ADDENDUM NO. 3
TO
REQUEST FOR PROPOSALS
FOR
City of Hays Wastewater Treatment Plant Upgrade and Expansion
Project No.: 2014-28

Prepared by: HDR Engineering, Inc.
3741 NE Troon Drive
Lee's Summit, MO 64064

Owner: City of Hays, Kansas
1507 Main Street
Hays, KS 67601

DATE: October 26, 2015

TO ALL RESPONDENTS:

This addendum shall become a part of the Request for Proposals as if originally included. The Respondents shall acknowledge receipt of the addendum.

The Request for Proposals and Attachments shall be modified as required by the following items:

AD3-1 **RFP Section 2.3 Project Schedule**

REPLACE this section with the following:

It is anticipated that Phase One of the Progressive Design-Build Contract will be executed on or about December 23, 2015. The project milestones and Completion dates are as follows:

Completion Date	Milestone Activity
Phase 1	
December, 2015	Contract Execution, Phase 1
January 4, 2016	Notice-to-Proceed
January 29, 2016	Preliminary Pricing Information on Option 1 and Option 2, Activated Sludge Processes
February 29, 2016	30% Design Milestone
March 31, 2016	60% Design Milestone
April 29, 2016	90% Design Milestone
June 30, 2016	Negotiate GMP
Phase 2	
July 15, 2016	Contract Execution, Phase 2
December 29, 2017	Substantial Completion of Liquid Phase Improvements
March 2, 2017	Substantial Completion
March 30, 2018	Final Completion

AD3-2 RFP Section 3.1 General

REPLACE the fourth bullet under section titled "Phase One Services", with the following:

- "Produce the basis-of-design report. As part of the report, include a cost evaluation of two activated sludge options for consideration by Owner. The cost evaluation shall be based on vendor proposals, costs from completed projects, and other industry experience to identify the relative costs of the two processes. Owner will review and direct Design-Builder which option to move forward with into design."

AD3-3 RFP Section 5.3.3

AD3-3.1 **ADD** the following bullets to the end of Section 5.3.3:

- "Proposer shall identify their approach to cost and schedule controls and their method or approach to GMP cost accounting. Proposer is referred to contract requirements for cost controls in DBIA 530, Article 7, Procedures for Payment."

- The Proposer shall provide their approach on the integration of system supplier design and performance requirements to insure that the effluent performance criteria are met.

- Proposer shall address their plan to meet the 500-year flood plan projection requirements as defined in RFP Attachment E Project Technical Requirements."

AD3-4 RFP Section 5.3.5

ADD the following to Section 5.3.5:

"The one page basis of proposer's fee and rate proposal as described in Section 5.3.5 of the RFP shall be included with the forms in Attachment F of the RFP and submitted in the separate sealed envelope."

AD3-5 Attachment B – General Scope of Design-Builder Services

AD3-5.1 **REPLACE** Phase One (Preconstruction) Services – Item 16 with the following:

"16. Prepare Critical Path Method project schedules at the schematic, 30%, 60%, and 90% design review milestones and reconcile the schedules with review comments prepared by the Owner or Owner's Representative. Provide Critical Path Method schedules in a format (Primavera P6 schedule file) to allow for Owner or Owner's Representative's review of the schedule logic and constraints."

AD3-5.2 **ADD** the following to RFP Attachments B, Scope of Services for Phase One, Item 19:

"The GMP pricing shall be based on results of a formal bidding process that will include the following steps: (1) subcontractor and vendor outreach and pre-qualification; (2) formal request for equipment and material quotations and subcontractor bids; (3) receipt of quotes and bids based on work packages developed from the 90% design documents; (4) best-value selection of quotes and bids in conjunction with the Owner."

AD3-6 Attachment C – Draft Progressive Design-Build Contract

AD3-6.1 **DBIA 520**

AD3-6.1.1 **REPLACE** DBIA 520, Article 2.4 with the following:

"Based on Owner's Project Criteria, the Detailed Design Documents, Design-Builder's original proposal, as each may be revised to pursuant to Sections 2.2.2 and 2.3 above, and any other Basis of Design Documents upon which the parties agree, Design-Builder shall submit a proposal to Owner (the "Proposal"), which shall include the following unless the parties mutually agree otherwise:"

AD3-6.1.2 **REPLACE** DBIA 520, Article 5.1 with the following:

"Commencement Date. Design-Builders shall commence performance of the services set forth in the Agreement within five (5) days of receipt of Owner's Notice to Proceed ("Date of commencement") unless the parties mutually agree otherwise in writing. Design-Builder shall complete such services no later than July 15, 2016."

AD3-6.1.3 **REPLACE** the table in DBIA 520, Article 7.1 with the following:

Milestone	Date	Amount
Basis of Design Report	January 29, 2016	$
30% design submittal	February 29, 2016	$
60% design submittal	March 31, 2016	$
90% design submittal	April 29, 2016	$
Preconstruction services lump sum fee including GMP development	June 30, 2016	$
Execution of Phase 2 contract	July 15, 2016	

AD3-6.2 **DBIA 530**

AD3-6.2.1 **ADD** DBIA 530, Article 2.1.6

"Design-Builder's original proposal."

AD3-6.2.2 **REPLACE** DBIA 530 article 5.2.1 with the following:

"Substantial Completion of the entire Work shall be achieved no later than March 2, 2017."

AD3-6.2.3 **REPLACE** DBIA 530, Article 5.2.2 with the following:

"Substantial Completion of identified portions of the Work shall be achieved as follows:

All liquid treatment unit processes from the influent pump station through the effluent reaeration structure shall be substantially completed by December 29, 2017. These processes include but are not necessarily limited to the influent pump station, headworks, biological process, clarifiers(if included), waste and return sludge pumping, tertiary filters (if included), disinfection, chemical feed systems, and reaeration facilities. Design-Builder shall have successfully completed all functional/hydraulic testing requirements as outlined in Section 6 Unit Process Design Criteria of the Request for Proposals, Attachment E – Project Technical Requirements, as well as tests required by the

respective equipment manufacturer for all unit processes. All applicable unit processes shall have also successfully completed the 30-Day Acceptance Testing. Design-Builder shall also develop a plan for handling waste biosolids during the time between substantial completion of the liquid treatment process and the completion of the biosolids facilities."

AD3-6.2.4 **REPLACE** DBIA 530, Article 5.4 with the following:

"Design-Builder understands that if Substantial Completion of either the separable part of the Work as identified in Item 5.2.2 or the entire Work by the Scheduled Completion Date, Owner will suffer damages which are difficult to determine and accurately specify. Design-Builder agrees that if the Liquid Treatment Unit Processes Substantial Completion is not attained by December 29, 2017 and Substantial Completion of the entire Work is not attained by March 2, 2018, Design Builder shall pay Owner two thousand five hundred dollars ($2500) as liquidated damages for each day that Substantial Completion extends beyond the specific Substantial Completion date. After Substantial Completion of the Work, if the Design-Builder neglects, refuses, or fails to complete the remaining Work within the Contract Time or any proper extension granted by the Owner, the Design-Builder agrees to allow the Owner to deduct from progress payments and retention, and to pay to the Owner as liquidated damages, and not as a penalty, the amount of One Thousand Five Hundred Dollars ($1500) for each day that expires after the Contract Time specified in Paragraph 5.2.3 for Final Completion and readiness for final payment."

AD3-6.2.5 *Clarification to DBIA 530, Article 7.2: Retainage shall only be held on the Phase 2 Services contract.*

AD3-6.2.6 **REPLACE** the first paragraph in the insurance requirements on page 17 of DBIA 530 with the following:

"Design-Builder will procure, hold and maintain the following project insurance types and coverage with insurance carrier(s) who are authorized to do business in the State of Kansas where the project is located, as provided in the Agreement. These rates are valid for the project duration. The City of Hays and HDR as the Owner's Agent must be named as additional insured on all policies **with the exception of the workers compensation and professional liability policies**. All policies shall contain provisions to the effect that in an event of payment of any loss or damage the insurer will have no right of recovery against any of the parties named as insured or additional insured, and if the insurers require separate waiver forms to be signed by Owner Representative or Owners Representative subconsultants, Owner will obtain the same, and if such waiver forms are required of any of Design-Builders subcontractors, Design-Builder will obtain the same. The current project rates and standard coverage's are as follows: "

AD3-6.3 **DBIA 535**

AD3-6.3.1 **ADD** the following language after DBIA 535 article 3.2.1.6:

"With exception to the foregoing, Design-Builder can not rely on any other Owner provided reference documents."

AD3-6.3.2 **REPLACE** title of first Exhibit in DBIA 535, page 26, with the following:

"Owner's Request for Proposal (RFP) and Design-Build Design Criteria Package"

AD3-6.3.3 **ADD** the attached KS12 and KS 21 documents to Appendix C – DBIA Document 535 SRF Funded Project Supplemental Conditions – Davis Bacon Wage Determination

Design-Builder shall be responsible to obtain the Davis Bacon Wage Determinations (Construction Type: Heavy and Construction Type: Building) that will apply to the Construction Phase Services.

AD3-7 Attachment E – Project Technical Requirements

AD3-7.1 **REPLACE** paragraph 3 in Section 1.2 General Requirements with the following:

"New structures, existing basins, and equipment associated with the improvements to the WWTP shall be protected from the 500-year flood elevation. An additional one foot of freeboard above the 500-year flood elevation shall be provided. Floodproofing plans and methods in conformance with FEMA P-936/ July 2013 Floodproofing Non-Residential Buildings shall be provided for existing buildings for which non-stop operation is critical."

AD3-7.2 **REPLACE** Part 10.a. of Section 3.3.4 with the following:

"a. 70, 2014 National Electric Code (NEC)."

AD3-7.3 **ADD** the following bullet as the last bullet in Section 6.1:

- "Chemical Addition System(s) to provide for the following project chemical uses:
    - Potential pH adjustment associated with influent alkalinity levels and as required by Designer-Builder for proposed liquid treatment process.
    - Future carbon source addition as required by Designer-Builder for proposed liquid treatment process, see Section 6.6.1.1 and 6.7.1 for further discussion.
    - Metal salt addition for the chemical precipitation of phosphorus as required by Designer-Builder for proposed liquid treatment process and as required to meet NPDES permit effluent concentration goals.
    - Metal salt addition to biosolids process to prevent the release of stored phosphorous in recycle flows from the aerobic digestion and sludge dewatering processes.
    - Liquid Sodium Hypochlorite as required for the prevention of algae growth within the water reclaim basin(s).
    - Liquid polymer as required for the sludge dewatering process.
    - Membrane cleaning chemicals as required by 4-Stage MBR treatment process manufacturer."

AD3-7.4 **DELETE** the following bullet from Section 6.5.1 Minimum Design Criteria:

- "Minimum Aerobic Hydraulic Retention Time at Average Daily Flow: 20 Hours"

AD3-7.5 **REPLACE** the first line of the first bullet from Section 6.6.1.1 with the following:

- "Design Minimum Hydraulic Retention Times (HRT) at Average Daily Flow (HRTs Exclude Return Flows):"

AD3-7.6 **REPLACE** the first bullet in Section 6.6.1.1 Minimum Design Criteria, Ancillary Equipment and Controls under the sub-bullet "Chemical feed and storage systems for carbon and metal salt addition" with the following:

- "Provide an evaluation for the storage and feed requirements for a future carbon source addition. If available, provide space in the existing Chlorine Storage and Feed Room for future suitable storage tanks for minimum 14 days storage at average design flow usages as well as applicable chemical feed systems with

redundant feed pumps. Consider use of Micro-C for carbon source in lieu of methanol, ethanol or other flammable fluids."

AD3-7.7 **REPLACE** entire Section 6.6.3.1 with the following:

- "Provide oxygen transfer testing results performed by a qualified 3rd party testing firm to validate Manufacturer's proposed equipment minimum oxygen transfer capacity. Tests shall be for like equipment as proposed for use on the project."

AD3-7.8 **ADD** the following under Section 6.6.6 (Existing Tertiary Filtration):

- "Package chemical feed system for metal salt addition. Chemical addition equipment and storage tank(s) shall be provided for the chemical precipitation of phosphorus as required by Design-Builder for proposed liquid treatment process and as required to meet NPDES permit effluent concentration goals. Chemical storage tank(s) shall be capable of providing a minimum of 14 days of storage for estimated use at average design flow. System may be provided as a separate unit or combined with the chemical system identified in Section 6.11.1 for the biosolids process and provided as one system."

AD3-7.9 **ADD** the following bullet under Section 6.7.1 Minimum Design Criteria, after the bullet which states: "Acceptable Manufacturers – System Supplier":

- "Owner will also consider the provision of a flat plate membrane system in lieu of hollow fiber type. Membrane shall have similar design pore size as proposed hollow fiber membrane type of approximately .04 micron and shall be capable of producing an effluent quality that meets or exceeds the capability of the proposed hollow fiber type."

AD3-7.10 **REPLACE** the first line of bullet number 5 in Section 6.7.1 Minimum Design Criteria with the following:

- "Design Minimum Hydraulic Retention Times at Average Daily Flow (Times Exclude Return Flows):"

AD3-7.11 **REPLACE** the sub-bullet in Section 6.7.1 Minimum Design Criteria, Ancillary Equipment and Controls under the sub-bullet "Chemical feed and storage systems for carbon and metal salt addition with the following:

  - "Provide an evaluation for the storage and feed requirements for a future carbon source addition. If available, provide space in the existing Chlorine Storage and Feed Room for future suitable storage tanks for minimum 14 days storage at average design flow usages as well as applicable chemical feed systems with redundant feed pumps. Consider use of Micro-C for carbon source in lieu of methanol, ethanol or other flammable fluids."

AD3-7.12 **ADD** the following bullet in Section 6.7.2 Equipment Testing after the first bullet:

- "Perform Uniformity and Benchmark Pressure Testing for diffused air membranes. Submit all tests procedures for approval prior to scheduling testing."

AD3-7.13 **DELETE** the following bullet and sub-bullet from Section 6.7.3.1 General:

- "Perform dissolved oxygen concentration measurements by direct reading instruments which have been standardized against a laboratory determination of dissolved oxygen as described in latest edition of "Standard Methods for Examination of Water and Waste Water" with appropriate modification for interfering substances:
    - Multiple probes will be required as detailed under Paragraph A and appropriate references."

AD3-7.14 **REPLACE** Section 6.7.3.2 Basic Common Elements of Performance Tests, in its entirety with the following:

- "Factory Test:
    - Perform clean water verification test by a qualified 3rd party testing firm to demonstrate that diffuser quantity and configuration meet required oxygen demands.
    - Test in factory with similar conditions and geometry of design for basins or test on site under full scale operation in aeration basins after installation of equipment.
    - Measure and submit SOTR values for approval.
    - Test to be witnessed by qualified professional testing agent.
- Off-Gas Test:
    - Perform standard off-gas test after 1-3 months of basins start-up.
    - Test in accordance with ASCE Standard Procedure ASCE 18-96, Standard Guidelines for In-Process Oxygen Transfer Testing.
    - Submit qualifications of qualified professional testing agent.
- Manufacturer shall perform membrane hydraulic flux capacity testing under design conditions on each membrane train. Manufacturer at a minimum shall successfully complete testing for one representative train no later than 30 days prior to the expiration of Substantial Completion. Remaining trains may be completed after Substantial Completion. Testing shall be performed at the maximum month and maximum day design flux conditions on each membrane train. Manufacturer shall also test peak hourly flux condition. Test duration shall be a minimum of 30 days and shall include at least 2 consecutive days at maximum day design flux, and 4 consecutive hours at peak hourly flux. Testing shall be performed at the Manufacturers design mixed liquor suspended solids (MLSS) concentration and shall account for variables such as MLSS temperature and other applicable parameters. Submit proposed test procedure for approval a minimum of 30 days prior to commencement of the first test."

AD3-7.15 **REPLACE** Section 6.9.1 Minimum Design Criteria: <u>Water Reclaim Basins (Modified Trickling Filter Basins #3)</u> with the following:

<u>"Water Reclaim Tanks</u>

- Provide storage for a minimum of 750,000 gallons of reclaimed plant effluent water.
- Existing trickling filter basins may be reused for storage if they can be modified or reconstructed to meet project design requirements. Perform structural investigation and analysis as required to determine capacity in accordance with project requirements. If structural modifications are constructed, or if permanent interior liners or coatings are used to make the basin watertight, test the basin after installation in accordance with ACI 350.1. Performance of the completed

basin shall be equal to the requirements in ACI 350.1 Section 2.1 for containment structures with monolithically placed floors designed to be shrinkage crack free.

- Provide new concrete basin(s), post-tensioned concrete tank(s), or prefinished, bolted steel tank(s) if existing trickling filters are not used.
- Remove trickling filter equipment and media in the two existing trickling filter basins regardless of end use.
- Basins may be demolished if not used."

AD3-7.16 **REPLACE** the first sub-bullet in Section 6.9.1 Minimum Design Criteria: Non-Potable Water Pump under bullet "Minimum NPW Demand" with the following:

- o "Minimum of two yard hydrants with flow of 10 gpm at pressure of 50 psi operating simultaneously with other plant equipment."

AD3-7.17 **ADD** the following bullet under Section 6.11.1 (Aerobic Digestion):
:

- "Package chemical feed system for metal salt addition. Chemical addition equipment and storage tank(s) shall be provided for the biosolids process to prevent the release of stored phosphorous in recycle flows from the aerobic digestion and sludge dewatering processes. Chemical storage tank(s) shall be capable of providing a minimum of 14 days of storage for estimated use. System may be provided as a separate unit or combined with the chemical system identified in Section 6.6.6 for the liquid treatment process and provided as one system."

AD3-7.18 **DELETE** Section 6.14.3 in its entirety.

AD3-7.19 **ADD** the following Section 6.15:

"**6.15 Performance Guarantees**

Performance Guarantees shall be as shown in the following Table 6.15-1:"

Table 6.15-1

Performance Guarantees										
Parameters	Units	*Discharge to Receiving Stream*					*Discharge to Reuse*			
		Flow Rate [1]	Requirement (Summer)	Requirement (Winter)	Sampling Frequency	Test Period	Flow Rate	Requirement	Sampling Frequency	Test Period
BOD	mg/L	3.1 MGD	20	25	One Per Weekday	30 days	-	-	-	-
TSS	mg/L	3.1 MGD	30		One Per Weekday	30 days	1.7 MGD	5 [4]	One Per Weekday	7 days
Ammonia	mg/L	3.1 MGD	0.7	2.18	One Per Weekday	30 days	-	-	-	-
Total Nitrate plus Nitrite	mg/L	3.1 MGD	8		One Per Weekday	30 days	-	-	-	-
Total Phosphorus	mg/L	3.1 MGD	1.5		One Per Weekday	30 days	-	-	-	-
E. Coli	mpn/100mL	3.1 MGD	262 [2]		One Per Week	30 days	-	-	-	-
Total Coliform	mpn/100mL	-	-		-	-	1.7 MGD	2.2 [4]	One Per Weekday	7 days
Effluent DO	mg/L	3.1 MGD	5 [3]		One Per Weekday	7 days	-	-	-	-

Notes:

All requirements are monthly averages unless stated otherwise.

Maximum daily values for applicable parameters are not listed in above table, but shall also apply during this period. Values are listed in Section 5 of the Attachment E of the RFP.

[1] Test may be performed on a single treatment train to ensure adequate influent flows are available for testing period. If two trains are provided, flowrate would be adjusted to 1.55 MGD (3.1 MGD / 2

[2] Geometric Mean

[3] Minimum value

[4] 7 Day Median

AD3-7.20 **ADD** the following Section 7.1.5:

"**7.1.5 Outfall Structure**

Correct the soil erosion around and downstream of the plant outfall structure. Remove the debris located directly downstream of outfall structure. Place the following riprap downstream of plant outfall:

- KDOT Light 18" at a minimum thickness of 24"
- Minimum dimensions of the riprap apron shall be 9' width by 18' length
- Excavate as required to match existing grade elevation with riprap downstream of outfall"

AD3-7.21 **ADD** the following at the end of Section 7.4 Mechanical:

"On-site potable water and natural gas utility piping improvements are the responsibility of the design-builder from an onsite meter provided by the utility."

AD3-7.22 **REPLACE** bullet number 5, and all sub-bullets under bullet number 5, in Section 7.7.6 Telemetry with the following:

- "A direct fiber optic cable link shall be provided between the WWTP and City Hall. The City will procure fiber between the WWTP and City Hall with fiber patch panels at each end. The Design-Builder and their fiber optic contractor are responsible for the exact location of fiber patch panel on the plant site and all additional components in the new office building required for a complete and operational administrative network connection."

AD3-7.23 **ADD** the following bullets to the end of Section 7.7.6 Telemetry:

- "WWTP to Water Plant SCADA network connection:
    - The existing plant SCADA connection between the WWTP and the Water Plant shall to be upgraded from the existing radio connection to a fiber connection.
    - A new fiber optic cable link will be provided from the WWTP to City Hall (see Section 7.7.6). Additional fiber pairs within that cable will be dedicated for SCADA system network use. Existing multi-mode fiber pairs between City Hall and the Water Plant will be re-allocated for the new SCADA system link.
    - The City and their fiber optic contractor are responsible for the linkage from the WWTP to the Water Plant routed through, and patched together via conversion and linkage equipment, at City Hall.
    - The Design-Builder and their fiber optic contractor are responsible for the final location of fiber patch panel on the WWTP site, connections to the WWTP new SCADA network, and additional hardware and programming at both the WWTP and Water Plant for a complete and operational SCADA system network, enabling remote monitoring and control of either plant from either location.
        - Hardware:
            - New network switch at each plant and all applicable cabling and connections from the switches to the SCADA equipment
            - Maintain hardware separation between administrative network and SCADA network via completely segregated

fiber links and fiber to Ethernet media converters provided.

- Software:
  - Upgrade Water Plant existing SCADA system and HMI to view and control WWTP SCADA upgrades and modifications.
    - Programming to account for water plant existing HMI software version and existing PLC hardware platforms.
  - Include restoration of existing Water Plant HMI data accessibility from the WWTP.
  - Maintain software separation between administrative network and SCADA network via completely segregated fiber links and fiber to Ethernet media converters provided.
- Demolition:
  - Remove existing radios and associated hardware and salvage to the City."

AD3-8 **Clarification regarding Appendix E: MBE/WBE/DBE Requirements of RFP Attachment E: Project Technical Requirements Design Criteria.**

The 4.1% and 6.9% values do not apply to the individual projects such as this one at Hays. For this project, the design-builder will be accountable for putting forth a good faith effort to meet the City's MBE/WBE goal of 2%.

AD3-9 **Attachment F Fee and Rate Proposal**

AD3-9-1 **ADD** the following language prior to the Cost Table included in Attachment F: Fee and Rate Proposal at the end of the second paragraph.

"Employees burdened cost assigned to the Project and those working in the Proposer's administrative office, including the project manager and assistant project managers shall be included in the fee item under the home office overhead; Employees assigned to the Project and working at the construction site or employees for which the Owner provides all office facilities and services, excluding the project manager and assistant project managers, shall be included in the fee item under the field office; Construction and craft labor personnel stationed at the construction site shall be included under the construction fee item."

AD3-10 **ADD** the attached Appendix G – Flow and Sampling Data

AD3-11 The following items were provided electronically on a flash drive to the Proposers at the proprietary meetings on 10/14/2015:

- 1953 Plan Set
- 1967 Plan Set
- 1992 Plan Set
- 2012 WWTP Flow and Sampling Data
- 2013 WWTP Flow and Sampling Data
- 2014 WWTP Flow, Sampling and Irrigation Data
- WWTP Flow Data – Ammonia Sampling

This addendum is made part of the Request for Proposals. Respondents must acknowledge receipt and acceptance of this Addendum No. 3 by completion of the attached acknowledgement form. FAILURE TO ACKNOWLEDGE RECEIPT AND ACCEPTANCE MAY RESULT IN REJECTION OF THE PROPOSAL.

HDR ENGINEERING, INC.

Stan Christopher, P.E., HDR Engineering, Inc.
Owner Representative

Attachments:

KS12 and KS 21 – Davis Bacon Wage Determination document
Appendix G - Flow and Sampling Data
Addenda Acknowledgement Form

END OF ADDENDUM NO. 3