EXHIBIT A

Scope of Services
Mechanical Integrity Testing of Deep Injection Wells IW-1, IW-2, IW-3, and IW-4 at the Southern Regional Wastewater Treatment Plant
ESSD Project No. XXXX
City of Hollywood
Department of Public Utilities

Background

The City of Hollywood (City) owns and operates the Southern Regional Wastewater Treatment Plant (SRWWTP). The SRWWTP is permitted to treat an average annual daily flow of 55.5 million gallons per day (mgd). The SRWWTP has four (4) deep injection wells (IW-1, IW-2, IW-3, and IW-4). As specified in Rule 62-528, Florida Administrative Code (FAC), deep injection wells must demonstrate both internal and external mechanical integrity every 5 years. Mechanical integrity testing (MIT) for all the deep injection wells at the SRWWTP and net MITS are shown in the table below:

Well Name	Last MIT Date	Next MIT Due Date
IW-1	August 21, 2022	August 20, 2027
IW-2	August 31, 2022	August 30, 2027
IW-3	April 26, 2021	April 25, 2026
IW-4	September 7, 2021	September 6, 2026

MIT of each injection well will consist of performance of a video survey, pressure testing, temperature logging, and performance of a radioactive tracer survey (RTS). The Florida Department of Environmental Protection (FDEP) requires that a MIT Plan providing testing procedures be submitted to, and approved by, the Underground Injection Control (UIC) program of the FDEP. Additionally, it will be necessary for the City to hire a well testing Contractor to perform the actual MIT of the wells. A set of Technical Specifications detailing the testing procedures is required for the City to solicit competitive bids from potential testing Contractors.

Brown and Caldwell, along with its subconsultant, McNabb-Miller Hydrogeologic Consulting, Inc. (MMHC), has completed the MIT Plan and technical specifications. The same team will perform the professional services associated with the MIT testing.

Scope of Services

The Scope of Services to be provided by the Consultant team includes the following tasks:

- Task 1 – Project Administration and Coordination
- Task 2 – MIT Field Services of IW-1, IW-2, IW-3, and IW-4
- Task 3 – Preparation of MIT Reports

Task 1 – Project Coordination and Administration

The Consultant team's project manager will be the City's point of contact during the execution of the work. The City will appoint a project manager to be the Consultant's point of contact during the execution of the work. The City's project manager will coordinate involvement of City operations, maintenance, administrative, and engineering staff as needed. Consultant's project manager will manage the work of the Consultant team's internal staff to provide City staff with efficient and responsive service throughout the course of work on this project.

Consultant will provide a monthly progress report to the City and perform administrative activities throughout the duration of the project.

Deliverables:

The following deliverables will be provided under this task.

- Monthly status reports and invoices

Task 2 – MIT Field Services for IW-1, IW-2, IW-3 and IW-4

Once the Contractor has been selected, the Consultant team will provide resident oversight services during the MIT work. This will be performed by staff experienced in the construction and testing of Class I injection wells.

Task 3 – MIT Reports

Upon completion of the MIT work for the four (4) injection wells, the Consultant team will prepare a report summarizing the MIT work, a summary and interpretation of the injection well system operating and monitoring data, and an interpretation of the testing results. Separate, stand-alone reports will be prepared for each injection well. A draft of the reports will be submitted to the City of Hollywood for review and comments. Upon receipt of the comments, the MIT reports will be finalized and submitted to FDEP and the City. Response to up to two (2) requests for additional information (RAIs) related to the MIT reports is also included in this task.

Deliverables:

The following deliverables will be provided under this task.

- Four (4) electronic draft reports
- Four (4) electronic final reports

Assumptions

1. The City will provide potable water for the MIT testing. The estimated volume of water to be used in each injection well is approximately 130,000 gallons per well.

2. The City will review the reports within two (2) weeks and provide consolidated comments in each of the four (4) reports.

Schedule

Upon selection of the contract and receipt of the Authorization to Proceed (ATP) and the Purchase Order (PO), the work will commence and it is expected to be completed within 120 calendar days.

Exhibit B

Compensation
Mechanical Integrity Testing of Deep Injection Wells IW-1, IW-2, IW-3, and IW-4 at the Southern Regional Wastewater Treatment Plant
Project No. XXX
City of Hollywood
Department of Public Utilities

Total compensation to Consultant for the Scope of Services described in Exhibit A will be the lump sum amount of $209,375.00

A breakdown of the Consultant's estimated fee to perform the work described in Exhibit A is presented in Exhibits B-1 through B-3 on the following pages.

Copies of proposals from **McNabb-Miller Hydrogeologic Consulting, Inc.,** containing cost breakdowns for the work this firm will be providing, are included for reference at the end of this proposal.

EXHIBIT B-1

Summary of Engineering Fees

City of Hollywood - MIT of DIWs IW-1, IW2, IW-3, and IW-4 CAS

Description		Amount
Direct Labor Costs	$	91,175
Subcontracts and Other Direct Costs	$	118,200
Total Fee	**$**	**209,375**

EXHIBIT B-2

COST ESTIMATE										
CITY OF HOLLYWOOD										
City of Hollywood - MIT of DIWs IW-1, IW2, IW-3, and IW-4 CAS										
			General, Administrative, and Permitting							
			Project Director	Technical Advisor/QC	Project Manager	Engineer	Project Analyst	Coord.		
			Vice President	Sr. Principal Hydrogeologist	Managing Engineer	Engineer III	Project Analyst III	Project Admin	**Labor Hours**	**Labor Cost**
		Billing Labor Rate	$359.07	$257.56	$309.57	$191.83	$139.76	$91.53		
			Earle	Christians	Herrera	Julien	Gonzales	Curatolo		
		TASKS								
TASK NO. 1 - Project Administration and Coordination										
	1.1	Project Administration and Coordination	40	4	80	0	30			$ 44,351.44
		Hour Subtotal	40	4	80	0	30	0	**154**	
		Labor Cost Subtotal	$14,363	$1,030	$24,766	$0	$4,193	$0		**$ 44,351.44**
TASK NO. 2 - MIT Field Services for IW-1, IW-2, IW-3, and IW-4										
	2.1	MIT Field Services	8	2	20	24	20			$ 16,978.20
										$ -
										$ -
		Hour Subtotal	8	2	20	24	20	0	**74**	
		Labor Cost Subtotal	$2,873	$515	$6,191	$4,604	$2,795	$0		**$ 16,978.20**
TASK NO. 3 - MIT Reports										
	3.1	MIT Reports	20	16	40	8	20	20		$ 29,845.60
										$ -
										$ -
										$ -
										$ -
		Hour Subtotal	20	16	40	8	20	20	**124**	
		Labor Cost Subtotal	$7,181	$4,121	$12,383	$1,535	$2,795	$1,831		**$ 29,845.60**
		TOTALS								
		Total Labor Hours	68	22	140	32	70	20	**352**	
		Total Labor Cost without Allowances	$24,417	$5,666	$43,340	$6,139	$9,783	$1,831		**$91,175**
		Total Labor Cost with Allowances								**$91,175**
		Subcontracts and ODCs								**$118,200**
		TOTAL								**$209,375**

EXHIBIT B-3

OTHER DIRECT COSTS SUMMARY

City of Hollywood - MIT of DIWs IW-1, IW2, IW-3, and IW-4 CAS

		UNIT	NO. OF UNITS	UNIT COST	TOTAL COST
1.0	COPYING AND PRINTING				
	COPIES 8.5x11	PAGES	0	$ 0.10	$0
	COPIES 11x17	PAGES	0	$ 0.20	$0
	COPIES 22x34	PAGES	0	$ 1.80	$0
3.0	MAILING - FED EXPRESS	UNIT	0	$ 20	$0
4.0	TRAVEL	LS			$0
	SUBTOTAL OTHER DIRECT COSTS				**$0**
4.0	SUBCONTRACTS				
	MMHC	LS			$118,200
	SUBCONTRACTS SUBTOTAL				**$118,200**
	Total for Subcontracts and Other Direct Costs				**$118,200**