CITY OF CORPUS CHRISTI CONTRACT FOR PROFESSIONAL SERVICES

The City of Corpus Christi, a Texas home rule municipal corporation, P.O. Box 9277, Corpus Christi, Nueces County, Texas 78469-9277 (City) acting through its duly authorized City Manager or Designee (Director of Engineering Services) and <u>HDR Engineering. Inc.</u>, a Nebraska corporation, 4401 West Gate Boulevard, Suite 400, Austin, Texas 78745, (Consultant), hereby agree as follows:

1. SCOPE OF PROJECT

Corpus Christi Aquifer Storage and Recovery Feasibility Study (Project No. E16265) This project is to advance the evaluation of aquifer storage and recover (ASR) feasibility within the Corpus Christi Aquifer Storage and Recovery District (District) through exploratory testing, geochemical analysis and modeling and use this information to develop recommendations for ASR operations.

2. SCOPE OF SERVICES

The Consultant hereby agrees to perform services to complete the Project, as detailed in **Exhibit "A"**. In addition, Consultant will provide monthly status updates (project progress or delays presented with monthly invoices) and provide contract administration services, as described in **Exhibit "A"**, to complete the Project. Work will not begin on Additional Services until requested by the Consultant (provide breakdown of costs, schedules), <u>and</u> written authorization is provided by the Director of Engineering Services.

3. ORDER OF SERVICES

The Consultant agrees to begin work on those authorized Basic Services for this contract upon receipt of the Notice to Proceed from the Director of Engineering Services. Work will not begin on any phase or any Additional Services until requested in writing by the Consultant and written authorization is provided by the Director of Engineering Services. The anticipated schedule of the preliminary phase, design phase, bid phase, and construction phase is shown on **Exhibit "A"**. This schedule is not to be inclusive of all additional time that may be required for review by the City staff and may be amended by or with the concurrence of the Director of Engineering Services.

The Director of Engineering Services may direct the Consultant to undertake additional services or tasks provided that no increase in fee is required. Services or tasks requiring an increase of fee will be mutually agreed and evidenced in writing as an amendment to this contract. Consultant shall notify the City of Corpus Christi within three (3) days of notice if tasks requested requires an additional fee.

4. FEE

The City will pay the Consultant a fee as described in **Exhibit "A"** for providing services authorized, a total fee not to exceed <u>\$601,980.00</u>. Fees invoiced will be computed by multiplying payroll costs by a multiplier of 2.2, plus direct expenses (travel, printing, etc.). Payroll costs include customary and statutory benefits (Fringe Costs) equal to 48.83% of

Salary Costs, subject to equitable adjustment each year to reflect changes in overall compensation procedures and practices and any changes imposed by federal or state laws. Subcontractor costs will be direct expenses without mark-up. Monthly invoices will be submitted in accordance with **Exhibit "B"**. Payments to the District are contingent upon the appropriation of funds by the Texas Legislature.

5. INDEMNITY

Consultant shall fully indemnify and hold harmless the City of Corpus Christi and its officials, officers, agents, employees, Texas Water Development Board, or other entity, excluding the engineer or architect or that person's agent, employee or subconsultant, over which the City exercises control ("Indemnitee") from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, to the extent that the damage is caused by or results from an act of negligence, intentional tort, intellectual property infringement or failure to pay a subcontractor or supplier committed by Consultant or its agent, Consultant under contract or another entity over which Consultant exercises control while in the exercise of rights or performance of the duties under this agreement. This indemnification does not apply to any liability resulting from the negligence.

Consultant shall defend Indemnitee, with counsel satisfactory to the City Attorney, from and against any and all claims, damages, liabilities or costs, including reasonable attorney fees and court costs, if the claim is not based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee. If a claim is based wholly or partly on the negligence of, fault of or breach of contract by Indemnitee, the Consultant shall reimburse the City's reasonable attorney's fees in proportion to the Consultant's liability.

Consultant must advise City in writing within 24 hours of any claim or demand against City or Consultant known to Consultant related to or arising out of Consultant's activities under this Agreement.

The Consultant is solely responsible for securing all required licenses and permits from local, state and federal governmental entities and solely responsible for obtaining sufficient insurance in accordance with the general standards and practices of the industry or governmental entities.

6. INSURANCE

Consultant agrees to comply with the insurance requirements in Exhibit "C".

7. TERMINATION OF CONTRACT

The City may terminate this contract for convenience upon seven days written notice to the Consultant at the address of record. The City may terminate this agreement for cause upon ten days written notice to the Consultant. If Consultant begins, within three days of receipt of such notice, to correct its failure and proceeds to diligently cure such failure

within the ten days, the agreement will not terminate.

In the event of termination, the Consultant will be compensated for its services on all stages authorized based upon Consultant and City's estimate of the proportion of the total services actually completed at the time of termination.

8. LOCAL PARTICIPATION

The City Council's stated policy is that City expenditures on contracts for professional services be of maximum benefit to the local economy.

9. ASSIGNABILITY

The Consultant will not assign, transfer or delegate any of its obligations or duties in this contract to any other person without the prior written consent of the City, except for routine duties delegated to personnel of the Consultant staff. If the Consultant is a partnership, then in the event of the termination of the partnership, this contract will inure to the individual benefit of such partner or partners as the City may designate. No part of the Consultant fee may be assigned in advance of receipt by the Consultant without written consent of the City.

The City will not pay the fees of expert or technical assistance and consultants unless such employment, including the rate of compensation, has been approved in writing by the City.

10. OWNERSHIP OF DOCUMENTS

All documents including contract documents (plans and specifications), record drawings, contractor's field data, inspection reports and submittal data will be the sole property of the City, may not be used again by the Consultant without the express written consent of the Director of Engineering Services. However, the Consultant may use standard details that are not specific to this project. The City agrees that any modification of the plans will be evidenced on the plans, and be signed and sealed by a professional engineer prior to re-use of modified plans. Ownership of data, materials and work papers, in any media, that is gathered, compiled, adapted for use, or generated by the Consultant or District shall become the joint property of the District, Consultant, and TWDB. Consultants shall have no proprietary rights in such data, materials and work papers except as permitted by TWDB and District contract.

11. STANDARD OF CARE

Services provided by Consultant under this Agreement shall be performed with the professional skill and care ordinarily provided by competent engineers or architects practicing in the same or similar locality and under the same or similar circumstances and professional license; and performed as expeditiously as is prudent considering the ordinary professional skill and care of a competent engineer or architect.

The Consultant and its contracted parties shall keep timely and accurate books and maintain all financial accounting documents and records, including copies of invoices and receipts related to the work under this contract in accordance with generally acceptable

accounting principles. The Consultant shall make them available for examination and audit by City, Executive Administrator of the TWDB, or any other authorized entity of the State of Texas. Accounting by the Consultant and its contracted parties shall be in a manner consistent with generally accepted accounting principles. The Consultant accepts the authority of the Texas State Auditor's Office to conduct audits and investigations in connection with all state funds received pursuant to this contract. The Consultant shall comply with directives from the Texas State Auditor and shall cooperate in any such investigation or audit. The Consultant agrees to provide the Texas State Auditor with access to any information the Texas State Auditor considers relevant to the investigation or audit. The Consultant will submit to audits and investigation by the State Auditor's Office in connection with all state funds received pursuant to the contract.

12. DISCLOSURE OF INTEREST

Consultant agrees to comply with City of Corpus Christi Ordinance No. 17112 and complete the *Disclosure of Interests* form as part of this contract.

13. CERTIFICATE OF INTERESTED PARTIES

For contracts that exceed \$50,000, Consultant agrees to comply with Texas Government Code section 2252.908 and complete Form 1295 Certificate of Interested Parties as part of this agreement.

Form 1295 requires disclosure of "interested parties" with respect to entities that enter contracts with cities. These interested parties include:

- (1) persons with a "controlling interest" in the entity, which includes:
 - a. an ownership interest or participating interest in a business entity by virtue of units, percentage, shares, stock or otherwise that exceeds 10 percent;
 - b. membership on the board of directors or other governing body of a business entity of which the board or other governing body is composed of not more than 10 members; or
 - c. service as an officer of a business entity that has four or fewer officers, or service as one of the four officers most highly compensated by a business entity that has more than four officers.
- (2) a person who actively participates in facilitating a contract or negotiating the terms of a contract with a governmental entity or state agency, including a broker, intermediary, adviser or attorney for the business entity.

Form 1295 must be electronically filed with the Texas Ethics Commission at <u>https://www.ethics.state.tx.us/whatsnew/elf_info_form1295.htm</u>. The form must then be printed, signed, notarized and filed with the City. For more information, please review the Texas Ethics Commission Rules at <u>https://www.ethics.state.tx.us/legal/ch46.html</u>.

14. CONFLICT OF INTEREST

Consultant agrees to comply with Chapter 176 of the Texas Local Government Code and file Form CIQ with the City Secretary's Office, if required. For more information and to determine if you need to file a Form CIQ, please review the information on the City Secretary's website at http://www.cctexas.com/government/city-secretary/conflict-

disclosure/index.

15. ENTIRE AGREEMENT AND CONTROLLING LAW

This Agreement represents the entire and integrated Agreement between City and Consultant and supersedes all prior negotiations, representations or agreements, either oral or written. This Agreement may be amended only by written instrument signed by both the City and Consultant. This Agreement is governed by the laws of the State of Texas without regard to its conflicts of laws. Venue for legal proceedings lies exclusively in Nueces County, Texas.

16. CONFLICT RESOLUTION BETWEEN DOCUMENTS

Consultant hereby agrees and acknowledges if anything contained in the Consultantprepared **Exhibit "A"**, Consultant's Scope of Services, or contained in any other document prepared by Consultant and included herein, is in conflict with this Agreement, this Agreement shall take precedence and control to resolve said conflict.

CITY OF CORPUS CHRISTI

J.H. Edmonds, P.E. Date Director of Engineering Services

RECOMMENDED

Operating Department

Date

APPROVED AS TO LEGAL FORM

Legal Department

Date

APPROVED

Office of Management Date and Budget

ATTEST

Rebecca Huerta City Secretary

Date

HDR ENGINEERING, INC.

Kelly J. Raatz, P.E.

Senior Vice President 4401 West Gate Boulevard, Suite 400 Austin, Texas 78745 (512) 912-5100 Office (512) 912-5158 Fax

Project Name <u>Corpus Christi Aquifer</u> <u>Storage and Recovery Feasibility Study</u> Project Number <u>E16265</u> Accounting Unit <u>4080-072</u> Account <u>550950</u> Activity <u>E16265014080EXP</u> Account Category <u>50950</u> Fund Name <u>Water CIP</u>

Contract for Professional Services K:IENGINEERING DATAEXCHANGEJENNIFERIWATERIE16265 CC AQUIFER STORAGE & RECOVERY FEASIBILITY STUDY/CONTRACT/CONTRACT - CCASR.DOCX Page 5 of 5

EXHIBIT "A"

Corpus Christi Aquifer Storage and Recovery Conservation District and City of Corpus Christi

Corpus Christi Aquifer Storage and Recovery Feasibility Project

Scope of Work April 28, 2016

HDR along with its team of technical sub-consultants will perform the professional engineering services described in this Scope of Work. The objective of the study is to determine aquifer storage and recovery (ASR) feasibility within the Corpus Christi Aquifer Storage and Recovery District (District) through exploratory testing, geochemical analysis, and modeling and use this information to develop recommendations for ASR operations.

Background

The District, with support from the City, is actively studying ASR and to promote water supply resiliency for industrial customers and for cost-effective long term regional water supply. The District

developed a 5-year plan in 2009 which included a schedule of major elements of an ASR feasibility plan. In support of the 5year plan, the TWDB conducted a geologic characterization of the District and surrounding counties in 2012. In 2015, the District performed a desktop aquifer characterization study at three specific areas within the District boundaries which was delivered in a 2016 report entitled "Aquifer Characterization Study for ASR Feasibility". The study identified a preferred ASR test drilling location (Figure 1) based on interpretation of nearby geophysical logs that showed favorable permeable zones



Figure 1 - Study areas and preferred ASR test drilling location

comprised of sand or mostly sand spanning a few hundred feet within the lower Chicot and/or upper Evangeline Aquifers, in either continuous unit or at multiple intervals considered most desirable for ASR development. The results of the 2016 study serve as a basis for this scope of work, and continue pursuit of the 5-year plan with site-specific hydrogeological and geochemical testing and modeling to determine the optimal intervals within these formations for ASR development and operation.

In January 2016, the TWDB selected the District to receive a grant award of \$433,000 to assist with tasks outlined in this Scope of Work. The City committed \$325,000 in Fiscal Year 2016 to evaluate ASR feasibility.

The scope of work items utilizes data collected from previous studies and fulfills the second through final year of the 5-year plan developed in 2009.



Organization of Scope of Work

As Basic Services, HDR will perform six major tasks for ASR feasibility. Drilling services will be contracted directly, in a separate contract, between qualified driller and the District. HDR will provide technical and support services necessary to select a qualified driller and supervise field collection activities as denoted in the Scope of Services below.

0. Formulate Program: HDR understands that a successful ASR testing program hinges on good communication and clear vision. HDR will meet with District and City Staff to identify goals and objectives. Based on the meeting outcome, HDR will confirm drilling techniques appropriate to project objectives, develop a field testing plan, and summarize results in a brief technical memorandum to include a discussion of trade-offs in drilling techniques. HDR will provide updates and requests for feedback during critical phases to achieve project success.

1. Develop and Supervise Exploratory Test Drilling Program: The HDR team will provide supervision and technical support for up to three exploratory boreholes to a depth of about 1,200 feet to assess the geology, hydrogeology, water quality, and geochemistry. The test drilling program will be used to assess potential storage zones for treated water and also confining intervals that will limit vertical movement of water from the target storage zone. The goal of the program is to collect hydrogeological and geochemical parameters that can be used to characterize a potential ASR system at the selected sites. HDR will summarize the results gained from the exploratory test program in a brief technical memorandum.

2. Perform Geochemical Analysis and Modeling: The HDR team will conduct a geochemical analysis to determine the compatibility of treated, source water for storing within the native aquifer setting. This phase is critical in understanding water quality compatibilities to avoid reactions that lead to clogging of the near-well pore space or mobilization of undesirable constituents from aquifer, increasing their concentration in the water when it is recovered. This task will include a brief technical memorandum to determine whether either of these situations is likely to occur, and what operational approaches, water treatment, and/or aquifer conditioning might be necessary.

3. Develop a Field Scale Groundwater Model to Simulate Storage and Recovery Operations: The HDR team will construct a numerical model using one of the MODFLOW family of groundwater codes, along with a transport code such as MT3DMS or SEAWAT if saline water and density effects are found to be potentially important from Tasks 1 and 2. HDR will meet with District and City Staff to identify ASR operational scenarios for model simulation and the model will be used to simulate up to four scenarios with different schedules and rates. Recovery efficiencies will be evaluated based on native water quality and likely ASR operations. HDR will summarize the results of this task in a brief technical memorandum to include modeling assumptions, results, and operational considerations.

4. Evaluate ASR Operating Policy Considerations: The HDR team will identify considerations for ASR operating policy to mitigate risk and uncertainty. HDR will summarize in a brief technical memorandum and provide recommendations of well yields, recovery efficiencies, and operations.

5. Meetings and Deliverables: HDR will meet with the TWDB, District, and the City to present interim results; provide TWDB status reports; and prepare draft and final reports.

Scope of Work Tasks

0. Formulate Program-

Task 0.1- Prepare and meet with the District to identify goals, objectives, and preferred source water for ASR. Submit water quality data request to the City including list of constituents of interest for the study.

Task 0.2- Confirm drilling and sampling techniques to accomplish project objectives.

Task 0.3- Develop preliminary test drilling, sampling, and well construction plan.

Task 0.4- Prepare and deliver technical memorandum discussing trade-offs in drilling techniques. Meet with District (one meeting) and City Council (one meeting) to discuss the memorandum and study progress.

1. Develop and Supervise Exploratory Test Drilling Program

Task 1.1- Confirm test program approach including location, review of nearby logs to gain insight on local aquifer structure and stratigraphy.

Task 1.2- Prepare design and specifications for test drilling program and contract documents. This subtask includes HDR participation in the following activities and up to three meetings with driller related to the following: Pre-bid meeting, receipt of proposals, bid opening, summary of bids received, coordination and interview of drillers (as needed). Meet with the District (one meeting) to provide recommendation on driller selection.

Task 1.3- Design and supervise a test drilling program of up to three boreholes.

Task 1.4- Collect and classify lithology at discrete depth intervals (30 to 45 feet) or perceived formation changes to characterize permeable sand zones and impermeable clay intervals. Sieve analysis of collected lithology samples may be used to determine grain size to use as a qualitative measurement of permeability.

Task 1.5- Collect core samples while drilling through permeable and confining areas of the borehole. Cores will be collected for hydraulic testing and sent to the laboratory for geochemical analysis. Laboratory measurements on each core for modeling purposes include, photograph, grain-size, x-ray diffraction (mineralogy), x-ray fluorescence (chemistry), cation exchange capacity with individual exchangeable cation concentrations, thin section petrology, scanning electron microscopy photomicrographs and acid insoluble residue analysis.

Task 1.6- Collect water quality samples and specific capacity testing at intervals beginning in the lower Chicot to determine salinity and relative specific capacity of the encountered formations as the borehole is advanced. Periodically, the following field measurements will be obtained: temperature, conductivity, pH, oxidation reduction potential (closed cell), dissolved oxygen and turbidity. Samples will be collected for laboratory analysis of regulated constituents based on TCEQ requirements and may include: silica, aluminum, both dissolved and total iron and manganese, calcium, magnesium, sodium, potassium, total alkalinity, sulfate, chloride, fluoride, nitrate, ammonia, total Kjeldahl nitrogen, total phosphorus, phosphate, total organic carbon, total dissolved solids, total suspended solids, specific conductance and pH.

Task 1.7- Analyze geophysical logs and identify sand intervals for isolation and pump testing. Results will be used to develop well screen interval recommendations.

Task 1.8- Provide field support for isolated interval testing (pump tests), while collecting continuous water levels to calculate hydraulic conductivity. Collect water quality samples representative of discrete intervals and send water quality samples to laboratory for analysis. Packer tests if practicable will be conducted to isolate discrete intervals of the borehole for hydraulic conductivity testing. At the



end of the pumping phase, a water quality sample will be collected for laboratory analysis and at least one will be analyzed for a full suite of chemical constituents, including radionuclides.

Task 1.9- Prepare and deliver a technical memorandum summarizing the exploratory drilling program. Meet with District (one meeting) during interim stage of Task 1 to provide an update on field activities.

2. Perform Geochemical Analysis and Modeling

Task 2.1- Collect and analyze water quality data from Stevens WTP, Greenwood WWTP, or other potential recharge water sources as provided by City staff. One sample will be collected by HDR and analyzed for a full suite of chemical constituents, including regulated organic, inorganic and radionuclide constituents, at a minimum. Additional laboratory analyses for modeling purposes include: silica, aluminum, both dissolved and total iron and manganese, calcium, magnesium, sodium, potassium, total alkalinity, sulfate, chloride, fluoride, nitrate, ammonia, total Kjeldahl nitrogen, total phosphorus, phosphate, total organic carbon, total dissolved solids, total suspended solids, specific conductance and pH.

Task 2.2- Perform geochemical modeling of representative potential recharge water sources, native groundwater from individual developed ASR wells and mixtures of source and native groundwater using PhreeqC or The Geochemical Workbench thermodynamic modeling software. Results of the modeling will be used to determine source compatibility with the aquifer mineralogy and physiochemical matrix of individual ASR wells. Aquifer characteristics and field and laboratory measurements from the exploratory testing program (Task 1.5 & Task 1.6 & Task 1.8) will be used in the modeling effort. Clay mineralogy and CEC cation chemistry will be particularly important to this project because of chemical and total dissolved solids differences in the source and native groundwater.

Task 2.3- Prepare and deliver technical memorandum to include laboratory test report, summary of modeling findings, and geochemical analysis. Meet with District (one meeting) and City Council (one meeting) to discuss results of exploratory testing program and geochemical analysis.

3. Develop a Field Scale Groundwater Model to Simulate Storage and Recovery Operations:

Task 3.1- Select grid and layering of model based on Task 1- drilling program and previous studies.

Task 3.2- Construct a local, field scale model and assign aquifer model parameters.

Task 3.3- Meet with the District to identify ASR operational scenarios for modeling, to include recharge, production schedule, and rates in accordance with District goals.

Task 3.4- Prepare model simulations for up to four scenarios to evaluate the aquifer response of recharge and recovery for different schedules and rates, including likelihood of stratification within storage and movement during injection/idle/recovery periods. These simulations would span seasonal operations (recharge in the winter and recovery in the summer) and long-term water banking.

Task 3.5- Evaluate impact of native brackish groundwater on ASR recovery.

Task 3.6- Prepare and deliver technical memorandum summarizing modeling assumptions, results, and operational considerations.

4. Evaluate ASR Operating Policy Considerations

Task 4.1- Using results from Tasks 1-3, identify considerations for ASR operating policy to mitigate risk and uncertainty. Such items will include but not be limited to TCEQ regulations, water quality standards, subsidence, and supply protection measures.

Task 4.2- Prepare and deliver technical memorandum summarizing ASR operating policy considerations considering estimated well yields and recovery efficiencies. Meet with District (one meeting) and City Council (one meeting) to discuss ASR operating policy and study progress.



5. TWDB Coordination Meetings, Draft and Final Report Deliverables and Meetings

* Note: Meetings related to specific tasks and interim deliverables (technical memorandums) are included above in Tasks 0-4.

Task 5.1- Prepare for and participate in a TWDB coordination meeting and up to three (3) project status meetings with representatives of the TWDB and District/City staff to provide updates and interim results of the studies.

Task 5.2- Prepare status reports to the TWDB after each major task to summarize preliminary findings.

Task 5.3- Prepare and submit a draft report and electronic presentation to the District. Meet with the District (one meeting) and meet with City Council (one meeting) to summarize results of the draft report. Submit draft report to TWDB, not later than March 29, 2019. The report to include the following items to assess ASR feasibility for the study areas:

- Favorability of ASR well development for each area tested in the exploratory drilling program;
- Ranking of investigated areas based on ASR well feasibility;
- Optimal depths and storage intervals of planned ASR wells;
- Recommended injection and recovery rates per well for optimal performance;
- Considerations regarding geochemical compatibility and pre-treatment needs, if applicable;
- Number of wells to meet available flow volumes and desired objectives;
- ASR operational and policy considerations; and
- Next steps to complete an EPA Class V ASR well permit application.

Task 5.4- Prepare and submit a final report and electronic presentation to the District. Meet with the District (one meeting) and meet with City Council (one meeting) to summarize results of the final report. Submit final report to TWDB within six weeks of receipt of comments on the draft, not later than June 27, 2019.

Project Schedule

The schedule is provided in Attachment 1. The draft report is scheduled to be provided to the District no later than January 4, 2019 in order to provide adequate review schedule for delivery of draft report to the TWDB by March 29, 2019. All work must be completed by August 30, 2019, which is the TWDB Contract Expiration deadline.

Fee Estimate

The following table summarizes the fee for Tasks identified in the above scope of work.

TASK BUDGET

TASK	DESCRIPTION	AMOUNT
0	Formulate Program	\$44,287
1	Exploratory Test Drilling Program	\$276,055
2	Geochemical Analysis	\$65,906
3	Field Scale Groundwater Model	\$116,753
4	ASR Operating Policies	\$29,553
5	TWDB Coordination, Draft/Final Deliverables and Meetings	\$69,427
Total		\$601,980

EXPENSE BUDGET

CATEGORY	AMOUNT
Salaries & Wages	\$168,745
Fringe	\$82,398
Overhead/Profit	\$294,592
Travel	\$18,550
Supplies/Misc	\$27,097
Tech/Computer	\$9,598
Reproduction	\$1,000
Total	\$601,980

Attachment 1



EXHIBIT "B"

SAMPLE PAYMENT REQUEST FORM

Sample form for: Payment Request Revised 07/27/00

COMPLETE PROJECT NAME Project No. XXXX Invoice No. 12345 Invoice Date:

				Total	Amount	Previous	Total	Percent
Basic Services:	Contract	Amd No. 1	Amd No. 2	Contract	Invoiced	Invoice	Invoice	Complete
Preliminary Phase	\$1,000	\$0	\$0	\$1,000	\$0	\$1,000	\$1,000	100%
Design Phase	2,000	1,000	0	3,000	1,000	500	1,500	50%
Bid Phase	500	0	250	750	0	0	0	0%
Construction Phase	2,500	0	1,000	3,500	0	0	0	0%
Subtotal Basic Services	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services:								
Permitting	\$2,000	\$0	\$0	\$2,000	\$500	\$0	\$500	25%
Warranty Phase	0	1,120	0	1,120	0	0	0	0%
Inspection	0	0	1,627	1,627	0	0	0	0%
Platting Survey	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
O & M Manuals	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
SCADA	TBD	TBD	TBD	TBD	TBD	TBD	TBD	0%
Subtotal Additional Services	\$2,000	\$1,120	\$1,627	\$4,747	\$500	\$0	\$500	11%
	0						30	
Summary of Fees								
Basic Services Fees	\$6,000	\$1,000	\$1,250	\$8,250	\$750	\$1,500	\$2,500	30%
Additional Services Fees	2,000	1,120	1,627	4,747	500	0	500	11%
Total of Fees	\$8,000	\$2,120	\$2,877	\$12,997	\$1,250	\$1,500	\$3,000	23%

EXHIBIT "C"

Insurance Requirements

1.1 Consultant must not commence work under this agreement until all required insurance has been obtained and such insurance has been approved by the City. Consultant must not allow any subcontractor to commence work until all similar insurance required of any subcontractor has been obtained.

1.2 Consultant must furnish to the Director of Engineering Services with the signed agreement a copy of Certificates of Insurance (COI) with applicable policy endorsements showing the following minimum coverage by an insurance company(s) acceptable to the City's Risk Manager. The City must be listed as an additional insured on the General Liability and Auto Liability policies, and a waiver of subrogation is required on all applicable policies. Endorsements must be provided with COI. Project name and or number must be listed in Description Box of COI.

TYPE OF INSURANCE	MINIMUM INSURANCE COVERAGE					
30-written day notice of cancellation,	Bodily Injury and Property Damage					
required on all certificates or by	Per occurrence - aggregate					
applicable policy endorsements						
Commercial General Liability including:	\$1,000,000 Per Occurrence					
1. Commercial Broad Form	\$2,000,000 Aggregate					
2. Premises – Operations						
3. Products/ Completed Operations						
4. Contractual Liability						
5. Independent Contractors						
6. Personal Injury- Advertising Injury						
AUTO LIABILITY (including)	\$500,000 Combined Single Limit					
1. Owned						
2. Hired and Non-Owned						
3. Rented/Leased						
PROFESSIONAL LIABILITY	\$1,000,000 Per Claim					
(Errors and Omissions)						
	If claims made policy, retro date must be					
	prior to inception of agreement, have					
	extended reporting period provisions					

and i	dentify	any	limitations	regarding
who is	s insure	d.		

1.3 In the event of accidents of any kind related to this agreement, Consultant must furnish the City with copies of all reports of any accidents within 10 days of the accident.

1.4 Consultant shall obtain and maintain in full force and effect for the duration of this Contract, and any extension hereof, at Consultant's sole expense, insurance coverage written on an occurrence basis, by companies authorized and admitted to do business in the State of Texas and with an A.M. Best's rating of no less than A- VII. **Consultant is required to provide City with renewal Certificates.**

1.5 Consultant shall be required to submit a copy of the replacement certificate of insurance to City at the address provided below within 10 days of the requested change. Consultant shall pay any costs incurred resulting from said changes. All notices under this Article shall be given to City at the following address:

City of Corpus Christi Attn: Engineering Services P.O. Box 9277 Corpus Christi, TX 78469-9277

1.6 Consultant agrees that with respect to the above required insurance, all insurance policies are to contain or be endorsed to contain the following required provisions:

- 1.6.1 List the City and its officers, officials, employees and elected representatives as additional insured by endorsement, as respects operations, completed operation and activities of, or on behalf of, the named insured performed under contract with the City with the exception of the professional liability/Errors & Omissions policy;
- 1.6.2 Provide for an endorsement that the "other insurance" clause shall not apply to the City of Corpus Christi where the City is an additional insured shown on the policy;
- 1.6.3 Provide thirty (30) calendar days advance written notice directly to City of any suspension, cancellation, or non-renewal in coverage, and not less than ten (10) calendar days advance written notice for nonpayment of premium.

1.7 Within five (5) calendar days of a suspension, cancellation or non-renewal of coverage, Consultant shall provide a replacement Certificate of Insurance and applicable endorsements to City. City shall have the option to suspend Consultant's performance should there be a lapse in coverage at any time during this contract. Failure to provide and to maintain the required insurance shall constitute a material breach of this contract.

1.8 In addition to any other remedies the City may have upon Consultant's failure to provide and maintain any insurance or policy endorsements to the extent and within the time herein required, the City shall have the right to order Consultant to remove the exhibit hereunder, and/or withhold any payment(s) if any, which become due to Consultant hereunder until Consultant demonstrates compliance with the requirements hereof.

1.9 Nothing herein contained shall be construed as limiting in any way the extent to which Consultant may be held responsible for payments of damages to persons or property resulting from Consultant's or its subcontractor's performance of the work covered under this agreement.

1.10 It is agreed that Consultant's insurance shall be deemed primary and noncontributory with respect to any insurance or self-insurance carried by the City of Corpus Christi for liability arising out of operations under this agreement.

1.11 It is understood and agreed that the insurance required is in addition to and separate from any other obligation contained in this agreement.



CITY OF CORPUS CHRISTI DISCLOSURE OF INTEREST

City of Corpus Christi Ordinance 17112, as amended, requires all persons or firms seeking to do business with the City to provide the following information. Every question must be answered. If the question is not applicable, answer with "NA". See reverse side for Filing Requirements, Certifications and definitions.

COMPAN	Y NAMI	E:	HDR	Engineeri	ıg, Inc.								
P. O. BOX:	:	,											_
STREET A	DDRES	S:	4401 W	est Gate F	Blvd, Su	ite 400	CI	ГҮ:	Austi	in		ZIP:	78745
FIRM IS:	1. 4.	Cor Ass	poration ociation	\boxtimes	2. 5.	Partner Other	ship			3.	Sole Owr	ner 🗌]
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Name					Jo	b Title a	ind Ci	ty De	partme	ent (if	known)		
2. State the	names o	fead	h "offici	ial" of the (City of C	Corpus C	Christi	havi	ng an "	owner	ship inter	est"	
Name				ownersnip	m the a Ti	tle	med "	11rm.					
2 State the		£	-1. (1.	1 1 9									
interest"	constituti	ing 3	sh board 3% or mo	ore of the o	of the wnership	p in the	above	s Chi nam	risti hav ed "firr	ving a n."	n "owners	ship	
					B —	oard, Co	ommis	sion	or Com	nmittee			
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4. State the who wor interest"	names o ked on a constituti	of ea any ing 3	ch emplo matter r 3% or mo	oyee or off related to to ore of the o	icer of a he subj wnership	e "consu ect of the a	ltant" nis co above	for to ntrac	he City t and ed "firr	y of C has ar n."	orpus Chi "owners	risti ship	
Name NA					Co	onsultant							
					-								

FILING REQUIREMENTS

If a person who requests official action on a matter knows that the requested action will confer an economic benefit on any City official or employee that is distinguishable from the effect that the action will have on members of the public in general or a substantial segment thereof, you shall disclose that fact in a signed writing to the City official, employee or body that has been requested to act in the matter, unless the interest of the City official or employee in the matter is apparent. The disclosure shall also be made in a signed writing filed with the City Secretary. [Ethics Ordinance Section 2-349 (d)]

CERTIFICATION

I certify that all information provided is true and correct as of the date of this statement, that I have not knowingly withheld disclosure of any information requested; and that supplemental statements will be promptly submitted to the City of Corpus Christi, Texas as changes occur.

Certifying Person:	Kelly J. Kaatz, P.E.	Title:	Senior Vice President		
	(Type or Print)				
Signature of Certify Person:	ing fullthat		Date: 6/15/16		
	DEFINITIONS				

- a. "Board member." A member of any board, commission, or committee appointed by the City Council of the City of Corpus Christi, Texas.
- b. "Economic benefit". An action that is likely to affect an economic interest if it is likely to have an effect on that interest that is distinguishable from its effect on members of the public in general or a substantial segment thereof.
- c. "Employee." Any person employed by the City of Corpus Christi, Texas either on a full or part-time basis, but not as an independent contractor.
- d. "Firm." Any entity operated for economic gain, whether professional, industrial or commercial, and whether established to produce or deal with a product or service, including but not limited to, entities operated in the form of sole proprietorship, as self-employed person, partnership, corporation, joint stock company, joint venture, receivership or trust, and entities which for purposes of taxation are treated as non-profit organizations.
- e. "Official." The Mayor, members of the City Council, City Manager, Deputy City Manager, Assistant City Managers, Department and Division Heads, and Municipal Court Judges of the City of Corpus Christi, Texas.
- f. "Ownership Interest." Legal or equitable interest, whether actually or constructively held, in a firm, including when such interest is held through an agent, trust, estate, or holding entity. "Constructively held" refers to holdings or control established through voting trusts, proxies, or special terms of venture or partnership agreements."
- g. "Consultant." Any person or firm, such as engineers and architects, hired by the City of Corpus Christi for the purpose of professional consultation and recommendation.