SUPPLEMENTAL WORK AUTHORIZATION NO. 4 Lehman Road Project

WHEREAS, on the 28th day of March, 2014, a professional services agreement was entered into by and between the City of Kyle ("City") and HDR Engineering, Inc. ("Consultant"), collectively known as the "parties," for the development of a preliminary engineering report, limited environmental studies, schematic, plans, specifications, and estimate (PS&E), utility coordination and design, traffic studies, geotechnical analysis, and pavement design to develop Lehman Road from RR 150 to Goforth Road Intersection, in Hays County, Texas; and,

WHEREAS, during the development of the project plans the City requested a change in the electrical service requirements as well as decorative illumination pole and service type. These changes necessitate the revision of the pole foundation design, and revision of illumination plan sheets.

WHEREAS, during the development of the project plans, the CITY requested the evaluation of roadway geometric, hydraulic and environmental impacts of the possible reuse of concrete box culverts to be salvaged from the Goforth road project.

WHEREAS, during the development of the project plans, two (2) proposed commercial developments on the former Mosqueda and Nash parcels, have been proposed requiring additional coordination with CITY staff and developers as well as revisions to the roadway construction plans for consideration of the proposed driveway access points.

WHEREAS, during the development of the project plans, the CITY requested the upsizing of the proposed wastewater line replacement / relocation on the southern end of the project corridor.

WHEREAS, the City's dual 10" force mains on the northern end of the project corridor have been found to be in conflict with the proposed roadway curb inlets necessitating the development of a special detail and construction specification for the roadway contractor to relocate these force mains to provide horizontal clearance at certain locations.

WHEREAS, due to the previous direction to lower the roadway profile in the vicinity of the tributary to Plum Creek, the required ROW take from Lake Kyle Park was reduced necessitating a change in the parcel exhibit, legal description and ROW strip map.

WHEREAS, the project quantities, General Notes and Engineer's opinion of probable construction cost will also be revised for these requested design/plan changes.

The Consultant requested additional compensation in the amount of \$35,000.00 for these services; and,

WHEREAS, the additional engineering services to be performed by the Consultant ("supplemental work") are described and set forth in EXHIBIT "A" which is attached hereto and incorporated by reference herein; and,

WHEREAS, after careful review of the support documentation, the City has agreed to an amount not to exceed, \$35,000.00 for the purpose of compensating the Consultant to perform the supplemental work described in EXHIBIT "A";and,

WHEREAS, at its regular meeting on April 4, 2017, the city council approved an amount not to exceed \$35,000.00 for the purpose of compensating the Consultant to perform the supplemental work described in EXHIBIT "A";

NOW THEREFORE, IT IS HEREBY AGREED between the parties hereto that Supplemental Work Authorization #4 ("Authorization") in an amount not to exceed \$35,000.00 is fair and reasonable, and this Authorization will become effective immediately upon the signature of both parties.

IN WITNESS WHEREOF, the parties hereby execute this Supplemental Work Authorization #4 on this 4th day of April, 2017.

THE CITY OF KYLE, TEXAS :	HDR Engineering, Inc.:
	Kelly 1. Kanta
R. Todd Webster, Mayor	Kelly J. Kaatz, P.E. Senior Vice President
ATTEST:	
Jennifer Vetrano, City Secretary	

EXHIBIT A

SUPPLEMENT NO. 4

TO CONTRACT AGREEMENT FOR PROFESSIONAL SERVICES FOR LEHMAN ROAD IMPROVEMENTS

SERVICES TO BE PROVIDED BY THE ENGINEER

WORK DESCRIPTION:

The work to be performed by ENGINEER under Supplement No. 4 to the Contract Agreement for Professional Services for the Lehman Road Improvements project for the plan revisions made necessary by the reduction in the ROW take from Lake Kyle Park as a result of the CITY's request to lower the roadway profile, as well as the CITY's requested change in decorative illumination pole type, pole foundation and electrical service, and investigate the potential for reuse of existing box culverts from the Goforth Road project at the Tributary to Plum Creek low water crossing location.

The scope of work for the aforementioned requested plan revisions include:

PROJECT MANAGEMENT

- The ENGINEER will provide internal project coordination and oversight of design revisions.
- Coordination with City staff regarding reuse of existing box culverts from the Goforth Road project at the Tributary to Plum Creek low water crossing location. Added coordination with roadway, drainage and environmental staff.
- Coordination with new developer located on the previous Mosqueda parcel regarding PCCD easement and roadway / drainage designs.
- Coordination with developer on the Nash parcel regarding roadway access and driveway.

ENVIRONMENTAL STUDIES

• Evaluate the impacts to the environmental assessment for the reuse of existing concrete box culverts from the Goforth Road project at the Tributary to Plum Creek low water crossing location.

PLANS, SPECIFICATIONS & ESTIMATE

ROADWAY GEOMETRICS

- Evaluate the impacts to the proposed roadway profile for the reuse of existing concrete box culverts from the Goforth Road project at the Tributary to Plum Creek low water crossing location.
- Prepare exhibits for City illustrating anticipated clear cover over box culverts and culvert end treatments.
- Update plans and project quantities for the proposed driveway for the new developments located on the former Mosqueda and Nash parcels. Anticipate this new driveway to be

constructed prior to reconstruction of Lehman, therefore driveway will need to be modified for the proposed roadway.

DRAINAGE

• Evaluate the impacts to the proposed hydraulic design for the reuse of existing concrete box culverts from the Goforth Road project at the Tributary to Plum Creek low water crossing location.

SIGNING, PAVEMENT MARKING, AND ILLUMINATION

• The ENGINEER will revise illumination sheets and calculations due to the change in type of decorative illumination pole, pole foundation and electrical service.

MISCELLANEOUS

- The ENGINEER will revise project quantities.
- The ENGINEER will revise the engineer's opinion of probable construction cost.

UTILITY DESIGN

- The CITY requested the engineer to upsize the proposed relocation / replacement of existing wastewater line. New pipe size to be provided by the CITY.
- The ENGINEER will revise the model and verify that the current proposed slope is adequate to provide the necessary velocity and capacity. The ENGINEER will revise the design to provided velocity/slope for the new line size.
- The ENGINEER will revise the CAD file and plan sheets for the change in pipe size.
- Then ENGINEER will update project quantities and cost summary.
- The ENGINEER will perform a QA/QC review of design and plan revisions.

In addition, it has been noted that the existing dual 10" force mains on the northern end of the project are in conflict with proposed curve inlets and storm sewer.

• The ENGINEER will prepare a generic detail for the relocation of force mains, where required, by the contractor. Detail will be simple and general guidance for providing either horizontal separation from proposed storm sewer drainage elements.

HDR ENGINEERING, INC.

EXHIBIT C - SUMMARY OF COMPENSATION SUPPLEMENT NO. 4 (LUMP SUM)

CITY OF KYLE, TEXAS

Project Description: Prepare Environmental Document, Utility Relocation, and PS&E package for Lehman Road from FM 150 to CR 157 (Goforth Rd.).

Project Length: Approximately 8,500 LF (1.60 miles)

1 - PROJECT MANAGEMENT	\$12,335.00
2 - PRELIMINARY ENGINEERING	\$1,230.00
2A ENVIRONMENTAL	\$1,230.00
3 - PLANS, SPECIFICATIONS AND ESTIMATES (PS&E)	\$21,254.00
3A ROADWAY GEOMETRICS (P & P SHTS: 1" = 50')	\$3,342.50
3B ROADWAY DRAINAGE	\$2,651.00
3C ILLUMINATION	\$9,238.00
3D MISCELLANEOUS ROADWAY	\$1,818.00
3F UTILITY ENGINEERING - WASTEWATER LINE RELOCATION - PIPE UPSIZE REQUESTED BY CITY	\$4,204.50
4 - RIGHT OF WAY ACQUISITION SERVICES	\$0.00
5 - DIRECT EXPENSES	\$181.00
<u>6 - SUBCONSULTANT FEES</u>	
SUBTOTAL - SUBCONSULTANT FEES	\$0.00
TOTAL HDR LABOR FEE, SUBCONSULTANTS, AND DIRECT EXPENSES	\$35,000.00

	Project Description: Plum Creek Conservation District Coodination for Lehman Rd.		Project Length	: 1.60 miles	8,500 LF										
TASK NO.	TASK DESCRIPTION	SENIOR PROJ. MGR.	ROW. / ENV. MGR.	SR. ENGR.	SR. ENV. SCIENTIST	JR. ENV. SCIENTIST	GIS TECH.	DESIGN ENGR.	EIT	UTILITY DESIGN COORD	CADD TECH.	ARCH/ HISTORIAN/ PI SPECIALIST	BRIDGE CAD TECH	ACCOUNTING CLERICAL/ STENO	TOTAL
OST C	DMPONENT, HOURS														
1A	PROJECT MANAGEMENT														
	General project management activities	6												6	12
	QA / QC of revised project plans	2		4											6
															0
	Additional invoicing / project controls due to delays	2		2										4	8
	Coordination with City and internal staff regarding possible reuse of existing box culverts from Goforth Road at the Tributary to Plum Creek low water crossing	6	2	2											10
	Additional coordination with new developers on Mosqueda parcel	3		2							3				8
	Additional coordination with developers on the Nash parcel	3		2							3				8
	Additional coordination with City staff and Jansen's regarding previously executed														
	development and annexation agreements and potential impact to road project and Jansen's farming operation	6	8												14
	CURTOTAL PROJECT MANAGEMENT	28	10	12	0	0	0	0	0	0	6	0	0	10	0 66
2Δ	SUBTOTAL PROJECT MANAGEMENT ENVIRONMENTAL	20	10	12	- 0	U	U	0	U	U		0	<u> </u>	10	00
	Evaluate impacts to environmental study if existing concrete boxes are utilized at the														
	Tributary to Plum Creek low water crossing		6												6
	SUBTOTAL ENVIRONMENTAL	0	6	0	0	0	0	0	0	0	0	0	0	0	6
2B	UTILITY COORDINATION														0
	No additional activities														0
	SUBTOTAL UTILITY COORDINATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0 0
2H	SURVEYING AND PHOTOGRAMMETRY														
	TOTAL HDR HOURS	28	16	12	0	0	0	0	0	0	6	0	0	10	72
							HOURLY	RATES INCLUD	ING OVERHEAD	AND PROFIT					
	COST COMPONENT, DOLLARS	\$ 234.50	\$ 205.00	\$ 187.00	\$ 141.00	\$ 109.00	\$ 131.50	\$ 156.00	\$ 119.00	\$ 109.00	\$ 100.00	\$ 87.50	\$ 112.50	\$ 87.50	
1A	PROJECT MANAGEMENT	\$6,566.00	\$2,050.00	\$2,244.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$600.00	\$0.00	\$0.00	\$875.00	\$12,335.0
	ENVIRONMENTAL	\$0.00		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$1,230.0
2B	UTILITY COORDINATION	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.0
	TOTAL HDR LABOR FEE	\$6,566.00	\$3,280.00	\$2,244.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$600.00	\$0.00	\$0.00	\$875.00	\$13,565.0
	COST COMPONENT DIRECT EXPENSES	UNIT COST	UNIT		QTY										
EXP	MILEAGE	\$0.540			240										\$129.6
EXP	COPIES (8.5" x 11")	\$0.05			110										\$5.5
EXP	COPIES (11" x 17")	\$0.10			99										\$9.9
EXP	COPIES (8.5" X 11")(COLOR)	\$0.15			0										\$0.0
EXP	COPIES (11" X 17")(COLOR)	\$0.30			0										\$0.0
EXP	ROLL PLOTS	\$0.20			0										\$0.0
EXP	HAZARDOUS MATERIALS DATABASE SEARCH	\$500.00			0										\$0.0
EXP	COURT REPORTER (PUBLIC INVOLVEMENT)	\$35.00 \$3,500.00			0										\$0.0 \$0.0
LAP	ADDITIONAL TURNING MOVEMENT DATA COLLECTION (GRAM TRAFFIC COUNTS) TOTAL DIRECT EXPENSES	\$5,500.00	EA		U										\$145.0
	1		1									1		1	

	Project Description: Plum Creek Conservation District Coodination for Lehman Rd.	Project Length: 1.60 miles 8,500 LF													
TASK NO.	TASK DESCRIPTION	SENIOR PROJ. MGR.	ROW. / ENV. MGR.	SR. ENGR.	SR. ENV. SCIENTIST	JR. ENV. SCIENTIST	GIS TECH.	DESIGN ENGR.	EIT	UTILITY DESIGN COORD	CADD TECH.	ARCH/ HISTORIAN/ PI SPECIALIST	BRIDGE CAD TECH	ACCOUNTING CLERICAL/ STENO	TOTAL
	OMPONENT, HOURS														
24	ROADWAY GEOMETRICS (P & P SHTS: 1" = 50')														
ЭА.	Evaluate impact to proposed roadway profile for reuse of existing box culverts at the								_						
	Tributary to Plum Creek low water crossing	1						1	2						4
	Prepare exhibits illustrating clear cover of box culverts / possible need for revised	2						2	4						8
	pavement section / culvert end treatments	2						2	4		2				10
	Revise project plans for driveway for proposed development on former Mosqueda parcel								-		-				0
	SUBTOTAL ROADWAY GEOMETRICS	5	0	0	0	0	0	5	10	0	2	0	0	0	22
3B	ROADWAY DRAINAGE			2				4	12				2		20
	Evaluate impact to water surface elevation / hydraulics for possible reused of existing box							4	12				2		0
	SUBTOTAL ROADWAY DRAINAGE	0	0	2	0	0	0	4	12	0	0	0	2	0	20
3C	ILLUMINATION														
	REVISE ILLUMINATION DETAILS AND CALCULATIONS REVISE ILLUMINATION / ELECTRICAL SERVICE PLAN SHEETS			6				20 8			10 20				36 32
	REVISE IELOWINATION / ELECTRICAL SERVICE FLAN SHEETS										20				0
	SUBTOTAL ILLUMINATION	0	0	10	0	0	0	28	0	0	30	0	0	0	68
3D	MISCELLANEOUS ROADWAY	1		1					2						4
	REVISE PROJECT QUANTITY SHEETS REVISE ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST	1		2					2						4
	REVISE PROJECT GENERAL NOTES	1						2							3
											_				0
3E	SUBTOTAL MISCELLANEOUS ROADWAY TRAFFIC CONTROL PLANS	2	0	3	0	0	0	2	4	0	0	0	0	0	11
35	No additional activities														0
															0
	SUBTOTAL OF TRAFFIC CONTROL PLANS	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3F	UTILITY ENGINEERING - WASTEWATER LINE RELOCATION - PIPE UPSIZE REQUESTED BY CITY REVISE MODEL. VERIFY SLOPE, CAPACITY, VELOCITIES. REVISE AS NECESSARY	2							3						5
	REVISE CAD SHEETS	-							2		4				6
	REVISE QUANTITIES COST SUMMARY			1					1						2
	QA QC OF REVISED DESIGN AND CAD DETAILS COORDINATION WITH RPS TO VERIFY CURRENT ELLIOTT BRANCH DESIGN	1							2						3
	COOKDINATION WITH RPS TO VERIFY CORRENT ELLIOTT BRANCH DESIGN	1													0
	PREPARE GENERIC DETAIL FOR RELOCATON OF 10" FORCE MAINS IN CONFLICT WITH SS	2						4			4				10
		7	0	1	0	0		4	_	_	8	0	0	0	0
3G	SUBTOTAL UTILITY ENGINEERING DRAINAGE STRUCTURE / BRIDGE DESIGN		U	1	U	U	0	4	8	0	8	0	U	U	28
	No additional activities														0
															0
311	SUBTOTAL BRIDGE DESIGN NRCS STRUCTURE MITIGATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
311	No additional activities														0
															0
	SUBTOTAL NRCS STRUCTURE MITIGATION	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	TOTAL HDR HOURS	14	0	16	0	0	0	43	34	0	40	0	2	0	149
	TOTAL TIDAL T					-						-		_	
								LY RATES INCLU					****		
	COST COMPONENT, DOLLARS	\$ 234.50	\$205.00	\$187.00	\$141.00	\$109.00	\$131.50	\$156.00	\$119.00	\$109.00	\$100.00	\$87.50	\$112.50	\$87.50	
3A	ROADWAY GEOMETRICS (P & P SHTS: 1" = 50')	\$1,172.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$780.00	\$1,190.00	\$0.00	\$200.00	\$0.00	\$0.00	\$0.00	\$3,342.50
3B	ROADWAY DRAINAGE	\$0.00	\$0.00	\$374.00	\$0.00	\$0.00	\$0.00	\$624.00	\$1,428.00	\$0.00	\$0.00	\$0.00	\$225.00	\$0.00	\$2,651.00
3C 3D	ILLUMINATION MISCELLANEOUS ROADWAY	\$0.00 \$469.00	\$0.00 \$0.00	\$1,870.00 \$561.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$4,368.00 \$312.00	\$0.00 \$476.00	\$0.00 \$0.00	\$3,000.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$9,238.00 \$1,818.00
3E	TRAFFIC CONTROL PLANS	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
3F		\$1,641.50	\$0.00	\$187.00	\$0.00	\$0.00	\$0.00	\$624.00	\$952.00	\$0.00	\$800.00	\$0.00	\$0.00	\$0.00	\$4,204.50
	UTILITY ENGINEERING - WASTEWATER LINE RELOCATION - PIPE UPSIZE REQUESTED BY CITY														
3G 3H	DRAINAGE STRUCTURE / BRIDGE DESIGN NRCS STRUCTURE MITIGATION	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00	\$0.00 \$0.00
311	INCO STRUCTURE INTEGRATION		Ç0.00	Ş0.00	Ş0.00	Ç0.00	Ç0.00	,		Ç0.00	Ç0.00	, vo.00	Ş0.00	Ş0.00	Ş0.00
	TOTAL HDR LABOR FEE	\$3,283.00	\$0.00	\$2,992.00	\$0.00	\$0.00	\$0.00	\$6,708.00	\$4,046.00	\$0.00	\$4.000.00	\$0.00	\$225.00	\$0.00	\$21,254.00
	IOTAL FIDE LABOR FEE	33,203.00	ŞU.UU	32,332.00	ŞU.UU	30.00	ŞU.UU	30,700.00	34,040.00	30.00	34,000.00	30.00	3223.UU	ŞU.00	321,234.UU
	COST COMPONENT DIRECT EXPENSES	UNIT COST	UNIT		QTY										
EXP	MILEAGE	\$0.540	MILE		0										\$0.00
EXP	COPIES (8.5" x 11") COPIES (11" x 17")	\$0.05 \$0.10	EA EA		0 360										\$0.00 \$36.00
EXP	COPIES (8.5" X 11")(COLOR)	\$0.15	EA		0										\$0.00
EXP	COPIES (11" X 17")(COLOR)	\$0.30	EA		0										\$0.00
EXP	MYLARS (11" X 17")	\$2.00 \$25.00	EA EA		0										\$0.00 \$0.00
EXP	OVERNIGHT DELIVERIES TOTAL DIRECT EXPENSES	ş25.UÜ	LA		U										\$36.00
	TOTAL HDR LABOR FEE AND EXPENSES														\$21,290.00