December 12, 2023

Castulo Estrada Utilities Manager City of Coachella 87075 Avenue 54 Coachella, California 92236

Subject: Proposal to Perform Well Site Evaluation, Provide Final Recommendation and Prepare Technical Specifications and Bid Package for the Drilling, Construction and Development of Proposed Well 20

Dear Mr. Estrada,

Dudek is pleased to submit this proposal to the City of Coachella (City) to support the final well siting and preparation of technical specifications and bid document package for the drilling, construction and development of proposed

Well 20. Dudek offers the District a team of professional hydrogeologists and water resource engineers with years of local experience on similar projects. We specialize in all aspects of production well construction, from bidding, planning and design to overseeing drilling, development, testing, equipping, and above-grade infrastructure associated with the operations of a well. As part of our initial approach, Dudek hydrogeologists will review the Well 20 Siting Evaluation technical memorandum dated August 22, 2017.

Based on discussions with the City, Dudek understands that the anticipated location for the new well is location C or D, as identified in the report and shown in **Figure 1**. However, the City recently acquired new property further south near Avenue 53. Dudek will evaluate this newly acquired property as a potential well site and make a final recommendation for the final location of Well 20, factoring in considerations such as hydrogeologic setting, production potential, well interference potential, groundwater quality,

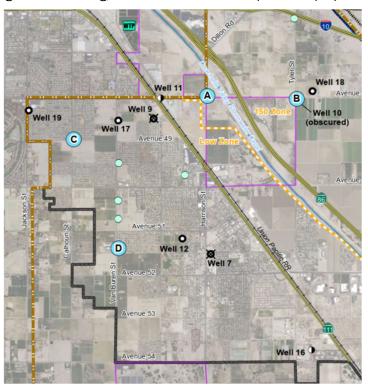


Figure 1: Potential Well Sites Based on 2017 Well Siting Report.

proximity to existing infrastructure, and parcel ownership. Additionally, Dudek will support the City following the final well site selection with the preparation of technical specifications and a bid package for solicitation of a licensed C-57 drilling contractor.

The new groundwater well will be located within the Indio Subbasin of the Coachella Valley Groundwater Basin (DWR Basin No. 7-12.01, which is designated as a medium-priority basin and subject to the Sustainable Groundwater Management Act (SGMA) of 2014. The four water agencies in the Indio Subbasin (Coachella Valley Water District, Desert Water Agency, Coachella Water Authority and the Indio Water Authority) are collaborating to manage the Subbasin, each acting as exclusive Groundwater Sustainability Agencies (GSAs) that oversee portions of the



Subbasin overlying their respective services area. The new well location will be within the Coachella Water Authority management area.

We understand that an important initial component of this project (after the final well site has been selected) will be obtaining all the necessary permits in a timely fashion to prevent project delays. We will provide well permitting support including completing a preliminary Drinking Water Sources Assessment and Protection (DWSAP) report will be prepared for the District new groundwater production well, which will follow the Division of Drinking Water (DDW) templates and guidelines. Additionally, we will facilitate permitting through the Riverside County Department of Environmental Health, as necessary.

Dudek's project manager, Kayvan Ilkhanipour, PG, CHg, will serve as the point of contact for the City and Patrick Rentz, PG will serve and the senior hydrogeologist on the project. This letter outlines our anticipated scope to provide hydrogeological support for the Well 20 well project and includes our assumptions of the level of effort required.

## Scope of Work

## **Task 1: Project Management and Meetings**

- Preparation of monthly invoices and progress reports.
- Monthly budget and schedule tracking.
- Regular communication between the Dudek project manager, City, and project team.
- Facilitation of quality control reviews for deliverables.
- Meetings:
  - Kickoff Meeting: In person kick off meeting including Dudek project manager, project engineer and appropriate District engineering, management, and operations staff. The meeting will be followed by a site visit.
  - Preliminary Design Report (PDR) review meeting. Zoom meeting to review and discuss PDR, and receive City comments.
  - Draft technical specifications review meeting. Zoom meeting to review draft technical specifications for Well 20, based off of PDR report, and receive City comments.
  - Final technical specifications review meeting. Zoom meeting to review draft technical specifications for Well 20, and receive City comments.

#### **Deliverables:**

- Meeting agendas for online meetings.
- Meeting minutes for all meetings.

## Task 2: Data Review and Preliminary Design Report (PDR)

Dudek will prepare a preliminary design report that will include an evaluation of the recently acquired well site south of Ave. 53, background hydrogeologic data at and near the site, a preliminary design of the well, and information regarding the planned well construction. The site evaluation will include accessing the site location for any hazards and feasibility for connecting the new water supply to existing infrastructure. Background hydrogeologic data will be used to estimate the well yield and evaluate the anticipated aquifer material at the new well location, as well as expected water quality. The preliminary design report will include all proposed aspect of well construction from well casing material, screen, depths, etc., and site logistics during drilling (potable water supply, locations for discharge water during development and testing, noise requirements, dust requirements, traffic requirements, and any other monitoring required).

#### **Deliverables:**

- Draft Preliminary Design Report
- Final Preliminary Design Report

### Task 3: Draft and Final Plans, Specifications and Estimates

The Dudek team will prepare draft and final technical specifications for the new well, incorporating details and comments from the PDR (Task 2) as the basis for design. Dudek will review previously completed technical specifications from the City and incorporate items that the City considers a requirement for the new production well. Pertinent information from the Well 20 Siting Evaluation technical memorandum will also be incorporated into the technical specifications. The technical specifications will be drafted to be included in the City's contractual front-end documents for the project and will ultimately be used as the bid package and specifications.

An engineer's estimate will include a line-item list of task and quantities for the new groundwater production well. Using Dudek's current work with various agencies and municipalities, we can provide an up-to-date cost estimate for each line item. Dudek will also confirm costs with local drilling, manufacturing, and service contractors to ensure the cost estimate is accurate and effectively estimates actual cost for the work.

#### **Deliverables:**

- Draft technical specifications
- Final technical specifications

#### **Assumptions:**

- City review of submittals is assumed to take 2 weeks, and all review comments for each project submittal will be provided to Dudek in a single consolidated document.
- Hydraulic modeling is not a part of the project scope.
- No new easements, temporary or construction easements, are anticipated or included as part of the scope of work at this time, but may be included through an addendum if requested.
- Front-end contract documents will be coordinated and provided by the District.
- It is assumed that the contractor will prepare the project SWPPP and be responsible for preparing and implementing traffic control drawings.

## Task 4: Drinking Water Source Assessment and Protection Documents (DWSAP)

A Drinking Water Sources Assessment and Protection (DWSAP) report will be prepared for the City's new groundwater production well, which will follow the Division of Drinking Waters templates and guidelines. The DWSAP will be compliant with Section 11672.60 of the California Health and Safety Code.

Dudek will use the standard procedures to delineate each capture zone and identify possible contaminate activities (PCA) to determine which, if any, will pose a concern at the proposed well location. The PCA will be determined based on a desktop review of GeoTracker sites, aerial imagery, and overlying jurisdiction information. Well design criteria included in the DWSAP will be discussed with the City before calculations for the capture zones are conducted to streamline the process in an efficient and competent manner.

#### **Deliverables:**

Draft DWSAP

## **Task 5: Bid Support**

Following the publication of the bid RFP by the City, Dudek will attend a pre-bid meeting and discuss any technical issues, logistical concerns, or questions regarding the bid specifications with the drilling contractors and the City. An addendum to the bid RFP will be developed based on the questions received, which the City will publish in a similar manner as the bid RFP. Dudek understands that the City will select the drilling contractor and contract directly with the drilling contractor;



however, we will assist in reviewing the received contractor bids, evaluating estimated costs, and provide a recommendation to the City.

#### **Deliverables:**

Response to Questions/Addenda to Bid

### **Assumptions:**

- It is assumed the pre-bid meeting will be held in person.
- Up to five (5) RFI's are assumed during the bid phase.

This scope of work includes assisting with phases of the project associated with completion of the technical specifications through the bidding process and pre-construction meeting and does not include any work beyond that phase of the project. Construction oversight through well completion is not included in this proposal.

Dudek would be happy to provide a scope and fee to assist the City with construction management, well design, well construction, well development, pump testing, disinfection, and well completion report, if desired.

## Schedule

Dudek proposes the following draft project schedule.



Fee

The table below summarizes the anticipated level of effort for each task.

		Dudek Labor Hours and Rates									
	Project Team Role:	K. Ilkhanipour	Senior Hydrogeologist IV P. Rentz \$255	Project Hydrogeologist IV H. McManus \$225	Project Hydrogeologist II B. Page	TOTAL DUDEK	DUDEK LABOR OTHER DIRECT				
	Billable Rate :					HOURS	costs		COSTS	Т	TOTAL FEE
Task 1	Project Management and Meetings										
1.1	Meetings - Kick-off, PDR, and Technical Specifications	4	4	4		12	\$	3,080		\$	3,080
1.2	QA/QC	4	2			6	\$	1,670		\$	1,670
				_			\$	-		\$	-
	Subtotal Task 1	8	6	4		18	\$	4,750	\$ -	\$	4,750
Task 2	Data Review and Preliminary Design Report										
2.1	Review and Evaluate Ave 53 Well Site/Prepare and Submit PDR	2	8	32	8	50	\$	11,380		\$	11,380
	Subtotal Task 2	2	8	32	8	50	\$	11,380	\$ -	\$	11,380
Task 3	Draft and Final Plans, Specifications and Cost Estimate (PS&E)										
3.1	Prepare 60%, 90% and 100% PS&E	4	12	60	8	84	\$	19,280		\$	19,280
							\$	-		\$	-
	Subtotal Task 3	4	12	60	8	84	\$	19,280	\$ -	\$	19,280
Task 4	Drinking Water Source Assessment Protection Documents (DWSAP)										
4.1	Draft and Final DWSAP		2	10		12	\$	2,760		\$	2,760
	Subtotal Task 4		2	10		12	\$	2,760	\$ -	\$	2,760
Task 5	Bidding Assistance										
5.1	Pre-Bid Meeting	2	10	2		14	\$	3,580	\$ 135	\$	3,715
5.2	Assist with Response to Bidder Questions	2	4	4		10	\$	2,500		\$	2,500
5.3	Review Bids	2	4			6	\$	1,600		\$	1,600
5.4	Pre-Construction Meeting		8			8	\$	2,040	\$ 135	\$	2,175
5.5	Review Submittals and RFI's	2	2	6		10	\$	2,440		\$	2,440
	Subtotal Task 5	8	28	12		48	\$	12,160	\$ 135	\$	12,430
	Total Non-Optional Hours and Fee	22	56	118	16	212	\$ 5	50,330			50,600

Total Time and Materials Not to Exceed......\$50,600.00



# Closing

We appreciate the City of Coachella's consideration of the above proposed scope of work. Should you have any questions please reach out to Kayvan Ilkhanipour at 760.479.4129 or <a href="kilkhanipour@dudek.com">kilkhanipour@dudek.com</a>. We look forward to working with the City on this project.

Sincerely,

Kayvan Ilkhanipour, PG No. 8461, CHG No. 948 Principal Hydrogeologist/ Project Manager

**DUDEK**