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July 9, 2025

Mr. Paul Thompson Assistant Utility Director City of Pembroke Pines 8300 S. Palm Drive Pembroke Pines, FL 33025

Re: Hydrogeologic Consulting Services

Mechanical Integrity Testing
City of Pembroke Pines Deep Injection Wells IW-1 and IW-2
Pembroke Pines, Broward County, Florida

Dear Mr. Thompson:

Connect Consulting, Inc. (CCI) appreciates the opportunity to provide hydrogeologic services to the City of Pembroke Pines (City) for the above referenced project. Our proposed scope of work includes services to complete mechanical integrity testing (MIT) activities for two, municipal, deep injection wells, IW-1 and IW-2, owned and operated by the City of Pembroke Pines (City). It is our understanding that the injection wells are used for the disposal of secondary treated municipal effluent from the Pembroke Pines Wastewater Treatment Plant.

Background

The injection well system is permitted by the Florida Department of Environmental Protection (FDEP) Underground Injection Control (UIC) department. The injection well system is operated in accordance with FDEP Permit No. 0336555-003-004-UO/1M issued on April 26, 2022. As described in Specific Condition I.B. of the permit, the City must demonstrate mechanical integrity once every five years during the life of each injection well.

The MIT program must include the following: TV survey, pressure test, radioactive tracer survey, and temperature log. The next MIT for IW-1 must be completed by March 7, 2026, and on IW-2 by March 3, 2026. An MIT plan must be submitted to FDEP no later than ninety days (December 3, 2025, for IW-2 and December 7, 2025, for IW-1) prior to the MIT deadline.

The general scope to complete MIT efforts for the City is as follows:

- Identify a suitable piggyback contract to facilitate procurement of a qualified licensed water well contractor.
 - o If a piggyback contract is not available, provide technical specifications for the City to bid and provide oversight of bidding.
- Prepare and submit MIT plan to FDEP.
- Provide on-site coordination and field oversight services of the MITs.

- o Coordinate, as required, with operational personnel at the plant to assist in minimizing impact on facility operations.
- Review the data submitted by the Contractor for the MIT's and prepare a summary report that
 provides a description of the tests and methods used and an interpretation of the results of the
 MIT for both wells. CCI will also review and evaluate the previous five years of operational data
 for each injection well.

Scope of Work

Task 1 – Identify a Suitable Piggyback Contract

CCI will assist the City in identifying a suitable piggyback contract that can be used to complete mechanical integrity testing activities for IW-1 and IW-2. If a suitable contract cannot be found, CCI will prepare bid specifications and assist the City in the bidding process (see Task 2).

Task 2 – Preparation of Bid Specifications and Bidding Assistance (if a Piggyback Contract is not available)

CCI will develop a basic specification/request for quotation to solicit quotations from water well contractors capable of conducting the scope of work. The specification will include a bid/quotation form with lump sum and unit prices that will sum to a total price for bid/quotation evaluation. CCI will assist the city in distributing the specifications by email, answer questions from the contractors who will be providing quotes, review the submitted quotes, and provide a recommendation to the City to use in procuring the contractor. The City will procure the contractor.

Task 3 – Prepare and Submit MIT Plan to FDEP

CCI will review the existing operating permit, No. 0336555-003-004-UO/1M and previous MIT procedures used in 2021. After review of the above-referenced documents, CCI will prepare and submit an MIT Plan to the FDEP UIC department for approval.

Task 4 – Project Coordination/Administration and Field Oversight

CCI will provide project coordination with the City/operating staff and the selected drilling contractor. CCI will also provide field oversight services for the MIT of both injection wells to document the work conducted by the contractor and ensure that the work is conducted in accordance with the specifications and contractor quotation.

Task 5 – Data Evaluation and Report Preparation

CCI will review the data collected during the MIT's and provide an interpretation of results as required by Rule 62-528.300(6)(f), Florida Administrative Code. The data will be incorporated into a summary report that provides a description of the tests and methods used and an interpretation of the results of the MIT for both wells. CCI will also review and evaluate operational data for both injection wells over the previous five-year period. This data may include injection well performance data, upper and lower zone monitoring well data, specific injectivity test data, and groundwater geochemistry data. The report will be signed and sealed by a Florida-licensed Professional Geologist.

Schedule

CCI can begin work on Tasks 1 and 3 immediately upon receipt of written authorization from the City. The MIT of IW-1 and IW-2 should be completed on or before March 7, 2026, and March 3, 2026. CCI will deliver a draft of the final report within 60 days of receipt of the final MIT data from the drilling contractor and the operational data provided by the City. The final report will be submitted to the City and/or the FDEP within 10 working days upon receipt of comment from the City.

Cost of Services

CCI will provide these services for a lump sum fee of \$50,837.00 as shown in Table 1. The City agrees to pay CCI for the Services as specified therein. Compensation for Services covered by a Change of Scope or for Additional Services shall be as defined in an approved Change Order.

Table 1 – Cost of Services						
Task No.	Description	Fee				
1	Identify a Suitable Piggyback Contract	\$2,130.00				
2	Preparation of Bid Specifications and Bidding Assistance (if Necessary)	\$7,620.00				
3	Prepare and Submit MIT Plan to FDEP	\$2,950.00				
4	Project Coordination/Administration and Field Oversight	\$24,065.00				
4.1	Project Travel for Field Oversight (11 trips, 160 miles per trip, \$ 0.70 per mile)	\$1,232.00				
5	Data Evaluation and Report Preparation	\$12,840.00				
	Total	\$50,837,00				

Table 1 - Cost of Services

Cost Notes and Assumptions

- 1. The fees for oversight services assume eleven (11) field days. Additional time (field days) will be invoiced on a time and material, not to exceed basis. A rate sheet is enclosed.
- 2. The level of effort for report preparation and data evaluation assumes that the historical operational and water quality data will be provided in tabular format and can be evaluated using typical software capable of providing trend analysis using graphs, such as Microsoft Excel or equivalent. If data tabulation is required or requested, CCI will provide these services on a time and materials, not to exceed basis in accordance with the conditions contained in this proposal.

Payment

CCI will submit partial payment requests at the end of each calendar month. The City agrees to pay each invoice within thirty (30) days of its receipt of an acceptable invoice.

If this proposal is acceptable, please sign the authorization block and return to CCI. If you have any questions, please do not hesitate to contact me.

Sincerely,

CONNECT CONSULTING, INC.

James L. Andersen, P.G. Principal Hydrogeologist Cc: Elizabeth Owosina, David Robertson

CONNECT CONSULTING, INC SCHEDULE OF HOURLY BILLING RATES

Principal Hydrogeologist/Corporate (Officer		\$245.00
Project Manager/Senior Hydrogeolog	gist III		\$228.00
Senior Hydrogeologist II			\$205.00
Hydrogeologist III			\$155.00
Hydrogeologist II			\$140.00
Hydrogeologist I			\$132.00
AUTHORIZATION:			
City of Pembroke Pines			
Authorized Agent (Print Name)		Date	-
Signature			
WITNESS:			
Printed Name	•	Date	_
Signature			

Hydrogeologic Services Estimate

JLA Geosciences, Inc.

PROJECT: Pembroke Pines WWTP MIT's (IW-1 and IW-2)	SHEET 1 OF 1				
CLIENT: City of Pembroke Pines	FILE NO.				
ESTIMATOR: E Owosina, CCI	DATE: 7/3/2025 7/23/2025 updated				

DESCRIPTION:												
Provide services to complete mechanical integrity testing (MIT) activities for two, municipal, deep injection wells, IW-1 and IW-2, owned and operated by the City of Pembroke Pines at the City of Pembroke Pines WWTP.		Principal Hydro	Sr Hydro III	Sr Hydro II	Hydrogeologist III	Hydrogeologist II	Hydrogeologist I	Mileage	Equipment Cost	ODC/Subconsult ant	LINE TOTAL	TASK TOTAL
NO.	TASK											
1.0	Identify a Suitable Piggyback Contract	2		8							\$2,130	
2.0	Preparation of Bid Specifications and Bid Assistance	6		30							\$7,620	
3.0	Prepare and Submit MIT Plans to FDEP	2		12							\$2,950	
4.0	Project Coordination and Field Oversight	2		45	70	25					\$24,065	
4.1	Project Site Travel Mileage (11 trips, 160 mi/trip @ \$0.70/mile)							\$1,232			\$1,232	
5.0	Data Evaluation and Report Preparation	6		50		8					\$12,840	
	TOTAL HOURS	18		145	70	33					\$50,837	
	LABOR (\$/HOUR)	\$245	\$228	\$205	\$155	\$140	\$132					
	TOTALS			\$29,725				\$1,232			\$50,837	\$50,837