inc. in this matter on behalf of Alliance Geotechnical Group. If you have any questions or comments please contact David Allen at 469-360-0954 or Allan Thomas at 214-558-6646.

Sincerely,

David Allen, PG, CAPM
Environmental Geologist

Attachment

TTI ENVIRONMENTAL LABORATORIES

ACCREDITED IN ACCORDANCE WITH nelac

TEST REPORT

TTI Lab No: 4123219

Customer ID: AGG
PO #: N/A
Date Collected: 12/11/14
Date Received: 12/11/14
Date Reported: 12/12/14

Alan Thomas
Alliance Geotechnical Group
3228 Halifax Street
Dallas, TX 75247

Dear Alan Thomas:

Please find the enclosed analytical results for the samples you submitted to TTI Environmental Laboratories.

The as-is-received samples were suitably preserved and prepared as per EPA approved methodology. The determinations were carried out using EPA approved methods. The test results are tabulated in the attached tables. The analytical data contained in these tables has undergone a thorough review and is deemed to be accurate and complete.

Everyone in our organization will work hard to earn your continued support. We appreciate the opportunity to do business with you and look forward to a growing relationship in the future.

Please do not hesitate to contact us, if we can be of any service to you or if you have any questions, at (817) 861-5322.

Brandi Rose
Project Manager

TTI ENVIRONMENTAL LABORATORIES

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

Client Sample ID	Laboratory ID	Matrix	Sampled:
8 Way Duck Bank at 9+00	4123219-01	Water	12/11/2014
8 Way Duck Bank at 9+00	4123219-02	Soil	12/11/2014

800 106th Street ◆ Arlington, Texas 76011 Phone: (817) 861-5322 ◆ Fax: (817) 261 1717

TTI ENVIRONMENTAL LABORATORIES

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

SAMPLE ID: 8 Way Duck Bank at 9+00
TTI SAMPLE NO: 4123219-01

BTEX

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
Benzene	EPA 8021B	0.344	0.344	1.000	< 0.344	µg/L	U	VK	12/11/14
Toluene	EPA 8021B	0.307	0.307	1.000	68.39	µg/L		VK	12/11/14
Ethylbenzene	EPA 8021B	0.276	0.276	1.000	41.78	µg/L		VK	12/11/14
Xylenes, total	EPA 8021B	0.760	0.760	2.000	89.04	µg/L		VK	12/11/14
Methyl tert-Butyl Ether	EPA 8021B	0.363	0.363	1.000	18.61	µg/L		VK	12/11/14
Surrogate: 4-Bromofluorobenzene	*EPA 8021B*		*60-140*		120 %			VK	12/11/14

TOTAL PETROLEUM HYDROCARBONS

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
>C6-C12	TCEQ1005	0.09	0.09	0.48	2.49	mg/L		VK	12/11/14
>C12-C28	TCEQ1005	0.10	0.09	0.48	< 0.09	mg/L	U	VK	12/11/14
>C28-C35	TCEQ1005	0.05	0.05	0.48	< 0.05	mg/L	U	VK	12/11/14
Surrogate: 1-Chlorooctadecane	*TCEQ1005*		*70-130*		73.6 %			VK	12/11/14
Surrogate: 1-Chlorooctane	*TCEQ1005*		*70-130*		98.8 %			VK	12/11/14

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TTI ENVIRONMENTAL LABORATORIES

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

SAMPLE ID: 8 Way Duck Bank at 9+00
TTI SAMPLE NO: 4123219-02

BTEX

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
Benzene	EPA 8021B	0.185	0.185	1.000	< 0.185	µg/kg wet	U	VK	12/11/14
Toluene	EPA 8021B	0.225	0.225	1.000	< 0.225	µg/kg wet	U	VK	12/11/14
Ethylbenzene	EPA 8021B	0.155	0.155	1.000	26.07	µg/kg wet		VK	12/11/14
Xylenes, total	EPA 8021B	0.571	0.571	2.000	< 0.571	µg/kg wet	U	VK	12/11/14
Methyl tert-Butyl Ether	EPA 8021B	0.333	0.333	1.000	< 0.333	µg/kg wet	U	VK	12/11/14
Surrogate: 4-Bromofluorobenzene	*EPA 8021B*		*60-140*		95.5 %			VK	12/11/14

TOTAL PETROLEUM HYDROCARBONS

ANALYTE	METHOD NUMBER	MDL	S.Q.L.	M.Q.L.	SAMPLE RESULTS	UNITS	FLG	ANAL.	ANALYZED
>C6-C12	TCEQ1005	1.47	1.46	4.96	< 1.46	mg/kg wet	U	VK	12/11/14
>C12-C28	TCEQ1005	1.45	1.44	4.96	< 1.44	mg/kg wet	U	VK	12/11/14
>C28-C35	TCEQ1005	0.50	0.50	4.96	< 0.50	mg/kg wet	U	VK	12/11/14
Surrogate: 1-Chlorooctane	*TCEQ1005*		*70-130*		91.7 %			VK	12/11/14
Surrogate: 1-Chlorooctadecane	*TCEQ1005*		*70-130*		72.7 %			VK	12/11/14

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TTI ENVIRONMENTAL LABORATORIES

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

BTEX - Quality Control

TTI ENVIRONMENTAL LABORATORIES

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4121104 - EPA 5030B											
Blank (4121104-BLK1)					Prepared & Analyzed: 12/11/14						
Benzene	< 0.344	0.344	1.000	µg/L							U
Ethylbenzene	< 0.276	0.276	1.000	"							U
Methyl tert-Butyl Ether	< 0.363	0.363	1.000	"							U
Toluene	< 0.307	0.307	1.000	"							U
Xylenes, total	< 0.760	0.760	2.000	"							U
Surrogate: 4-Bromofluorobenzene	*51.8*			"	*50.2*		*103*	*60-140*			
LCS (4121104-BS1)					Prepared & Analyzed: 12/11/14						
Benzene	56.27	0.344	1.000	µg/L	50.0		113	67-145			
Ethylbenzene	59.71	0.276	1.000	"	49.5		121	63-140			
Methyl tert-Butyl Ether	52.50	0.363	1.000	"	50.0		105	42-139			
Toluene	67.83	0.307	1.000	"	49.8		136	52-137			
Xylenes, total	178.3	0.760	2.000	"	150		119	51-142			
Surrogate: 4-Bromofluorobenzene	*54.6*			"	*50.2*		*109*	*60-140*			
LCS Dup (4121104-BSD1)					Prepared & Analyzed: 12/11/14						
Benzene	54.62	0.344	1.000	µg/L	50.0		109	67-145	2.98	25	
Ethylbenzene	56.23	0.276	1.000	"	49.5		114	63-140	6.00	25	
Methyl tert-Butyl Ether	55.51	0.363	1.000	"	50.0		111	42-139	5.57	25	
Toluene	67.97	0.307	1.000	"	49.8		137	52-137	0.206	25	
Xylenes, total	159.4	0.760	2.000	"	150		107	51-142	11.2	25	
Surrogate: 4-Bromofluorobenzene	*49.0*			"	*50.2*		*97.6*	*60-140*			
Batch 4121106 - EPA 5030B											
Blank (4121106-BLK1)					Prepared & Analyzed: 12/11/14						
Benzene	< 0.185	0.185	1.000	µg/kg wet							U
Ethylbenzene	< 0.155	0.155	1.000	"							U
Methyl tert-Butyl Ether	< 0.333	0.333	1.000	"							U
Toluene	< 0.225	0.225	1.000	"							U
Xylenes, total	< 0.571	0.571	2.000	"							U
Surrogate: 4-Bromofluorobenzene	*57.4*			"	*50.2*		*114*	*60-140*			
LCS (4121106-BS1)					Prepared & Analyzed: 12/11/14						
Benzene	48.40	0.185	1.000	µg/kg wet	50.0		96.8	67-145			

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TTI ENVIRONMENTAL LABORATORIES

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

BTEX - Quality Control

TTI ENVIRONMENTAL LABORATORIES

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4121106 - EPA 5030B											
LCS (4121106-BS1)					Prepared & Analyzed: 12/11/14						
Ethylbenzene	51.78	0.155	1.000	µg/kg wet	49.5		105	63-140			
Methyl tert-Butyl Ether	54.71	0.333	1.000	"	50.0		109	42-139			
Toluene	66.28	0.225	1.000	"	49.8		133	52-145			
Xylenes, total	150.4	0.571	2.000	"	150		101	51-142			
Surrogate: 4-Bromofluorobenzene	*48.1*			"	*50.2*		*95.8*	*42-159*			
LCS Dup (4121106-BSD1)					Prepared & Analyzed: 12/11/14						
Benzene	56.13	0.185	1.000	µg/kg wet	50.0		112	67-145	14.8	25	
Ethylbenzene	57.47	0.155	1.000	"	49.5		116	63-140	10.4	25	
Methyl tert-Butyl Ether	52.88	0.333	1.000	"	50.0		106	42-139	3.40	25	
Toluene	64.90	0.225	1.000	"	49.8		130	52-145	2.10	25	
Xylenes, total	167.4	0.571	2.000	"	150		112	51-142	10.7	25	
Surrogate: 4-Bromofluorobenzene	*49.1*			"	*50.2*		*97.8*	*42-159*			
Matrix Spike (4121106-MS1)		**Source: 4123219-02**			Prepared & Analyzed: 12/11/14						
Benzene	50.61	0.185	1.000	µg/kg wet	50.0	<	101	57-145			
Ethylbenzene	53.56	0.155	1.000	"	49.5	26.07	55.5	43-140			
Methyl tert-Butyl Ether	44.74	0.333	1.000	"	50.0	<	89.5	42-139			
Toluene	60.67	0.225	1.000	"	49.8	<	122	42-145			
Xylenes, total	156.2	0.571	2.000	"	150	<	104	51-142			
Surrogate: 4-Bromofluorobenzene	*49.1*			"	*50.2*		*97.8*	*42-149*			
Matrix Spike Dup (4121106-MSD1)		**Source: 4123219-02**			Prepared & Analyzed: 12/11/14						
Benzene	49.83	0.185	1.000	µg/kg wet	50.0	<	99.7	57-145	1.55	25	
Ethylbenzene	55.49	0.155	1.000	"	49.5	26.07	59.4	43-140	3.54	25	
Methyl tert-Butyl Ether	43.92	0.333	1.000	"	50.0	<	87.8	42-139	1.85	25	
Toluene	65.41	0.225	1.000	"	49.8	<	131	42-145	7.52	25	
Xylenes, total	160.1	0.571	2.000	"	150	<	107	51-142	2.45	25	
Surrogate: 4-Bromofluorobenzene	*50.8*			"	*50.2*		*101*	*42-149*			

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TTI ENVIRONMENTAL LABORATORIES

ACCREDITED IN ACCORDANCE WITH nelac

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

TOTAL PETROLEUM HYDROCARBONS - Quality Control

TTI ENVIRONMENTAL LABORATORIES

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4121103 - TCEQ Prep											
Blank (4121103-BLK1)					Prepared & Analyzed: 12/11/14						
>C12-C28	< 1.45	1.45	5.00	mg/kg wet							U
>C28-C35	< 0.50	0.50	5.00	"							U
>C6-C12	< 1.47	1.47	5.00	"							U
Surrogate: 1-Chlorooctadecane	*57.7*			"	*75.0*		*76.9*	*70-130*			
Surrogate: 1-Chlorooctane	*67.4*			"	*74.4*		*90.6*	*70-130*			
LCS (4121103-BS1)					Prepared & Analyzed: 12/11/14						
>C12-C28	1040	1.45	5.00	mg/kg wet	1000		104	75-125			
>C6-C12	1030	1.47	5.00	"	1010		102	75-125			
Surrogate: 1-Chlorooctadecane	*60.1*			"	*75.0*		*80.1*	*70-130*			
Surrogate: 1-Chlorooctane	*64.7*			"	*74.4*		*87.0*	*70-130*			
LCS Dup (4121103-BSD1)					Prepared & Analyzed: 12/11/14						
>C12-C28	1040	1.45	5.00	mg/kg wet	1000		104	75-125	0.166	20	
>C6-C12	1020	1.47	5.00	"	1010		101	75-125	0.380	20	
Surrogate: 1-Chlorooctadecane	*60.9*			"	*75.0*		*81.2*	*70-130*			
Surrogate: 1-Chlorooctane	*73.0*			"	*74.4*		*98.1*	*70-130*			
Matrix Spike (4121103-MS1)		**Source: 4123212-01**			Prepared & Analyzed: 12/11/14						
>C12-C28	1020	1.45	5.00	mg/kg wet	1000	<	101	75-125			
>C6-C12	1010	1.47	5.00	"	1010	<	100	75-125			
Surrogate: 1-Chlorooctadecane	*56.9*			"	*75.0*		*75.8*	*70-130*			
Surrogate: 1-Chlorooctane	*76.3*			"	*74.4*		*103*	*70-130*			
Matrix Spike Dup (4121103-MSD1)		**Source: 4123212-01**			Prepared & Analyzed: 12/11/14						
>C12-C28	1020	1.45	5.00	mg/kg wet	1000	<	101	75-125	0.0570	20	
>C6-C12	1020	1.47	5.00	"	1010	<	101	75-125	0.647	20	
Surrogate: 1-Chlorooctadecane	*56.8*			"	*75.0*		*75.7*	*70-130*			
Surrogate: 1-Chlorooctane	*81.5*			"	*74.4*		*114*	*70-130*			
Batch 4121105 - TCEQ Prep											
Blank (4121105-BLK1)					Prepared & Analyzed: 12/11/14						
>C12-C28	< 0.10	0.10	0.50	mg/L							U
>C28-C35	< 0.05	0.05	0.50	"							U

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TTI ENVIRONMENTAL LABORATORIES

Project Name: Belt Line Road
Project No: C14-1016

TTI Lab No: 4123219
Date Sampled: 12/11/2014
Date Received: 12/11/2014
Date Reported: 12/12/2014

TOTAL PETROLEUM HYDROCARBONS - Quality Control
TTI ENVIRONMENTAL LABORATORIES

Analyte	Result	MDL	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 4121105 - TCEQ Prep											
Blank (4121105-BLK1)					Prepared & Analyzed: 12/11/14						
>C6-C12	< 0.09	0.09	0.50	mg/L							U
Surrogate: 1-Chlorooctadecane	*8.46*			"	*10.0*		*84.6*	*70-130*			
Surrogate: 1-Chlorooctane	*9.60*			"	*9.92*		*96.7*	*70-130*			
LCS (4121105-BS1)					Prepared & Analyzed: 12/11/14						
>C12-C28	101	0.10	0.50	mg/L	100		100	75-125			
>C6-C12	102	0.09	0.50	"	101		101	75-125			
Surrogate: 1-Chlorooctadecane	*11.0*			"	*10.0*		*110*	*70-130*			
Surrogate: 1-Chlorooctane	*11.1*			"	*9.92*		*112*	*70-130*			
LCS Dup (4121105-BSD1)					Prepared & Analyzed: 12/11/14						
>C12-C28	101	0.10	0.50	mg/L	100		100	75-125	0.350	20	
>C6-C12	101	0.09	0.50	"	101		100	75-125	0.848	20	
Surrogate: 1-Chlorooctadecane	*7.21*			"	*10.0*		*72.1*	*70-130*			
Surrogate: 1-Chlorooctane	*10.2*			"	*9.92*		*103*	*70-130*			
Matrix Spike (4121105-MS1)		**Source: 4123219-01**			Prepared & Analyzed: 12/11/14						
>C12-C28	103	0.09	0.49	mg/L	98.8	<	104	75-125			
>C6-C12	102	0.09	0.49	"	99.3	2.49	100	75-125			
Surrogate: 1-Chlorooctadecane	*7.46*			"	*9.83*		*75.8*	*70-130*			
Surrogate: 1-Chlorooctane	*10.0*			"	*9.75*		*103*	*70-130*			
Matrix Spike Dup (4121105-MSD1)		**Source: 4123219-01**			Prepared & Analyzed: 12/11/14						
>C12-C28	97.4	0.09	0.48	mg/L	96.4	<	101	75-125	5.80	20	
>C6-C12	99.8	0.09	0.48	"	96.9	2.49	100	75-125	2.33	20	
Surrogate: 1-Chlorooctadecane	*8.13*			"	*9.60*		*84.7*	*70-130*			
Surrogate: 1-Chlorooctane	*9.57*			"	*9.52*		*101*	*70-130*			

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TTI ENVIRONMENTAL LABORATORIES

ACCREDITED IN ACCORDANCE WITH nelac

Project Name:	Belt Line Road	TTI Lab No:	4123219
Project No:	C14-1016	Date Sampled:	12/11/2014
		Date Received:	12/11/2014
		Date Reported:	12/12/2014

Notes and Definitions

U	Analyte included in the analysis, but not detected
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

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TTI ENVIRONMENTAL LABORATORIES

CHAIN OF CUSTODY RECORD

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CLIENT NAME: Alliance Geotechnical Group	CLIENT CONTACT: Alan Thomas
CLIENT ADDRESS: 3228 Halifax Street	PHONE: (214) 558-6646
	FAX:
CITY, STATE, ZIP: Dallas Texas 75247	EMAIL: athomas@aggengr.com
P.O. NO.: -	QUOTE NO.:

PROJECT NO.: C14-1016 | PROJECT NAME: Belt line Road. | SAMPLER'S NAME: Alan Thomas

LAB USE
LAB NO. 4123219 (1-2)
ON ICE ☑ YES ☐ NO
TEMP OF COOLERS °C: 3 | 4 ✓ | 5 | 6 | >6
CUSTODY SEAL: Cooler ☐ Y ☑ N | Samples ☐ Y ☑ N
SEAL INTACT: Cooler ☐ Y ☐ N | Samples ☐ Y ☐ N

Sample Collection: Date (Ex:mm/dd/yyyy)	Time (Ex:hh:mm)	(C)omp (G)rab	Matrix[1]	Sample Description	No. / Type Containers[2]: VOA	A/G 1 Lt.	4 OZ.	P/O	PRES[3]	TEST PARAMETERS: BTEX/MTBE	TPH 1005								DRY WT.	TRR?	HOLD[4]	TTI Lab ID
12/11/14	11:10	G	W	8way ditch bank @9+00	6					✓	✓											3219-01
12/11/14	11:12	C	S	8way duct-bank @9+00			1			✓	✓											-02

MC 12/11/14

TURNAROUND TIME:
☐ STANDARD 5 Business Days ☐ 50% RUSH 3 Business Days ☑ 100% RUSH 1Business Day / ASAP* ☐ E.R. 300% RUSH Same Day / ASAP*

1. MATRIX: WW-Wastewater; W-Water; S-Soil; SD-Solid; L-Liquid; A-Airbag; C-Charcoal Tube; SL-Sludge; O-Oil
2. CONTAINERS: VOA-40ml vial; A/G-Amber or Glass 1 Liter; 4 oz-Glass Wide Mouth; P/O-Plastic or Other
3. PRES.: 1-None; 2-1:1 HNO_3; 3-1:1 HCL; 4-1:1 H_2SO_4; 5-NaOH; 6-Ice; 7-Other ____
4. HOLD: Lab will hold samples for 30 (thirty) days.

Relinquished by (Signature)	Date	Time	Received By: (Signature)	Date	Time
Alan Thomas	12/11/14	11:45AM	[illegible]	12/11/14	11:45AM
Relinquished by (Signature)	Date	Time	Received By: (Signature)	Date	Time
[illegible]	12/11/14	11:45	Miguel [illegible]	12/11/14	11:45
Relinquished by (Signature)	Date	Time	Received By: (Signature)	Date	Time

REMARKS: ☑ TTI Drop Off ☐ TTI Pickup
Temp Cen #793

Clients delivery of samples to TTI constitutes acceptance to reimburse TTI as per the terms and conditions listed in the price schedule.