## Authorization No. 91 TO Agreement Between City Of Smithville, Missouri And HDR Engineering, INC. (Formally E.T. Archer Corporation) For Professional Engineering Services

### HIGHLAND STREET SANITARY SEWER IMPROVEMENTS

In accordance with Section 1.A. of the December 18, 2003 Agreement, ENGINEER is hereby authorized to assist the City with the topographic survey, design, preparation of easement and construction documents, bidding assistance, and construction administration for sewer improvements on Highland Drive and Quincy Boulevard east of HWY 169. The total length of sanitary sewer main improvements is approximately 500 feet with 4 manholes from 607 Quincy Boulevard to 102 Highland Drive.

The Scope of Services will more specifically include the following project improvements and tasks.

### **SCOPE OF SERVICES**

#### Task 1. Surveying – Base Services

- 1. Project research, preparation and management.
- 2. Safety Coordination
- 3. Control and benchmark survey
- 4. Topographic and utility survey
- 5. Property boundary, right-of-way and existing easement survey.
- 6. Utility coordination
- 7. Easement Descriptions & Conveyance Documents (4 properties total)
- 8. Title Work Coordination (4 Guaranteed Title Report)

#### Task 2. Design Phase – Base Services

- 1. Title Page, General Layout, and Survey Control Plans.
- 2. Erosion Control Plan
- 3. Sanitary Sewer Plan and Profile
- 4. Traffic Control Plan
- 5. Sanitary Sewer and Miscellaneous Details
- 6. Easement Dimension Plan
- 7. Project Manual/Technical Specifications
- 8. Prepare preliminary and final construction cost estimates
- 9. Utility coordination and plan submittal
- 10. Client meetings (2 included, conceptual layout and final plan review)
- 11. Internal QC Review
- 12. Project Management, schedule/cost control, invoicing

- 13. Geotechnical Investigation
  - a. 5 bores along the project alignment, depth 7 to 16 feet.
  - b. 8 pavement cores along Main Street between Commercial and Liberty
  - c. 6 pavement cores and subbase sampling at various locations within Smithville

## Task 3. Bidding Phase – Base Services

- 1. Prepare bid package (submit 1 Full size & 1 half size hard Copy to City, electronic files to Drexel)
- 2. Address prospective bidder's questions during bidding
- 3. Prepare up to one (1) addenda during bidding
- 4. Attend bid opening
- 5. Tabulate and review bids and provide award recommendation

#### **Task 4. Construction Phase – Base Services**

- 1. Review and distribute four (4) sets of executed contract documents
- 2. Attend pre-construction meeting (prepare agenda/meeting notes)
- 3. Review up to ten (10) Contractor submittals
- 4. Address up to 5 RFI's and issue up to 1 change orders
- 5. Review Contractor's applications for payment.
- 6. Monthly Progress/Coordination Meetings (3 meetings included)
- 7. Engineer site visits (2 total)
- 8. Perform substantial/final completion inspection/documentation
- 9. Perform project management, schedule/cost control, invoicing
- 10. Record Drawings Completion/Project Close-Out

## **Project Assumption**

- 1. A geotechnical investigation is included due to the anticipated depth of the sewer near the intersection of Highland & Quincy. Investigation will determine the presence of bedrock or soft soils and groundwater.
- 2. The City will negotiate with and obtain easements from the property owners (4 anticipated)
- 3. The City will provide construction observation and review results of testing during construction. HDR can provide this service if the City so chooses as an additional service.
- 4. The project will only be bid one time.
- 5. MDNR construction permit will not be required (sewer extensions less than 1,000 ft).
- 6. Land Disturbance permit will not be required (less than 1 acre total disturbance).
- 7. Construction duration will be approximately 90 calendar days.

## FEE

The CITY shall compensate ENGINEER for the Highland Street Sanitary Sewer Improvements in an amount not to exceed \$83,760.00.

## **SCHEDULE**

Topographic survey will commence within four weeks from NTP. Preliminary plans will be completed within four weeks from survey completion. After preliminary design is approved by the City, easement documents will be developed for acquisition by the City. Final Construction Documents are completed concurrently with easement acquisition.

This AUTHORIZATION shall be binding on the parties hereto only after it has been duly executed and approved by the CITY and ENGINEER.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this AGREEMENT in duplicate on the respective dates indicated below.

CITY: SMITHVILLE, MISSOURI

By: \_\_\_\_\_

Type or Print Name

Title \_\_\_\_\_

Date \_\_\_\_\_

ENGINEER: HDR Engineering, Inc. (formally E.T. ARCHER CORPORATION)

	AvanDi
By:	Jeseph Drimmel (Apr 10, 2020)

Joseph E. Drimmel, P.E. Type or Print Name

Title Sr. Vice President

Date Apr 10, 2020

(SEAL)

(SEAL)

#### Smithville Highland Drive Sewer Improvements

Scope and Fee

		Wiebelhaus, Mitchell John (Mitch)	Call, Brady	Sherman, William A	Yakle, Johnny R	Shields, Tyler		Jasper, James F	Allen, Jeffrey G	Campbell, Joni L	Harkins, Jeremy	Berne, Susan L	HDR Expenses	s Subconsultants	Total
Rate Schedule Code	Senior Project Manager I	Engineer II	Engineer I	Cadd/GIS Technician III	Senior Land Surveyor	Survey Technician II	Survey Technician II	Survey Technician III	Cadd/GIS Technician V	Project Assistant	Project Accountant I	Admin Assistant			
Billing Rate	\$225.00	\$135.00	\$110.00	\$130.00	\$160.00	\$80.00	\$80.00	\$120.00	\$165.00	\$95.00	\$95.00	\$80.00			
TASKS															
Task 1 - Surveying - Base Services															
<sup>1</sup> Project research, preparation and management					2										\$32
2 Safety Coordination					1	1	1	1	1						\$60
<sup>3</sup> Control and benchmark survey						6	6								\$96
<sup>4</sup> Topographic and utility survey					3	18	18	14					\$355		\$5,39
<sup>5</sup> Property boundary, right-of-way and existing															
easement survey					6	16	16	10							\$4,72
6 Utility coordination									4						\$66
7 Easement Descriptions & Conveyance Documents (4 property total)					8			4							\$1,76
<sup>8</sup> Title Work Coordination (4 Guaranteed Title Reprot)					1								\$1,000		\$1,16
Subtotal Hours	0	0	0	0	21	41	41	29	5	0	0	0			
Subtotal Dollars	0	0	0	0	3360	3280	3280	3480	825	0	0	0	1355	0	\$15,58
Total Task 1															\$15,58
Task 2 - Design Phase - Base Servies															
1 Title Page, General Layout, and Survey Control Plans		4		8											\$1,58
2 Erosion Control Plan		4		8											\$1,58
3 Sanitary Sewer Plan and Profile	4	36		60											\$13,56
4 Traffic Control Plan		1	8	4											\$1,53
5 Sanitary Sewer and Miscellaneous Details	1	2	4	8											\$1,97
6 Easement Dimension Plan		6	6	12											\$3,03
7 Project Manual/Technical Specifications	4	24										16	\$75		\$5,49
8 Prepare preliminary and final construction cost												10	4,0		\$2,19
estimates	1	4	4												\$1,20
9 Utility coordination and plan submittal		8													\$1,08
l0 Client meetings (2 included, conceptual layout and															
final plan review)	6	6											\$150		\$2,31
11 Internal QC Review	4												\$20		\$92
12 Project Management, schedule/cost control,															
invoicing		8								4	8				\$2,22
13 Geotechnical Investigation	1	4								2	1			\$7,800	\$8,85
Subtotal Hours	21	107	22	100	0	0	0	0	0	6	9	16			
Subtotal Dollars	4725	14445	2420	13000	0	0	0	0	0	570	855	1280	245	7800	\$45,34

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#### Smithville Highland Drive Sewer Improvements

Scope and Fee

	Bresette, Aaron J Senior Project	Wiebelhaus, Mitchell John (Mitch)	Call, Brady	Sherman, William A Cadd/GIS	Yakle, Johnny R Senior Land	Shields, Tyler Survey	Meyer, Timothy C Survey	Jasper, James F Survey	Allen, Jeffrey G Cadd/GIS	Campbell, Joni L Project	Harkins, Jeremy Project	Berne, Susan L Admin	HDR Expenses	Subconsultants	Total
Rate Schedule Code	Manager I	Engineer II	Engineer I	Technician III	Surveyor	Technician II	Technician II	Technician III	Technician V	Assistant	Accountant I	Assistant			
Billing Rate	\$225.00	\$135.00	\$110.00	\$130.00	\$160.00	\$80.00	\$80.00	\$120.00	\$165.00	\$95.00	\$95.00	\$80.00			
TASKS															
C. Task 3 - Bidding Phase - Base Servies															
l Prepare bid package (submit 1 full size & 1 half size															
hard Copy to City, electronic files to Drexel)	1	2										2	\$75		\$730
2 Address prospective bidder's questions during bidding	1	8	8												\$2,185
<sup>3</sup> Prepare up to one (1) addenda during bidding	1	4	4	4											\$1,725
4 Attend bid opening	1	4 4	+					1					\$45		\$1,723
<sup>5</sup> Tabulate and review bids and provide award													φ+5		\$505
recommendation	1	8	4												\$1,745
Subtotal Hours	4	26	16	4	0	0	0	0	0	0	0	2			
Subtotal Dollars	900	3510	1760	520	0	0	0	0	0	0	0	160	120	0	\$6,970
Total Task 3															\$6,970
D. Task 4 - Construction Phase - Base Servies															
Review and distribute four (4) sets of executed															
/ contract documents		2	4									2	\$140		\$1,010
Attend pre-construction meeting (prepare		-	•									2	φιιο		\$1,010
2 agenda/meeting notes)	3	8											\$45		\$1,800
3 Review up to ten (10) Contractor submittals	2	5	10												\$2,225
Address up to 5 RFI's and issue up to 1 change		U U	10												\$2,220
4 orders	2	6	4												\$1,700
5 Review Contractor's applications for payment	2	6													\$1,260
Monthly Progress/Coordination Meetings (3															
6 meetings included)	9	9											\$150		\$3,390
7 Engineer site visits (2 total)		6											\$90		\$900
Perform substantial/final completion															
8 inspection/documentation		8											\$45		\$1,125
Perform project management, schedule/cost										_					
9 control, invoicing		6		+						2	4				\$1,380
10 Record Drawings Completion/Project Close-Out		8													\$1,080
Subtotal Hours	18	64	18	0	0	0	0	0	0	2	4	2	470		
Subtotal Dollars	4050	8640	1980	0	0	0	0	0	0	190	380	160	470	0	\$15,870
Total Task 4															\$15,870
Total Hours	43	197	56	104	21	41	41	29	5	8	13	20			578
Total Billing Amount	\$9,675	\$26,595	\$6,160	\$13,520	\$3,360	\$3,280	\$3,280	\$3,480	\$825	\$760	\$1,235	\$1,600	\$2,190	\$7,800	\$83,760

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Estimated Project Fee

\$83,760