

# PROCUREMENT SERVICES

# **Invitation to Negotiate for**

Water Reclamation Facility Headworks Mechanical Screen and Related Services

Please mark all proposal submission envelopes with the following information:

ITN19KO-102 Opening 8/3/2018 at 3:00PM

# Contents

1.0	STA	TEMENT AND SCOPE OF WORK	
	1.1	Summary	5
	1.2	Scope of Work	5
	1.3	Term of Agreement	5
		Coverage and Participation	
		University Demographics	
2.0	FV/	LUATION PROCESS AND METHOD OF AWARD	6
2.0	2.1	Method of Award	
	2.2	Selection, Negotiation, Additional Information	
	2.3	Pre-Award Presentations	
	2.4	Pre-Award Negotiations	
	2.5	Vendor Protest Procedure; Notice of Proposal Protest Bonding Requirement	
	2.6	Contractual Intent/Right to Terminate and Recommence ITN Process	
	2.7	Effective Period of Proposals	
	2.8	Proposal Acceptance/Rejection	
	2.9	Errors and Omissions in Vendors Proposals	
	2.10	Determination of and Information Concerning Vendor's Qualifications	
	2.11	Apparently Conflicting Information Obtained by Vendor	
	2.12	Rejection of Vendor Counter-offers, Stipulations and Other Exceptions	
	2.13	Vendor's Need to Use Proprietary Rights of the University	
	2.14	Public Record	
	3.1 3.2	IEDULE OF EVENTSPre-Proposal ConferencePre-Proposal Site VisitPre-Proposal Accommodations	9 9
4.0		PPOSAL RESPONSE AND PREPARATION INSTRUCTIONS	
	4.1	Proposal Format Organization	10
	4.1.1	Response Format	
	4.1.2	Number of Proposal Copies to be Furnished	
	4.1.3	Bindings and Marking	11
	4.1.4	Marking of Envelopes	12
	4.1.5	Proposal Costs	12
	4.1.6	Faxes or Emails Not Accepted	
	4.2	Requirements of Proposer for Response	12
	4.2.1	Original ITN Document	12
	4.2.2	Vendor's Understanding of the ITN	12
	4.2.3	University Provides Information in Good Faith without Liability	12
	4.2.4	Verbal versus Written Communication	
	4.2.5	Questions, Communications and Inquires between the University and Vendors	
	4.2.6	Addenda and the University's Response to Communications from Vendor	
	4.2.7	Pricing and/or Revenue Proposal	
	4.2.8	Revisions to the ITN	
	4.2.9	Florida Preference	
		Attention to Terms and Conditions	
	4.2.11	Required Signature	15

	1212	Authority to Negotiate	15
		Collusion Prohibited	
		Improper Business Relationships/Conflict of Interest Prohibited	
		Corrections, Changes, and Providing Information on Forms within the ITN	
		Performance and Payment Bond	
		Anti-Kickback	
		Withdrawal of ITN	
		University's Right to Use Vendor's Ideas/Proprietary Information	
	4.2.19	University's Right to Use vendor's ideas/Proprietary Information	16
5.0	DEF	FINITIONS	17
	5.1	Agreement/Contract	
	5.2	Customer	
	5.3	May, Should	
	5.4	Must, Shall, Will	
	5.5	Proposal	
	5.6	Proprietary Information	
	5.7	Provider	
	5.8	Invitation to Negotiate (ITN)	
	5.9	Respondent	
	5.10	Response	
	5.11	Successful Vendor	
	5.12	Supplement Agreement	
	5.12	Supplier	
	5.13	University of Florida, UF or University	
	5.15	VendorVendor's Proposal	
	5.16	•	
	5.17	Vendor's Response	18
6.0	40	REEMENT TERMS AND CONDITIONS	40
o.u			
	6.2	Actions of Successful Vendor	
	6.3	Advertising	
	6.4	Americans with Disabilities Act	
	6.5	Certification	
	6.6	Conflict of Interest	
	6.7	Discrimination	
	6.7	Drug Free Workplace	
	6.8	Equal Opportunity Statement	
	6.9	Federal, State, and Local Laws and Regulations	
	6.10	Inspection, Audit and Reporting	
	6.11	Liens	
	6.12	Modifications	
	6.13	Non-Discrimination	21
	6.14	Ownership of Documents	21
	6.15	Sales and Use Tax	21
	6.16	Sexual Harassment	21
	6.17	Small Business Program	21
	6.18	Tobacco Free Campus Policy	
	6.19	Sustainability Preferences	
	6.20	Assignment-Delegation	
	6.21	Assignment of Anti-Trust Overcharge Claims	
	6.22	Date for Reckoning Prompt-Payment Discount	
	6.23	Force Majeure	
		Indemnification/Hold Harmless; Liability	23
	6.25	Insurance Requirements	

6.27	Protection of Property	24
6.28	Labor Disputes	
6.29	Laws and Regulations	
6.30	No Replacement of Defective Tender	
6.31	No Waiver of Right by the University	
6.32	Notice to Vendors of Asbestos-Containing Materials in University Buildings	
6.33	Parking and Identification Badges	
6.34	Payment Terms	
6.35	Price Adjustment	
6.36	Prior Course of Dealings	
6.37	Intentionally Blank	
6.38	Public Entity Crime	
6.39	Public Records	
6.40	Referencing of Orders	
6.41	Remedies and Applicable Law	
6.42	Right of Inspection	
6.43	Right of Offset	
6.44	Shipment Under Reservation Prohibited	
6.45	Specifications: Brand Name or Acceptable Alternate	
6.46	Successful Vendor to Package Goods	
6.47	Termination	
6.47.	1 Convenience	
	2 Default	
	3 Gratuities	
	4 Insolvency	
	5 Lack of Funds	
	6 Stop Work Order	
	7 Suspension or Debarment	
	8 Continuation of Performance Through Termination	
6.48	Title and Risk of Loss	
6.49	Warranties	
6.50	Payment Card Industry Data Security Standard	29
6.51	Payment and Invoice Information	29
	• • • • • • • • • • • • • • • • • • • •	
7.0 Ce	ertifications and Forms	
7.1	Certification of Proposal	30

#### 1.0 STATEMENT AND SCOPE OF WORK

#### 1.1 Summary

The University is seeking proposals from suppliers for a perforated plate mechanical screen for wastewater applications, to be installed by others, at the University's Water Reclamation Facility (WRF).

The University of Florida WRF located on the main campus at 1103 Gale Lemerand Drive, Gainesville, Florida is permitted by the Florida Department of Environmental Protection (FDEP) to treat up to 3.0 MGD of domestic wastewater from the UF campus and adjacent customers. The WRF experienced a failure of the existing mechanical screen in September 2017. It was determined by WRF staff that the screen had reached the end of its useful life. Based on the University's operational considerations, the University has selected a through-flow perforated plate screen as the equipment of choice.

### 1.2 Scope of Work

Provide one fully automatic perforated plate 316 S.S. mechanical raw sewage screen and one screenings washer compactor unit with all controls and appurtenances necessary to provide a complete and operational system. The screenings washer shall reduce the putrescible organic content of the screenings and shall dewater, compact, and transport the screenings to a dumpster. Controls for the screenings washer shall be incorporated in the control panel for the mechanical screen. The equipment shall be of the latest design and shall perform the functions described in the technical specifications in Attachment A and as specified in the drawings in Attachment B.

### 1.3 Term of Agreement

This Agreement is for the initial purchase of the mechanical screen and screenings washer compactor unit and all subsequent maintenance, service and warranty work on the equipment. The initial term of the agreement for maintenance, service and warranty work on the equipment shall be a minimum of one year, with options to renew annually based on satisfactory performance and the written approval of both parties.

#### 1.4 Coverage and Participation

With the consent and agreement of the Successful Vendor, the other state universities, community colleges, district school boards, other educational institutions, and other governmental agencies, may assess and access an Agreement resulting from this solicitation issued and administered by the University of Florida.

The University reserves the right to add and/or delete elements, or to change any element of the coverage and participation at any time without prior notification and without any liability of any kind or amount.

#### 1.5 University Demographics

The University of Florida is a major public land-grant research university. The state's oldest, largest, and most comprehensive university, the University of Florida is among the nation's most academically diverse public universities. The University has a long history of established programs in international education, research, and service. It is one of only 17 public land-grant universities nationwide and the only university in Florida belonging to the Association of American Universities. With more than 50,000 students, the University of Florida is now one of the five largest universities in the nation.

The University of Florida has a 2,000-acre campus and more than 900 buildings (including 170 with classrooms and laboratories). The northeast corner of campus is listed as a historic district on the National Register of Historic Places.

The University's extensive capital improvement program has resulted in facilities ideal for 21st century research including the McKnight Brain Institute, the Health Professions, Nursing and Pharmacy Building, the Cancer and Genetics Research Complex, and the Proton Therapy Institute in Jacksonville. Overall, the university's current facilities have a book value of more than \$1 billion and a replacement value of \$2 billion.

For any additional information about the University of Florida, please visit the University's web page at: www.ufl.edu.

#### 2.0 EVALUATION PROCESS AND METHOD OF AWARD

#### 2.1 Method of Award

The evaluation of each response to this ITN will be based on its overall competence, compliance, format, and organization. The Award shall be made to the responsive and responsible vendor whose proposal is determined to be the most advantageous to the University of Florida, taking into consideration the evaluation criteria listed below. Pricing may be a criterion. However, the University is under no obligation whatsoever to select as most responsive the proposal that demonstrates the lowest pricing.

The contract will consist of the University's ITN, the proposal with any and all revisions, award letter, purchase order, and the signed agreement between the parties, as stated in that agreement.

Vendors whose proposals are not accepted will be notified after a final selection has been made by public posting of the selected proposer(s). This public posting functions as the rejection of all other proposals. This posting will be made tohttps://procurement.ufl.edu/vendors/schedule-of-bids/.

#### **Evaluation Criteria**

Vendor proposals will be evaluated based upon how well each Vendor plans to meet the University's needs. Specific consideration will be given to the following responses in no particular order or weighting:

- **Technical Proposal** [response Tab #2]
- Operations and Maintenance Proposal [response Tab #3]
- Warranty Proposal [response Tab #4]
- Training and Support Program Proposal [response Tab #5]
- Pricing Proposal [response Tab #6]
- Customer References [response Tab #7]

### 2.2 Selection, Negotiation, Additional Information

Although the University reserves the right to negotiate with any vendor or vendors to arrive at its final decision and/or to request additional information or clarification on any matter included in the proposal, it also reserves the right to select the most responsive vendor or vendors without further discussion, negotiation, or prior notice. The University may presume that *any proposal is a best-and-final offer*.

The University also reserves the right to award to the next highest evaluated, responsive and responsible bidder for any and all groups, subgroups, or items in the event of vendor default, non-performance, non-compliance or similar issues affecting the University's ability to obtain services at any time throughout the contract period.

#### 2.3 Pre-Award Presentations

The University reserves the right to require presentation from any and all vendors, in which they may be asked to provide or they may provide information in addition to that provided in their proposals.

### 2.4 Pre-Award Negotiations

The University reserves the right to negotiate prior to award with vendors for purpose of addressing the matters set forth in the following list, which may not be exhaustive.

- Resolving minor difference and typographical errors
- Terms and conditions
- Clarifying necessary details and responsibilities
- Emphasizing important issues and points
- Receiving assurances from vendors
- Obtaining the lowest and best pricing and/or revenue agreement

### 2.5 Vendor Protest Procedure; Notice of Proposal Protest Bonding Requirement

Any vendor protest to a University decision or intended decision with regard to this ITN is subject to Florida Board of Governors' (BOG) Regulations 18.002 and 18.003. Any vendor who files an action protesting a decision or intended decision shall post at the time of the filing the formal written protest, a bond, payable to the University of Florida, in an amount equal to the lessor of 10% of the estimated value of the protestor's proposal or 10% of the University's estimated expenditure during the contract term:, or \$10,000. The bond shall be conditioned upon the payment of all costs which may be adjudged against the vendor. In lieu of a bond, the University will accept a cashier's check or money order in the amount of the bond.

#### 2.6 Contractual Intent/Right to Terminate and Recommence ITN Process

The University intends to contract with one vendor whose proposal is considered to be in the best interests of the University. However, the University may terminate this ITN process at any time up to notice of award, without prior notice, and without liability of any kind or amount. Further, the University reserves the right to commence one or more subsequent ITN processes seeking the same or similar products or services covered hereunder. In the event of cancellation or termination, the University reserves the right to award the contract to another Offeror, cancel in its entirety, or to request new proposals, whichever is in the best interest of University of Florida.

#### 2.7 Effective Period of Proposals

Under this ITN, the University shall hold that vendors' responses to this ITN shall remain in effect for a period of ninety (90) days following the closing date, in order to allow time for evaluation, approval, and award of the contract. Any vendor who does not agree to this condition shall specifically communicate in its proposal such disagreement to the University, along with any proposed alternatives. This University may accept or reject such proposed alternatives without further notification or explanation.

### 2.8 Proposal Acceptance/Rejection

The University reserves the right to reject any or all proposals. Such rejection may be without prior notice and shall be without any liability of any kind or amount to the University. The University shall not accept any proposal that the University deems not to be in its best interests. The University shall reject proposals submitted after the closing date and time.

#### 2.9 Errors and Omissions in Vendors Proposals

The University may accept or reject any vendor's proposal, in part or in its entirety, if such proposal contains errors, omissions, or other problematic information. The University may decide upon the materiality of such errors, omissions, or other problematic information.

# 2.10 Determination of and Information Concerning Vendor's Qualifications

The University reserves the right to determine whether a vendor has the ability, capacity, and resources necessary to perform/provide in full any contract resulting from this ITN. The University may request from vendors information it deems necessary to evaluate such vendors' qualifications and capacities to deliver the products and/or services sought hereunder. The University may reject any vendor's proposal for which such information has been requested but which the vendor has not provided. Such information may include but is not limited to:

- Financial resources
- Personnel resources
- Physical resources
- Internal financial, operating, quality assurance, and other similar controls and policies
- Resumes of key executives, officers, and other personnel pertinent to the requirements of the ITN
- Customer references
- Disclosures of complaints or pending actions, legal or otherwise, against the vendor
- The University reserves the right to check references with current customers as provided by the vendor and with any customers the University identifies

### 2.11 Apparently Conflicting Information Obtained by Vendor

The University is under no obligation whatsoever to honor or observe any information that may apparently conflict with any provision herein, regardless of whether such information is obtained from any office, agent, or employee of the University. Such information shall not affect the vendor's risks or obligations under a contract resulting from this ITN.

### 2.12 Rejection of Vendor Counter-offers, Stipulations and Other Exceptions

Any vendor exception, stipulation, counter-offer, requirement, and/or other alternative term or condition shall be considered rejected unless specifically accepted in writing by the University and thereafter incorporated into any contract resulting from this ITN.

#### 2.13 Vendor's Need to Use Proprietary Rights of the University

All information proprietary to the University and disclosed by the University to any vendor shall be held in confidence by the vendor and shall be used only for purposes of the vendor's performance under any contract resulting from this ITN.

#### 2.14 Public Record

On the earlier of (i) the time the University provides notice of a decision or intended decision, or (ii) 30 days after the final competitive sealed proposals are all opened, whichever occurs earlier, vendor proposals may be disclosed as public record.

#### 3.0 SCHEDULE OF EVENTS

The following is the tentative schedule that will apply to this ITN, but may change in accordance with the University's needs.

6/27/2018 Issuance of ITN
7/10/2018 – 9:00 AM ET Non-Mandatory Pre-proposal Conference
7/17/2018 – 5:00 PM ET Technical Questions/Inquiries Due
7/24/2018 Reponses to Inquires sent out
8/3/2018 – 3:00 PM ET ITN Closes/Opening of Proposals

#### 3.1 Pre-Proposal Conference

A Non-mandatory pre-proposal conference will be held for vendors who intend to respond to this ITN.

Date & Time: 7/10/2018 at 9:00 AM ET University of Florida Water Reclamation Admin. Building 1103 Gale Lemerand Drive Gainesville, FL 32611

The purpose of the conference is to provide for questions and answers regarding terms, conditions, or specifications of the ITN. Answers to any questions that might arise will be in the form of Addenda to the Invitation to Negotiate prior to the proposal opening. All such revisions must be acknowledged by signature and returned with the proposal.

The Procurement Staff may choose to call for additional pre-proposal conference(s) if, in the sole judgment of the Procurement Staff, there is a need for such conference(s) in order to promote competition.

#### 3.2 Pre-Proposal Site Visit

A pre-proposal site visit may be held for vendors who intend to respond to this ITN. The purpose of the site visit is to acquaint the vendors with the conditions under which the work must be performed. The University will not be responsible for additional compensation if the vendor does not acquaint themselves with all the available conditions and information nor shall it relieve the vendor from any responsibility for properly performing the work.

### 3.3 Special Accommodations

If special accommodations are needed in order to attend a pre-proposal meeting, site visit or a proposal opening, contact 352-392-1335 or email at <a href="mailto:procurement@ufl.edu">procurement@ufl.edu</a> three (3) business days prior to pre-proposal meeting, site visit or proposal opening.

### 4.0 PROPOSAL RESPONSE AND PREPARATION INSTRUCTIONS

The above address is a valid campus address for any courier service.

It is the vendor's responsibility to assure that the proposal is delivered at the proper time and place of the proposal opening. Proposals which for any reason are not so delivered will not be considered. The University shall not accept proposals received by facsimile or email. The University shall, at the specified closing date and time, open all proposals that are otherwise in order. The University will allow interested parties to attend such opening for purposes of identifying which vendors have responded. The University will make no immediate decision at such time, and there will be no disclosure of any information contained in any proposal until the earlier of (i) the time University provides notice of a decision or intended decision, or (ii) 30 days after the final competitive sealed proposals are all opened, whichever occurs earlier, at which time the vendor proposals become public record. When multiple solicitations have been scheduled to open at the same date and time, the University will open solicitations that have interested individuals present in sequential order by solicitation number. The University will hold unopened any proposals received after the closing date and time, and will not consider such proposals. The University reserves the right to retain or dispose of such proposals at its discretion; however, the University may return such proposals to their related vendors, but only at such vendor's request and at no cost or expense whatsoever to the University.

If only one proposal is received, Procurement may delay the opening in order to determine why other vendors did not respond and to encourage other vendors to respond.

# 4.1 Proposal Format Organization

Original proposal and all copies must be on 8-½ x11 text weight paper, <u>double-sided</u>, <u>using binding tabs that will facilitate the distribution and evaluation of the proposals</u>. <u>Proposals should be printed when possible on paper containing a high level of post-consumer recycle content</u>. <u>Proposals should conform to the tabbed format below as well as the requirements of sections 4.1.2, 4.1.3 and 4.1.4</u>.

### 4.1.1 Response Format

- Submit one (1) copy of the initial response on PC compatible media (CD/DVD or USB flash drive), preferably in Word® and/or Excel®. The original response must contain the original manual signature of the authorized person signing the proposal, and the electronic copy of the proposal.
- The outer carton of the response must display clearly and conspicuously the following identifying information, The ITN number, name and due date and is sealed; submit one (1) original and three (3) copies of the vendor's proposal in hard copy form.
- The offer's response must include the information and required submittals described, tabbed and numbered as shown below, with all information appearing in the Tab in which it was requested.
- Questions and requests for information may not be rearranged, regrouped, or divided in any way.
- All information and required submittals requested MUST BE in hardcopy and included in your written response.

<u>Failure to adhere to this condition may cause your response to be rejected without further</u> evaluation.

- Information submitted that is not requested by the University may be considered to be supplemental, not subject to evaluation by the committee members.
- If there is any information or required submittals which due to size or binding cannot be incorporated following the proper tab, the vendor must provide information following the numbered tab, telling the evaluator where the information can be found in the response.
- Tabular / Paginated Format:
  - Tab 1: Completed and signed Certification of Proposal form, Attestation of Principal Place of Business, and/or signed and completed acknowledgement forms for any addenda

issued. Contact name(s) and title(s) of the individual(s) responsible for the company's proposal and negotiation during this ITN process.

- Tab 2: Technical Proposal
  - Mechanical Screen element perforation size and material.
  - Mechanical Screen and Washer Compactor materials of construction (316 Stainless Steel, Ultra High Molecular Weight Polyethylene (UHMWPE), etc.)
  - Hydraulic calculations showing the Mechanical Screen System hydraulics including angle of inclination, design peak flow capacity, headloss, % blinding, capture efficiency/rate, carry-over rate, and other applicable data.
  - Mechanical Screen and Washer Compactor cleaning method(s) (spray wash, brush, etc.)
  - Minimum wash water flow and pressure requirements.
  - Booster pump model/make/materials of construction/hydraulic data including pump curve, design flow, total dynamic head (TDH), efficiency, NPSHr, and etc.
  - Drawing showing the layout for the lights, button, switches, and disconnect for the Local Control Panel (LCP).
  - Data for all motors included in the Mechanical Screen and Washer Compactor System including motor class, horsepower (HP), service factor, motor efficiency, motor enclosure type, and etc.
  - Overall layout drawing (to scale) of mechanical screen system, washer compactor and screenings discharge chute (plan view and cross sections)
  - Submittal requirements as listed in Attachment A, Section 11331 Item 1.02 and Section 11332 Item 1.02.
- Tab 3: Operations and Maintenance Proposal
  - Operation and Maintenance Manual.
  - Description of preventative maintenance/lubrication requirements (scope, frequency, etc.)
  - Repair parts/spare part availability.
- Tab 4: Warranty Proposal
  - Warranty and repair services.
- Tab 5: Training and Support Program
  - Operator training and technical support
- Tab 6: Pricing Proposal
  - Mechanical Screen Cost
  - Washer Compactor Cost
  - Total Cost
  - Total Cost of Ownership
- Tab 7: Customer References
  - List of installations of the perforated mechanical screen system in wastewater treatment plants (WWTP), located in Florida, of similar size and scope to the services described in the ITN.
    - This list must include the design flow of the mechanical screen system, WWTP name/location, name, address, telephone, and email address of the reference.
- o **Tab 8:** Detail any concerns with UF's terms and conditions.

# 4.1.2 Number of Proposal Copies to be Furnished

Vendors are to submit one (1) original, of the initial response on PC compatible media (CD/DVD or USB flash drive), preferably in Word® and or / Excel® marked "Original", and three (3) copies, each marked "Copy".

### 4.1.3 Bindings and Marking

Vendors shall ensure that the original and each copy are individually bound. When submitting more than one (1) proposal, vendors shall ensure that units are clearly marked; for example, as "Original

of Proposal One", "Copy One of Proposal One", "Original of Proposal Two", "Copy One of Proposal Two", and so on.

### 4.1.4 Marking of Envelopes

Vendors shall ensure that the outer carton of the response must display clearly and conspicuously the following identifying information: ITN #: ITN19KO-102

Opening date and time: 8/3/2018 at 3:00 PM ET

### 4.1.5 Proposal Costs

The University is not liable in any manner or to any extent for any cost or expense incurred by any vendor in the preparation, submission, presentation, or any other action connected with proposing or otherwise responding to this ITN. Such exemption from liability applies whether such costs are incurred directly by the vendor or indirectly through the vendor's agents, employees, assigns or others, whether related or not to the vendor.

### 4.1.6 Faxes or Emails Not Accepted

The University shall not accept proposals received by fax or email.

### 4.2 Requirements of Proposer for Response

### 4.2.1 Original ITN Document

Procurement Services shall retain the ITN, and all related terms and conditions, exhibits and other attachments, in original form in an archival copy. Any modification of these, in the vendor's submission, is grounds for immediate disqualification.

#### 4.2.2 Vendor's Understanding of the ITN

In responding to this ITN, the vendor accepts the responsibility fully to understand the ITN in its entirety, and in detail, including making any inquiries to the University as necessary to gain such understanding. The University reserves the right to disqualify any vendor who demonstrates less than such understanding. Further, the University reserves the right to determine, at its sole discretion, whether the vendor has demonstrated such understanding. Related to this, the University's right extends to cancellation of award if award has been made. Such disqualification and/or cancellation shall be at no fault, cost or liability whatsoever to the University.

### 4.2.3 University Provides Information in Good Faith without Liability

All information provided by the University in this ITN is offered in good faith. Individual items are subject to change at any time. The University makes no certification that any item is without error. The University is not responsible or liable for any use of the information, or for any claims attempted to be asserted there from.

#### 4.2.4 Verbal versus Written Communication

Verbal communication shall not be effective unless formally confirmed in writing by the specified University Procurement staff in charge of managing this ITN's process. In no case shall verbal communication override written communication.

### 4.2.5 Questions, Communications and Inquires between the University and Vendors

Vendor inquiries, questions and requests for clarification related to this ITN are to be directed, in writing, to:

University of Florida Procurement Services 971 Elmore Drive Gainesville, FL 32611-5250

Attn: Karen Olitsky
Telephone No: 352/294-1163
Facsimile No: 352/392-8837
E-mail Address: kolitsk@ufl.edu

Applicable terms and conditions herein shall govern communications and inquiries between the University and vendors, as they relate to this ITN.

**Informal communications** shall include, but are not limited to, requests from/to vendors or vendors' representatives of any kind or capacity, to/from any University employee or representative of any kind or capacity, with the exception of Procurement Services, for information, comments, speculation, etc. Inquiries for clarifications and information that will not require addenda may be submitted verbally to the Procurement Staff named, above, at any time.

**Formal communications** shall include but are not limited to the following.

- Questions concerning this ITN must be submitted in writing, and be received prior to 7/17/2018 at 5:00 PM ET.
- Errors and omissions in this ITN and enhancements. Vendors shall bring to the University's attention any discrepancies, errors, or omissions that may exist within this ITN. Vendors shall recommend to the University any enhancements in respect to this ITN, which might be in the University's best interests. These must be submitted in writing and be received prior to 7/17/2018 at 5:00 PM ET.
- Inquiries about technical interpretations must be submitted in writing, and be received prior to 7/17/2018 at 5:00 PM ET.
- Inquiries for clarifications/information that will <u>not</u> require addenda may be submitted verbally to the Procurement Staff named above at any time during this process.
- Verbal and/or written presentations and pre-award proposals under this ITN.
- Addenda to this ITN.

Informal communications shall cease on the date of distribution of this ITN and formal communications shall commence. On the date that the University completes the award process for this ITN and executes the resulting contract with the successful Vendor, informal communications may resume and formal communications must cease.

### 4.2.6 Addenda and the University's Response to Communications from Vendor

The University will make a good-faith effort to provide a written response to each question or request for clarification that requires addenda within five (5) University business days.

### All addenda will be posted to our web site only:

https://procurement.ufl.edu/vendors/schedule-of-bids/

• Vendors who want the addenda supplied to them in another form must notify the Procurement Staff listed in Section 4.2.5 above of that request. Otherwise, it will be the vendor's responsibility to check the web site for any additional information and addenda concerning this ITN.

The University may not respond to any questions/requests for clarification that require addenda, if received by the University after **7/17/2018** at **5:00 PM ET**.

### 4.2.7 Pricing and/or Revenue Proposal

Vendors shall indicate pricing and/or revenue offers in the appropriate spaces and/or areas provided in this ITN. Vendors shall ensure that any departure from this condition results in an offer that is clearly cross-referenced to the applicable sections within this ITN. For any material departure from this condition, vendors shall provide clear and unambiguous explanations how the departure relates in detail to the applicable sections within this ITN. If the vendor responds with an "All or None" proposal, it shall be clearly and unambiguously marked as such.

The University may presume and hold as the vendor's final offer all pricing and/or revenue offerings, whether stated as amounts or percentages, and/or whether or not offered on an all-or-none basis, if not specified by the vendor. The University may accept or reject in part or entirely the vendor's pricing and/or revenue offerings when such offerings are not on an all-or-none basis. The University prohibits the changing of pricing and/or revenue proposals after the ITN closing date and time. Unless otherwise specifically proposed by the vendor, the University reserves the right to hold such pricing and/or revenue proposal as effective for the entire intended contract term. The University may prescribe the manner and method by which pricing and/or revenue offerings shall be communicated in the vendor's proposal. The University may reject any proposal in which the pricing and/or revenue offering does not conform to such prescribed manner and method.

### 4.2.8 Revisions to the ITN

The University may revise any part of this ITN for any reason by issuing addenda. The University will communicate additional information and addenda to this ITN by posting them on our web site.

https://procurement.ufl.edu/vendors/schedule-of-bids/

• Vendors that want the revisions supplied to them in another way must notify the Procurement Staff listed in this document of that request. Otherwise, it will be the vendor's responsibility to check the web site for any additional information and addenda concerning this ITN.

Vendors are responsible for the information contained in such addenda, whether or not they acknowledge receipt. The University is under no obligation to communicate such addenda to vendors who notify the University that they will not be responding this ITN. The University may determine whether an addendum will be considered as part of this ITN and/or as part of any contract resulting there from. The University shall reject vendors' responses to addenda if such responses are received after the ITN closing date and time.

#### 4.2.9 Florida Preference

Preference for Florida Based Vendors for Purchases of Personal Property in accordance with §.287.084, Florida Statute; a preference shall be provided to vendors with a principal place of business in Florida. If the lowest responsible and responsive bid for personal property is from a vendor whose principal place of business is outside of Florida and is in a state or political subdivision thereof that grants a preference for the same purchase of personal property to a vendor in such state or political subdivision, as applicable, then the University shall grant the same preference to the Florida based vendor with the lowest responsible and responsive bid received pursuant to this Invitation to Bid.

If the lowest responsible and responsive bid is from a vendor whose principal place of business is in a state that does not grant a preference for the purchase of personal property to a vendor in such state, then the University shall grant a preference in the amount of 5 percent to the lowest and responsive Florida base vendor.

For vendors whose principal place of business is outside of Florida, such vendors must, at the time of submitting its bid, provide a written opinion from a licensed attorney in its state specifying (a) the preference(s) granted by the state or political subdivision and (b) how the preference(s) is/are calculated.

The attached Attestation of Principal Place of Business must be completed and returned with your ITN proposal.

#### 4.2.10 Attention to Terms and Conditions

Vendors are cautioned to thoroughly understand and comply with all matters covered under the Terms and Conditions section of this ITN. The successful Vendor is expected to enter into a form of agreement. The University agreement terms and conditions included in this ITN are intended to be incorporated into this agreement. PROPOSALS THAT ARE CONTINGENT UPON ANY CHANGES TO THESE TERMS AND CONDITIONS MAY BE DEEMED TO BE NON-RESPONSIVE AND MAY BE REJECTED (within the University's sole discretion).

#### 4.2.11 Required Signature

The University may reject any vendors' response if it is not signed as indicated and/or required by the areas, spaces, or forms provided within this ITN.

#### 4.2.12 Authority to Negotiate

Representatives of the vendor(s) selected to participate in oral negotiation(s) shall be first required to submit written authorization from the company CEO or CFO attesting to the fact that the company's lead negotiator is authorized to bind the company to the terms and conditions agreed to during negotiations and as contained in the vendor's best and final offer. The provision of such authorization shall be a prerequisite to continuation in the ITN process. The University shall not enter into extensive contract negotiations with the selected vendor(s) after the negotiation process has been completed. If the University determines that a company awarded a contract based on this ITN does not honor all aspects of the agreement reached during the negotiations in the best and final offer, the University reserves the right to immediately cancel the award, and to place the company on the University's suspended vendor list.

Company negotiators must enter the negotiations prepared to speak on behalf of the vendor's company. The University reserves the right to immediately terminate negotiations with any company whose representatives are not empowered to, or who will not, make decisions during the negotiation session. Vendors are reminded that the University may elect not to solicit a best and

final offer from any company whose representative(s) have been unable or unwilling to commit to decisions reached during the verbal negotiation process.

#### 4.2.13 Collusion Prohibited

In connection with this ITN, vendor collusion with other vendors or employees thereof, or with any employee of the University, is prohibited and may result in vendor disqualification and/or cancellation of award. Any attempt by the vendor, whether successful or not, to subvert or skirt the principles of open and fair competition may result in vendor disqualification and/or cancellation of award. Such disqualification and/or cancellation shall be at no fault or liability whatsoever to the University.

#### 4.2.14 Improper Business Relationships/Conflict of Interest Prohibited

In connection with this ITN, each vendor shall ensure that no improper, unethical, or illegal relationships or conflict of interest exists between or among the vendor, the University, and any other party to this ITN. The University reserves the right to determine the materiality of such relationships, when discovered or disclosed, whether intended or not; and to decide whether or not vendor disqualification and/or cancellation of award shall result. Such disqualification and/or cancellation shall be at no fault or liability whatsoever to the University.

### 4.2.15 Corrections, Changes, and Providing Information on Forms within the ITN

Vendors shall ensure that an authorized individual initials each correction using pen and ink. Vendors shall use pen and ink or typewriter in providing information directly on pages, or copies thereof, contained within this ITN.

#### 4.2.16 Performance and Payment Bond

Not required.

#### 4.2.17 Anti-Kickback

In compliance with FAR 52.203-7, the University has in place and follows procedures designed to prevent and detect violations of the Anti-Kickback Act of 1986 in its operations and direct business relationships.

### 4.2.18 Withdrawal of ITN

Vendors may withdraw their proposals any time prior to the ITN closing date. Vendors may request to withdraw their proposals after the ITN closing date and time prior to selection and notice of award. The University shall have sole authority to grant or deny such a request. In the event the University grants such a request, it may withhold issuing future ITN's to such vendors.

### 4.2.19 University's Right to Use Vendor's Ideas/Proprietary Information

If the vendor needs to submit proprietary information with the proposal, the vendor shall ensure that it is enclosed in a separate envelope from the proposal and that it is clearly designated and conspicuously labeled as such. Vendors who submit responses with information noted as proprietary may be asked to substantiate why the information is proprietary or is otherwise exempt from a public records request under Florida Law.

Selection or rejection of the proposal shall not affect the University's right of use. Provided, however, that the University will, in good faith, honor any vendor information that is clearly designated and conspicuously labeled as proprietary when the University concurs that the

information is proprietary, and that trade secrets or other proprietary data contained in the proposal documents shall be maintained as confidential in accordance with procedures promulgated by the Procurement Staff and subject to limitations in Florida or Federal law. Pricing information cannot be considered proprietary. The University shall not be liable in any manner or in any amount for disclosing proprietary information if such information is not clearly so designated and conspicuously so labeled. The University shall likewise not be liable if it did not know or could not have reasonably known that such information was proprietary.

Should a request be made of the University for access to the information designated confidential or trade secret by the bidder and, on the basis of that designation, the University denies the request, the bidder may be responsible for all legal costs necessary to defend such action if the denial is challenged in a court of law.

#### 5.0 DEFINITIONS

### 5.1 Agreement/Contract

All types of agreements entered into by the University of Florida, regardless of what they may be called, for the procurement of materials, services or construction, or the disposal of materials. Meaning is interchangeable.

#### 5.2 Customer

Unless otherwise implied by the context of the specific provision within this ITN, "Customer" means a customer of the vendor, other than the University.

### 5.3 May, Should

Indicates something that is not mandatory, but permissible, recommended, or desirable.

#### 5.4 Must, Shall, Will

Indicates a mandatory requirement. Failure to meet these mandatory requirements may result in rejection of your proposal as non-responsive.

### 5.5 Proposal

The entirety of the vendor's responses to each point of this ITN, including any and all supplemental offers or information not explicitly requested within this ITN.

#### 5.6 Proprietary Information

Information held by the owner that if released to the public or anyone outside the owner's organization, would be detrimental to its interests. It is an issue of fact rather than opinion. Pricing and/or revenues cannot be considered proprietary.

#### 5.7 Provider

Any entity responding to this ITN, or, if selected, the vendor entering into a contract with University.

### 5.8 Invitation to Negotiate (ITN)

A competitive negotiation process. It is not to be confused with an Invitation to Bid (ITB), in which goods or services are precisely specified and price is substantially the only competitive factor. This ITN

provides the University the flexibility to negotiate to arrive at a mutually agreeable relationship. Price will be considered, but will not be the only factor of evaluation.

### 5.9 Respondent

Any entity responding to this ITN, or, if selected, the vendor entering into a contract with University.

### 5.10 Response

Same as Proposal

#### 5.11 Successful Vendor

Any entity responding to this ITN, or, if selected, the vendor entering into a contract with University.

### 5.12 Supplement Agreement

Any supplement terms and conditions agreed to by the parties in writing taking precedence over all other documents governing the transaction.

### 5.13 Supplier

Any entity responding to this ITN, or, if selected, the vendor entering into a contract with University.

### 5.14 University of Florida, UF or University

Same as The University of Florida Board of Trustees, a public body corporate of the State of Florida; throughout the document the term UF, University and University of Florida is used interchangeably.

#### 5.15 Vendor

Any entity responding to this ITN, or, if selected, the vendor entering into a contract with University.

# 5.16 Vendor's Proposal

Same as Proposal

#### 5.17 Vendor's Response

Same as Proposal

### 6.0 AGREEMENT TERMS AND CONDITIONS

The following are the Terms and Conditions that will become part of any Agreement consummated between the University and the Successful Vendor and are not subject to negotiation or alteration by the Successful Vendor. Therefore, the Successful Vendor will be expected to execute an Agreement containing the provisions set forth in this section, or substantially similar provisions as University deems prudent or necessary. This list of provisions is not exhaustive or indicative of every provision that will be contained in the Agreement, but rather identifies particular terms and conditions of which the vendor should be aware. In the event of a conflict between any provisions contained in any of the documents governing this transaction, the following shall be the order of precedence: Agreement; Invitation to Negotiate; Proposal.

#### 6.2 Actions of Successful Vendor

The University is under no obligation whatsoever to be bound by the actions of any Successful Vendor with respect to third parties. The Successful Vendor is not a division or agent of the University.

#### 6.3 Advertising

The Successful Vendor shall not advertise or publish information concerning the Agreement without prior written consent of the University. The University shall not unreasonably withhold permission.

#### 6.4 Americans with Disabilities Act

The Successful Vendor shall comply with all applicable provisions of the Americans with Disabilities Act and applicable federal regulations under the act.

#### 6.5 Certification

By signature on the "Proposal Certification" form included under Section 7.0, the Vendor certifies that the submission on the proposal did not involve collusion or other anti-competitive practices. The Vendor has not given, offered to give, nor intends to give at any time hereafter any economic opportunity, future employment, gift, loan, gratuity, special discount, trip, favor, or service to a public servant in connection with the submitted proposal. In addition, Vendor certifies whether or not an employee of the University has, or whose relative has, a substantial interest in any Agreement subsequent to this ITN. Vendor also certifies their status with regard to debarment, or suspension by any federal entity.

Failure to provide a valid signature affirming the stipulations required by this clause shall result in the rejection of the submitted proposal and, if applicable, any resulting Agreement. Signing the certification with a false statement shall void the proposal and, if applicable, any resulting Agreement. Any resulting Agreement may be subject to legal remedies provided by law. Vendor agrees to promote and offer to the University only those services and/or materials as stated in and allowed for under resulting Agreement(s).

### 6.6 Conflict of Interest

The award hereunder is subject to the provisions of Chapter 112, F.S. Vendors must disclose with the proposal the name of any officer, director, or agent who is also an employee of the University of Florida. Further, all Vendors must disclose the name of any University employee who owns, directly or indirectly, an interest of five percent (5%) or more in the Vendor's firm or any of its branches.

### 6.7 Discrimination

An entity or affiliate who has been placed on the discriminatory list may not submit a bid on a contract to provide goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit proposals on leases of real property to a public entity, may not award or perform work as a Vendor, supplier, subcontractor or consultant under contract with any public entity, and may not transact business with any public entity.

#### 6.7 Drug Free Workplace

The Successful Vendor agrees that in the performance of the Agreement, neither the Successful Vendor nor any employee of the Successful Vendor shall engage in the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance in conducting any activity covered by the Agreement. The University reserves the right to request a copy of the Successful Vendor's Drug Free Workplace Policy. The Successful Vendor further agrees to insert a provision similar to this statement in all subcontracts for services required.

### 6.8 Equal Opportunity Statement

The State Universities have established equal opportunity practices which conform to both the spirit and the letter of all laws against discrimination and prohibit discrimination based on race, creed, color, sex, age, national origin, marital status or religion. To be considered for inclusion as a supplier under this agreement, the vendor commits to the following:

- A. The provisions of Executive Order 11246, September 24, 1966, and the rules, regulations, and relevant orders of the Secretary of Labor are applicable to each order placed against this agreement regardless of value.
- B. If the vendor expects to receive \$10,000 in orders during the first 12 months of this agreement, a complete certificate of non-segregated facilities shall be attached to the proposal response.

C.If the vendor expects to receive \$50,000 in orders during the first 12 months of this agreement and employs more than 50 people, standard form 100 (EEOO-1) must be filed prior to March 1 of each year.

D. If the vendor expects to receive \$50,000 in orders during the first 12 months and employs more than 50 people, a written program for affirmative action compliance must be maintained by the vendor, subject to review upon request by the user agencies of this agreement.

If you have already complied with the above, please indicate\_\_\_\_\_

### 6.9 Federal, State, and Local Laws and Regulations

Successful Vendor is solely responsible for complying with all laws, ordinances, and regulations including but not limited to, those relating to taxes, licenses and permits, as they may apply to any matter under this ITN. The Successful Vendor must demonstrate that they are duly licensed by applicable regulatory bodies during the performance of the Agreement. Prior to the commencement of Agreement, the Successful Vendor shall be prepared to provide evidence of such licensing as may be requested by the University. Successful Vendor shall, at no expense to the University, procure and keep in force during the entire period of the Agreement all such permits and licenses.

### 6.10 Inspection, Audit and Reporting

All books, accounts, reports, files and other records relating to the Agreement shall be subject at all reasonable times to inspection and audit by the University of Florida.

Reporting Requirements: The successful vendor(s) agrees to furnish to the University a summary of total sales made under this contract as requested.

All reporting will be in Electronic Format provided to Procurement Services either prior to business review meetings or as requested..

Reports will include, but are not limited to the following.

Detailed invoice level purchase history usage with at minimum the following fields:

- · PO Number
- Quote Number
- · Invoice Number
- · Invoice Date
- Delivery Date
- · List Price

#### **6.11 Liens**

Each Successful Vendor shall keep the University free and clear from all liens asserted by any person or entity for any reason arising out of the furnishing of services or materials by or to the Successful Vendor.

#### 6.12 Modifications

The Agreement can be modified or rescinded only by a writing signed by both parties or their duly authorized agents.

#### 6.13 Non-Discrimination

The parties agree to be bound by applicable state and federal rules governing Equal Employment Opportunity and Non-Discrimination.

#### 6.14 Ownership of Documents

All drawings, maps, sketches, documents, records, programs, data base, reports and other data developed or purchased, under this Agreement for or at the University's expense shall be and remain the University's property, without restriction, reservation or qualifications. The Successful Vendor may retain copies necessary for recordkeeping documentation and all such other business purposes related to the Agreement. All materials and products produced shall be provided to the University upon expiration of this Agreement.

#### 6.15 Sales and Use Tax

The Successful Vendor agrees to comply with and to require all of his subcontractors to comply with all the provisions of applicable law. The Successful Vendor further agrees to indemnify and hold harmless the University from any and all claims and demands made against it by virtue of the failure of the Successful Vendor or any subcontractors to comply with the provisions of any and all said laws. The University is exempt from state sales and use tax.

#### 6.16 Sexual Harassment

Federal law and the policies of the University prohibit sexual harassment of University employees or students. Sexual harassment includes any unwelcome sexual advance toward a University employee or student, any request for a sexual favor from a University employee or student, or any other verbal or physical conduct of a sexual nature that is so pervasive as to create a hostile or offensive working environment for University employees, or a hostile or an offensive academic environment for University students. University vendors, subcontractors and suppliers for this project are required to exercise control over their employees so as to prohibit acts of sexual harassment of University employees and students. The employer of any person who the University, in its reasonable judgment, determines has committed an act of sexual harassment agrees as a term and condition of the Agreement to cause such person to be removed from the project site and from University premises and to take such other action as may be reasonably necessary to cause the sexual harassment to cease.

#### 6.17 Small Business Program

University is an equal opportunity institution and, as such, encourages the use of small businesses, including women and minority-owned small businesses in the provision of goods and services. Small businesses should have a fair and equal opportunity to compete for dollars spent by the University. Competition ensures that prices are competitive and a broad vendor base is available. **Vendors are encouraged to get certified by the State of Florida** if they are minority-owned, woman-owned or

#### veteran-owned:

http://www.dms.myflorida.com/agency\_administration/office\_of\_supplier\_diversity\_osd/get\_certified

Vendor shall use good faith efforts to ensure opportunities are available to small businesses, including women and minority-owned businesses. For questions about the University's Small Business Program contact Director of Small Business and Vendor Diversity, 352-392-0380, <a href="https://sbvdr.admin.ufl.edu/">https://sbvdr.admin.ufl.edu/</a>

#### 6.18 Tobacco Free Campus Policy

The University of Florida campus is a tobacco-free campus. This policy was effective as of July 1, 2010. The use of cigarettes or other tobacco products in UF buildings, parking lots, or in vehicles in these areas is prohibited. The successful vendor is expected to respect this smoke free policy and fully comply with it.

### 6.19 Sustainability Preferences

The University's Procurement directives support the purchase of products that will minimize any negative environmental impacts of our work. In order to facilitate a healthy market in sustainable products, all parties involved in the procurement and utilization of materials must engage in both waste recycling and the initial purchase of products containing recycled content. It is in the interest of public health, safety and welfare and the conservation of energy and natural resources to use and promote environmentally responsible products, as well as energy efficient fixtures, appliances and mechanical equipment used in new construction and retrofit of University facilities.

### 6.20 Assignment-Delegation

No right or interest in the Agreement shall be assigned or delegation of any obligation made by Successful Vendor without written permission of the University. Any attempted assignment or delegation by Successful Vendor shall be wholly void and totally ineffective for all purposes unless made in conformity with this paragraph.

### 6.21 Assignment of Anti-Trust Overcharge Claims

The parties recognize that in actual economic practice overcharges resulting from anti-trust violations are in fact borne by the ultimate purchaser; therefore, Successful Vendor hereby assigns to the University any and all claims for such overcharges.

# 6.22 Date for Reckoning Prompt-Payment Discount

For purposes of determining whether a prompt-payment discount, if applicable, may be taken by the University, the starting date of such reckoning period shall be the later of the date of a properly executed invoice or the date of completion of service and/or delivery of product.

#### 6.23 Force Majeure

In the event compliance with any obligation under this Agreement is impractical or impossible due to any Event of Force Majeure, then the time for performance of such obligation shall be extended for a period equivalent to the duration of the Event of Force Majeure. The provisions of this section shall not operate to excuse either party's inability to perform its obligations hereunder because of inadequate finances. "Event of Force Majeure:" means any strike, lockout, labor dispute, embargo, flood, earthquake, storm, dust storm, lightning, fire, epidemic, act of God, war, national emergency, civil disturbance or disobedience, riot, sabotage, terrorism, restraint by governmental order or any other occurrence beyond the reasonable control of the party in question.

#### 6.24 Indemnification/Hold Harmless; Liability

The Successful Vendor shall indemnify, defend, and hold harmless the University of Florida Board of Trustees, the University of Florida, the State of Florida and the Florida Board of Governors, and their respective officers, agents, and employees, against and from any and all claims, demands, suits, actions, proceedings, loss, cost, and damages of every kind and description, including attorneys' fees and/or litigation expenses, which may be brought or made against or incurred on account of loss of or damage to any property or for injuries to or death of any person, caused by, arising out of, or contributed to, in whole or in part, by reasons of any act, omission, professional error, fault, mistake, or negligence of Successful Vendor, its employees, agents, representatives, or subcontractors, their employees, agents, or representatives in connection with or incident to the performance of the Agreement. Successful Vendor's obligation under this provision shall not extend to any liability caused by the sole negligence of the University Of Florida Board Of Trustees, University, or its officers, agents, and employees. Such indemnification shall specifically include infringement claims made against any and all intellectual property supplied by Successful Vendor and third party infringement under the Agreement.

The University, as a public entity, is protected by sovereign immunity from tort liability, subject to a limited statutory waiver. The University will not agree to (i) indemnify or hold harmless any vendor; (ii) be liable for vendor's attorneys' fees under any circumstances; or (iii) binding arbitration. The Agreement shall not be construed or interpreted as (i) denying to either party any remedy or defense available to such party under the laws of the State of Florida; (ii) the consent of University or the State of Florida or their agents and agencies to be sued; or (iii) a waiver of either University's or the State of Florida's sovereign immunity beyond the limited waiver provided in section 768.28, Florida Statutes.

#### 6.25 Insurance Requirements

The Successful Vendor shall purchase from and maintain with a company or companies, lawfully authorized to do business in Florida and acceptable to the University, such insurance as will protect the Successful Vendor from claims arising out of or resulting from the Successful Vendor's operations under the Agreement and for which the Successful Vendor may be legally liable, whether such operations be by the Successful Vendor or by their subcontractors or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. All insurance policies shall be issued and countersigned by representatives of such companies duly authorized for the State of Florida and shall be written on ISO standard forms or their equivalents. The Successful Vendor shall file with the University Certificates of Insurance prior to the commencement of this Agreement and shall file Certificates of Insurance evidencing the renewal of such policies at least thirty (30) days prior to the date that each applicable insurance policy is scheduled to expire. *Please note that the University of Florida must be named "additional insured" on automobile and general liability policies*.

<u>General Liability Insurance</u> – The Successful Vendor shall provide the ISO Commercial General Liability policy for general liability coverage's for limits of not less than of \$1,000,000 per occurrence. Coverage shall be maintained without interruption from date of commencement of work until date of final payment.

<u>Automobile Liability</u> - The Successful Vendor shall secure and maintain, during the life of this Agreement, Automobile Liability insurance on all vehicles against bodily injury and property damage in at least the amount of \$100,000.00 per person, \$500,000.00 per occurrence.

<u>Worker's Compensation</u> - The Successful Vendor shall secure and maintain for the life of this Agreement, valid Worker's Compensation Insurance as required by Chapter 440, Florida Statutes (if applicable.)

### 6.27 Protection of Property

The Successful Vendor shall at all times guard against damage or loss to the property of the University or of others or vendors and shall be held responsible for replacing or repairing any such loss or damage. The University may withhold payment or make such deductions as deemed necessary to insure reimbursement or replacement for loss or damage to property through negligence of the Successful Vendor or their agents. The Successful Vendor shall provide all barricades and take all necessary precautions to protect buildings and personnel.

### Intellectual Property

- A. All works that are created pursuant to this contract ("Works") are works made for hire, and all rights and privileges attendant to the Works belong exclusively to the University. If a court of competent jurisdiction determines that any Work does not constitute a work made for hire, the Contractor hereby assigns to the University for no additional consideration all rights and privileges the Contractor has in the works, including all intellectual property rights, specifically those under copyright law.
- B. Paragraph A does not apply to Works that are not created through performance under this Contract ("Pre-existing works"). With respect to Pre-existing works used by the Contractor in performance of this Contract, the Contractor shall obtain for the University at no additional charge a license to use Pre-existing works for the uses intended under this Contract, including the right to make derivative works. Paragraph A does apply, however, to any Works that are derivative of Pre-existing works.
- C. The Contractor warrants that it has full power and authority to transfer the rights granted by this Contract to the University and that use of the works by the University does not constitute an infringement or other violation of any copyright, trade secret, trademark, patent, non-disclosure, or other rights of any third party.
- D. Title and all rights and privileges to all graphics and material provided to the Contractor by the University in connection with this Contract remain the exclusive property of the University of Florida. The Contractor does not receive any title, rights, or privileges in those graphics or materials. The University grants to the Contractor a limited license in those graphics or materials only for the purpose of carrying out the Contractor's obligations under this Contract.

#### 6.28 Labor Disputes

Successful Vendor shall give prompt notice to the University of any actual or potential labor dispute which delays or may delay performance of the Agreement.

### 6.29 Laws and Regulations

Successful Vendors are solely responsible for keeping themselves fully informed of and faithfully observing all laws, ordinances, and regulations and shall protect and indemnify the University, its officers and agents against any claims of liability arising from or based on any violation thereof.

### 6.30 No Replacement of Defective Tender

Every tender of goods must fully comply with all provisions of the Agreement as to time of delivery, quantity, and the like. If a tender is made which does not fully conform, this shall constitute a breach and Successful Vendor shall not have the right to substitute a conforming tender.

### 6.31 No Waiver of Right by the University

No waiver by University of any breach of the provisions of the Agreement by the Successful Vendor shall in any way be construed to be a waiver of any future breach or bar the University's right to insist on strict performance of the provisions of the Agreement.

### 6.32 Notice to Vendors of Asbestos-Containing Materials in University Buildings

Asbestos containing materials (ACM) can be found in almost any building in the United States more than 10 years old. The University of Florida is no exception. The types of asbestos most commonly found are pipe and boiler insulation, fireproofing, hard panels known as "Transite", floor tile, and spray or trowel-applied ceiling finishes. ACM is generally not hazardous if left undisturbed.

The University has implemented an Asbestos Program to assure safe management and removal of ACM. Vendors, consultants, and other's providing service to the University may encounter ACM and must, therefore, comply with the following instructions:

- A. Avoid disturbing suspected ACM. Exercise caution and watch for possible ACM.
- B. If it is necessary to disturb ACM, first notify the appropriate Division Asbestos Representative listed in this notice, or the University of Florida Asbestos Coordinator, before proceeding with your work. You shall take whatever precautions are necessary to protect humans' health and the environment, and comply with all applicable Federal, State, and Local laws pertaining to asbestos.
- C. If you require additional information on possible locations of ACM in a particular building, contact the Asbestos Representative from the Division for which you are working.

<u>Division</u>	Asbestos Representative	<u>Telephone</u>
Facilities Services Health Center Housing Reitz Union IFAS	Assoc. Dir. Facilities Services Asst. Dir. Health Ctr Facilities Services Housing Maintenance Superintendent Maintenance Superintendent Engineer	(352) 392-7793 (352) 392-4417 (352) 392-2161 (352) 392-1614 (352) 392-6488
11 / 10	E.19.1001	(002) 002 0400

#### 6.33 Parking and Identification Badges.

The Successful Vendor shall obtain all parking permits and/or decals that may be required while performing project work on University premises. The Successful Vendor should review Contractor and Vendor Parking information from Transportation and Parking Services located at the following link: <a href="http://www.parking.ufl.edu/pages/contractorvendordecal.asp">http://www.parking.ufl.edu/pages/contractorvendordecal.asp</a>

### 6.34 Payment Terms

The University's obligation is payable only and solely from funds appropriated for the purpose of the Agreement. Unless otherwise stated herein, the payment terms for the Agreement are Net 30 days. VENDOR OMBUDSMAN: The University's vendor ombudsman whose duties include acting as an advocate for vendors may be experiencing problems in obtaining payment(s) from the University may be contacted at 352-392-1241.

### 6.35 Price Adjustment

Price changes will normally only be considered at the end of one Agreement period and the beginning of another. Price change requests shall be in writing, submitted at least sixty (60) days prior to the end of the current Agreement period, and shall be supported by written evidence of increased costs to the

Successful Vendor. The University will not approve unsupported price increases that will merely increase the gross profitability of the Successful Vendor at the expense of the University. Price change requests shall be a factor in the Agreement extension review process. The University shall, in its sole opinion, determine whether the requested price increase or an alternate option is in the best interest of the University.

### 6.36 Prior Course of Dealings

No trade usage, prior course of dealings, or course of performance under other agreements shall be a part of any agreement resulting from this ITN; nor shall such trade usage, prior course of dealing, or course of performance be used in the interpretation or construction of such resulting agreement.

### 6.37 Intentionally Blank

N/A

#### 6.38 Public Entity Crime

A person or affiliate who has been placed on the convicted list by the Department of Management Services, State of Florida, may not submit a proposal on a contract to provide any goods or services, including construction, repairs, or leases and may not be awarded or perform work as a Vendor, supplier, subcontractor, or consultant for the University of Florida for a period of 36 months from the date of being placed on the convicted list, a "person" or "affiliate" includes any natural person or any entity, including predecessor or successor entities or any entity under the control of any natural person who is active in its management and who has been convicted of a public entity crime (Rule 6C1-3.020 FAC).

#### 6.39 Public Records

All proposal information submitted and opened becomes subject to the Public Records Law set forth in Chapter 119 F.S.

Any resulting Agreement may be unilaterally canceled for refusal by the vendor to allow public access to all documents, papers, letters, or other materials made or received by the Successful Vendor in conjunction with the Agreement and subject to the provisions of Chapter 119. F.S.

#### 6.40 Referencing of Orders

For each order issued against an agreement resulting hereunder, the University intends in good faith to reference this ITN for pricing, terms and conditions, delivery location, and other particulars. However, in the event the University fails to do so, the University's right to such terms and conditions, and particulars shall not be affected, and no liability of any kind or amount shall accrue to the University.

# 6.41 Remedies and Applicable Law

The Agreement shall be governed by and construed in accordance with the laws of the State of Florida (without regard to principles of conflict of laws) and the rules and regulations of the Florida Board of Governors and the University. University and Successful Vendor shall have available all remedies afforded each by said law. The venue in any action or litigation commenced to enforce the Agreement shall lie in a court of competent jurisdiction located in Gainesville, Florida.

### 6.42 Right of Inspection

University shall have the right to inspect the goods at delivery before accepting them.

### 6.43 Right of Offset

The University shall be entitled to offset against any sums due the Successful Vendor, any expenses or costs incurred by the University, or damages assessed by the University concerning the Successful Vendor's non-conforming performance or failure to perform the Agreement, or any other debt owing the University, including expenses, costs and damages described in the termination provisions contained herein.

### 6.44 Shipment Under Reservation Prohibited

Successful Vendor is not authorized to ship the goods under reservation and no tender of a bill of lading will operate as a tender of the goods.

#### 6.45 Specifications: Brand Name or Acceptable Alternate

Where in these specifications reference is made to materials, trade names, catalog numbers or articles of certain manufacture, it is done for the sole purpose of establishing a basis of a comparable standard of quality, performance, characteristics desired and is not intended to limit or restrict competition. It shall be understood that such method of specification description is not intended to exclude other processes, similar designs, or kinds of materials, but is intended solely as a means of establishing a standard of comparison to be utilized for solicitation evaluation purposes. Other material or product may be used, if in the sole opinion of the University, they are equal in durability, quality and of a design in harmony with the intent of these specifications. Such other material or product which is substantially equivalent to those specific brand(s) specified shall qualify for solicitation evaluation and award consideration by the University. The University reserves the right to reject any substitute material or product which, in its opinion, does not meet the standard of quality established by reference in these specifications and is not considered an acceptable alternate for the intended use and purpose. The burden of proof as to meeting the requirements of these specifications shall be the responsibility of the submitting vendor. Such proposer(s) who is offering any material or product other than the item(s) specified herein must submit with their solicitation response catalog cuts and detailed specifications which will completely describe the item(s) on which they are offering for an acceptable alternate determination by the University. Where the proposer proposes to substitute a material or product which is not known to the University, he/she shall be prepared to submit samples on request for the University's inspection and evaluation. The cost of transportation, both ways, of such samples shall be borne by the submitting proposer.

# 6.46 Successful Vendor to Package Goods

Successful Vendor will package goods in accordance with good commercial practice. Each shipping container shall be clearly and permanently marked as follows: (a) Successful Vendor's name and address; (b) Consignee's name, address and purchase order number; (c) Container number and total number of containers, e.g. box 1 of 4 boxes and (d) the number of the container bearing the packing slip. Successful Vendor shall bear cost of packaging unless otherwise provided.

#### 6.47 Termination

#### 6.47.1 Convenience

The University reserves the right to terminate the Agreement in whole or part at any time when in the best interests of the University without penalty or cause. Upon receipt of the written notice, the Successful Vendor shall immediately stop all work as directed in the notice, notify all subcontractors of the effective date of the termination and minimize all further costs to the University. In the event of termination under this provision, all documents, data and reports prepared by the Successful Vendor under the Agreement shall become the property of and delivered to the University. The Successful Vendor shall be entitled to receive just and equitable compensation for work in progress,

work completed and materials accepted before the effective date of termination. Such compensation shall be the Successful Vendor's sole remedy against the University in the event of termination under this provision.

#### 6.47.2 **Default**

The University reserves the right to terminate the Agreement in whole or in part due to the failure of the Successful Vendor to comply with any term or condition of the Agreement, to acquire and maintain all required insurance policies, bonds, licenses and permits, or to make satisfactory progress in performing the Agreement. The University shall provide written notice of the termination and the reasons for it to the Successful Vendor. Upon termination under this provision, all goods, materials, documents, data and reports prepared by the Successful Vendor under the Agreement shall become the property of and be delivered to the University on demand. The University may, upon termination of the Agreement, procure, on terms and in the manner that it deems appropriate, materials, or services to replace those under the Agreement. The Successful Vendor shall be liable to the University for any excess costs incurred by the University in re-procuring the materials or services.

#### 6.47.3 Gratuities

The University may, by written notice to the Successful Vendor, cancel the Agreement if it is discovered by the University that gratuities, in the form of entertainment, gifts or other, were offered or given by the Successful Vendor, or any agent or representative of the Successful Vendor, to any officer or employee of the University with a view toward securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such Agreement. In the event the Agreement is canceled by the University pursuant to this provision, University shall be entitled, in addition to any other rights and remedies, to recover or withhold the amount of the cost incurred by Successful Vendor in providing such gratuities.

#### 6.47.4 Insolvency

The University shall have the right to terminate the Agreement at any time in the event Successful Vendor files a petition in bankruptcy; or is adjudicated bankrupt; or if a petition in bankruptcy is filed against Successful Vendor and not discharged within thirty (30) days; of if Successful Vendor becomes insolvent or makes an assignment for the benefit of its creditors or an arrangement pursuant to any bankruptcy law; of if a receiver is appointed for Successful Vendor or its business.

#### 6.47.5 Lack of Funds

The State of Florida's and UF's performance and obligation to pay under this Agreement is contingent upon an annual appropriation by the Florida State Legislature. The Agreement may be canceled without further obligation on the part of the University of Florida in the event that sufficient appropriated funding is unavailable to assure full performance of the terms. The Successful Vendor shall be notified in writing of such non-appropriation as soon as reasonably possible. No penalty shall accrue to the University in the event this cancellation provision is exercised. This cancellation provision shall not be construed so as to permit the University to terminate the Agreement in order to acquire similar equipment, material, supplies or services from another party.

### 6.47.6 Stop Work Order

The University may at any time, by written order to the Successful vendor, require the Successful Vendor to stop all or any part of the work called for by the Agreement for a period of ninety (90) days after the order is delivered to the Successful Vendor, and for any further period to which the parties may agree. The order shall be specifically identified as a Stop Work Order issued under this provision. Upon receipt of the order, the Successful Vendor shall immediately comply with its terms

and take all reasonable steps to minimize the incidence of costs allocable to the work covered by the order during the period of work stoppage. If a Stop Work Order issued under this provision is canceled or the period of the order or any extension expires, the Successful Vendor shall resume work. The University shall make an equitable adjustment in the delivery schedule or Agreement price, or both, and the Agreement shall be amended in writing accordingly.

#### 6.47.7 Suspension or Debarment

The University may by written notice to the Successful Vendor immediately terminate the Agreement if the University determines that the Successful Vendor has been debarred, suspended or otherwise lawfully prohibited from participating in any public procurement activity, including but limited to, being disapproved as a subcontractor Vendor of any public procurement unit or other governmental body.

### 6.47.8 Continuation of Performance Through Termination

The Successful Vendor shall continue to perform, in accordance with the requirements of Agreement, up to the date of termination, as directed in the termination notice.

#### 6.48 Title and Risk of Loss

The title and risk of loss of the goods and equipment shall not pass to University until University actually receives the goods and equipment at the point or points of delivery.

#### 6.49 Warranties

In addition to any implied warranties, Successful Vendor warrants that the goods furnished will conform to the specifications, drawings, and descriptions listed herein, and to the sample or samples if any, furnished by the Successful Vendor. In the event of a conflict between the specifications, drawings, and descriptions, the specifications shall govern.

### 6.50 Payment Card Industry Data Security Standard.

For e-commerce business and/or credit card transactions, Proposer agrees to be bound by the requirements and terms of the Rules of all applicable Card Associations, as amended from time to time, and be solely responsible for security and maintaining confidentiality of Card transactions processed by means of electronic commerce up to the point of receipt of such transactions by Bank.

Proposer is required to be in compliance with the requisites of the SAS 70 and/or Payment card Industry Data Security Standard and provide written attestation of compliance annually.

### 6.51 Payment and Invoice Information

All invoices will need to contain a **UF purchase order number**. All invoices for payment should be submitted to the University of Florida via:

Email: email a .pdf or .tif file to <u>ufl@invoices.corcentric.com</u>. The file must be attached to the email and not embedded within the email. There can be multiple files per email but each file should only contain one invoice.

#### 7.0 Certifications and Forms

### 7.1 Certification of Proposal

<u>Explanation</u>: This certification attests to the vendor's awareness of and agreement to the content of this ITN and all accompanying provisions contained herein.

Action: Vendor is to ensure that the following certificate is duly completed and correctly executed by an authorized officer of your company.

This proposal is submitted in response to Invitation to Negotiate #ITN19KO-102 issued by the University of Florida. The undersigned, as a duly authorized officer, hereby certifies that

(Vendor Name)

agrees to be bound by the content of this proposal and agrees to comply with the terms, conditions and provisions of the referenced Invitation to Negotiate (ITN) and any addenda thereto in the event of an award. Exceptions are to be noted as stated in the ITN. The proposal shall remain in effect for a period of ninety (90) calendar days as of the Due Date for responses to the ITN.

The undersigned certifies that to the best of his/her knowledge: (check one pf the below and provide information if required)

\_\_\_\_There is no trustee or employee of the University of Florida who has or whose Relative has an Interest in the entity or entities making this proposal or who is a natural person making this proposal.

\_\_\_\_There are trustee(s) and/or employee(s) of the University of Florida who have, and/or whose Relative(s) have, an Interest in the entity or entities making this proposal or who is a natural person making this proposal. Describe the nature of the interest held by each trustee, employee, or Relative of the trustee or employee (for example, grandson of Employee X owns the company or spouse of Employee Y is a director of the company).

"Interest" for purposes of this disclosure includes the following: director, trustee, officer, or employee of an entity, any contract with an entity (including consulting), or any partner, proprietor, stock, equity, or other ownership interest in an entity.

"Relative" for the purpose of this disclosure is an individual who is related to the trustee or employee as father, mother, son, daughter, brother, sister, uncle, aunt, first cousin, nephew, niece, husband, wife, father-in-law, mother-in-law, son-in-law, daughter-in-law, brother-in-law, sister-in-law, stepfather, stepmother, stepson, stepdaughter, stepbrother, stepsister, half brother, half sister, grandparent, great grandparent, grandchild, great grandchild, step grandparent, step grandchild, step grandchild, person who is engaged to be married to the trustee or employee or who otherwise holds himself or herself out as or is generally known as the person whom the trustee or employee intends to marry or with whom the trustee or employee intends to form a household, or any other natural person having the same legal residence as the trustee or employee"

The undersigned further certifies that their firm (check one) \_\_\_IS or \_\_\_IS NOT currently debarred, suspended, or proposed for debarment by any federal entity. The undersigned agrees to notify the University of any change in this status, should one occur, until such time as an award has been made under this procurement action.

Person(s) authorized to negotiate in good faith on behalf of this firm for purposes of this Invitation to Negotiate are:

Name:	Title:
	Date:
Email:	
Name:	Title:
Signature:	Date:
Signature of Authorized Officer	Date:
Printed Name	Email:

ITN #: ITN19KO-102 Closing Date: 8/3/2018 Closing Time: 3:00 PM ET

Attestation of Principal Place of Business University of Florida ITN19KO-102, Water Reclamation Facility Headworks Mechanical Screen and Related Services		
Name of Bidder:	Business Name:	
Identify the State in which the Bidder has its principal place	e of business:	
Bidder's Signature:	Title:	
information as indicated above and return this form wi principal place of business is outside of the State of F	s above is located within the State of Florida, provide the ith your bid response. No further action is required. <u>IF</u> your Florida, the following must be completed by an attorney and may be considered as non-responsive to the terms of this	
OPINION OF OUT-OF-STATE BIDDER'S ATTORNEY O (To be completed by the Attorney for an Out-of-State B		
state must accompany any written bid, proposal, or relicensed to practice law in that foreign state, as to the	"a vendor whose principal place of business is outside this eply documents with a written opinion of an attorney at law preferences, if any or none, granted by the law of that sate ntities whose principal places of business are in that foreign also § 287.084(1), Florida Statutes.	
LEGAL OPINION ABOUT STATE BIDDING PREFEREN	CES (Please Select One)	
	ne State of and it is my legal opinion that letting of any or all public contracts to business entities whose	
opinion that the laws of that state grant the following pre	in the State of and it is my legal ference(s) in the letting of any or all public contracts to business State: [Please describe applicable preference(s) and identify	
LEGAL OPINION ABOUT POLICITAL SUBDIVISION BIL	DDING PREFERENCES (Please Select One)	
	the political subdivision of and it is n do not grant a preference in the letting of any or all public siness are in that political subdivision.	
opinion that the laws of that political subdivision grant t	the political subdivision of and it is my legal he following preferences(s) in the letting of any or all public iness are in that political subdivision: [Please describe applicable preference(s)]:	
Signature of out-of-state Bidder's attorney:		
Printed name of out-of-state Bidder's attorney:		
Address of out-of-state Bidder's attorney:		
Telephone number of out-of-state Bidder's attorney: (	)	
Email address of out-of-state Bidder's attorney:		
Attorney's states of bar admission:		

#### SECTION 11331

### SCREENINGS WASHER COMPACTOR

### PART 1 - GENERAL

### 1.01 SCOPE OF WORK

- A. Furnish one (1) continuous screenings washer compactor unit with all controls and appurtenances necessary to provide a complete and operational system as shown on the attached drawings (Attachment B) and specified herein. The equipment shall be of the latest design and shall be fabricated of materials and in a fashion that will fully perform the functions described herein. The screenings washer shall reduce the putrescible organic content of the screenings and shall dewater, compact, and transport the screenings to a dumpster. Controls for the screenings washer shall be incorporated in the control panel for the mechanical screen specified in Section 11332.
- B. The screenings washer shall be manufactured with AISI 316L stainless steel and shall be fully automatic. All components of the screenings system including the screen and the screenings washer compactor shall be furnished by one manufacturer who shall be responsible for the design, coordination and proper operation of the entire system.
- C. The equipment shall be installed as shown on the plans, as recommended by the manufacturer, and in compliance with all OSHA, local, State, and federal codes and regulations. The system shall be furnished with all necessary instrumentation required to provide all communications and control functions necessary for the proper operation of the equipment.
- D. These Specifications are intended to give a general description of the system required, but do not cover all details; which will vary in accordance with the requirements of the equipment as offered. They are, however, intended to cover the furnishing, shop testing, delivery and complete installation and field testing of all materials, equipment and appurtenances for the complete unit as herein specified, whether specifically mentioned in these Specifications or not. The scope of work includes providing a manufacturer's authorized representative to perform start up of the equipment, and to instruct the University's personnel in the care, operation and maintenance of all equipment provided under this section.

# 1.02 SUBMITTALS

A. Submittal shall be as specified in Section 4.0 of the ITN document and as stated below.

11331-1 SCREENINGS WASHER COMPACTOR

# B. Submit the following:

- 1. Manufacturer's Certificate of Compliance certifying compliance with the referenced Specification and standard.
- 2. Certified copies of reports of factory tests specified in this Section and required by the referenced standards.
- 3. Product Data: Include the following:
  - a. Descriptive literature, brochures, and/or catalogs of the equipment.
  - b. Motor characteristics and performance information.
  - c. Gear reducer data including service factor, efficiency, torque rating, and materials.
- 4. Parts and materials list including a list of recommended spare parts.
- 5. Shop drawings with performance data and physical characteristics and additional information as described below:
  - a. Manufacturer's installation drawings.
  - b. Wiring and schematic diagrams.
  - c. Operations and maintenance manual.
  - d. Installation reference list.
  - e. Equipment weights and lifting points.
  - f. Recommendations for short and long term storage.
  - g. A copy of the manufacturer's warranty
- C. Operation and Maintenance Manuals: At minimum, the manuals shall include equipment descriptions, operating instructions, drawings, exploded views, parts listings, troubleshooting techniques, a recommended maintenance schedule, and the recommended lubricants.
- D. Submittal must include all drawings applicable to the equipment specified in this section.

#### 1.03 REFERENCE STANDARDS

- A. Codes, Specifications and standards referred by number or title shall form a part of this Specification to the extent required by the references thereto. Latest revisions as of the date of bid opening shall apply, unless otherwise shown or specified.
  - 1. American Iron and Steel Institute (AISI).
  - 2. American National Standards Institute (ANSI).
  - 3. American Society for Testing and Materials (ASTM).
  - 4. American Bearing Manufacturers Association (ABMA).

- 5. American Gear Manufacturers Association (AGMA).
- 6 National Electrical Manufacturers Association (NEMA).
- 7. National Fire Protection Association (NFPA).
- 8. Underwriters Laboratory (UL).
- 9 Anti-friction Bearing Manufacturers Association (AFBMA)

### 1.04 QUALITY ASSURANCE

A. The Screenings Washer shall be a Manufacturer's standard product and only modified as necessary to comply with the drawings, specifications, and specified service conditions. All equipment covered by these specifications shall be manufactured and provided by one manufacturer, and shall be complete including motors and all appurtenances.

# B. Certificate of Compliance

- 1. The manufacturer shall certify in writing that the Screen to be supplied shall be manufactured in strict compliance with the Contract Specifications and that all quality and quality control standards are met. The manufacturer shall submit the written certification along with the Shop Drawing submittal.
- C. The manufacturer shall completely shop assemble, test and adjust the screen prior to shipment. The University shall be notified 30 days in advance of the expected assembly date and again two weeks prior to when the assembled components are available for inspection prior to shipment.

### 1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. The manufacturer shall be responsible for the delivery, proper storage and handling of products
- B. The manufacturer shall be responsible for promptly removing damaged products from the job site and replacing damaged products with undamaged products.
- C. Thoroughly clean all equipment and subassemblies of all water, sand, grit, weld splatter, grease, oil and other foreign materials before preparation for shipment. Protect all machined surfaces against physical damage and exposure to the elements during shipment, handling, storage and installation.
- D. Pack equipment to provide ample protection from damage during shipment, handling and storage. Cap and seal all openings.

### 1.06 MANUFACTURER QUALIFICATIONS

- A. The screen and the screenings washer compactor and all associated and subordinate equipment shall be supplied by a single manufacturer in order to provide standardization for appearance, operation, maintenance, spare parts and manufacturer's service.
- B. The manufacturer shall be have been regularly engaged in the production of equipment for the specified use for a minimum of 10 years. The Contractor and the manufacturer shall have the responsibility for the proper functioning of the equipment as furnished.
- C. Subject to compliance with the requirements of the specification, the acceptable manufactures and products shall be the WAP 2 by Huber, Rotopac Type RPW Screw Washer Compactor by Velioa, the Whitetip Shark Washing Compactor by Hydro-Dyne Engineering or approved equal.

### 1.07 SUBSTITUTIONS

A. Submittals may include any proposed product substitutions. It will be at the University's sole discretion to approve or deny any proposed product substitutions.

# 1.08 WARRANTY

- A. The equipment manufacturer shall submit the standard warranty for the various components of the system. However, all equipment shall be warranted for a minimum period of one (1) year from the date of successful startup of the equipment.
- B. In order to assure the proper performance and compatibility of all equipment supplied within the intent of this Specification, all equipment shall be warranted by the same supplier.
- C. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail or show excessive wear during the warranty period, it shall be replaced at no expense to the University.

### 1.09 SPARE PARTS

- A. The following spare parts shall be provided by the manufacturer as applicable for the screen supplied:
  - 1. The complete lot of all of the respective manufacturers recommended spare parts listings for five (5) years of operation

- 2. 2 sets of screenings washer compactor bearings, bushings, wear plates, wear shoes, and sacrificial wear surface members/elements as appropriate
- 3. Six (6) Guide bars
- 2. One (1) Cleaning brush
- 3. One (1) Solenoid valve rebuild kit
- 4. 2 spares for each type fuse or electrical overload device used
- 5. 1 spare handheld device required for programming as applicable
- 6. One (1) Proximity switch
- 7. 2 complete brush assemblies
- B. Spare parts shall be packaged in containers suitable for long term storage and shall bear labels clearly designating the contents and the equipment for which they are intended.

# 1.10 SCREENINGS WASHER DESIGN CRITERIA

- A. The automatic screenings washer compactor shall be suitable for installation and operation by receiving screenings from a discharge chute that are generated by the mechanical screen described in Section 11332.
- B. The screenings washer compactor shall be capable of operating in coordination with the amount of incoming material generated by the mechanical screen specified in Section 11332.
- C. The screenings washer compactor shall be capable of processing 100% of the screenings generated by the mechanical screen.
- D. The screenings washer compactor shall be completely enclosed to control the emission of odors, equipped with a piped drain, and shall protect operators from contact with moving parts. All enclosures shall be readily and easily removable and covers shall have hinged sections as appropriate. The covers shall be fabricated from 14 gauge 316 SS.

## PART 2 - PRODUCTS

## 2.01 MATERIALS AND FINISHES GENERAL

### A. Materials

- 1. All stainless steel used for the fabrication of the equipment shall be AISI 316 conform to the following structural standards:
  - a. Plate and Sheet: ASTM A 167; ASTM A 240
  - b. Bar: ASTM A 276; ASTM A 479

c. Tube: ASTM A 312

## B. Exterior Surface Finishes

- 1. All surfaces shall be free of sharp edges, weld spatter and residue. All welds shall be ground smooth.
- 2. The equipment, after its fabrication, shall undergo a passivation (pickling) process to ensure maximum resistance to corrosion. All stainless steel components and structures shall be submersed in a chemical bath of nitric acid and hydrofluoric acid to remove any residues that may be present on the material as a result of forming, manufacture, or handling. After removal from the pickling bath, the equipment must be washed with a high-pressure wash of cold water to remove any remaining surface debris and promote the formation of an oxidized passive layer which is critical to the long life of the stainless steel. Submergence insures complete coverage. Spray on chemical treatments and glass bead blasting are specifically not acceptable due to their inability to provide complete and uniform corrosion protection.

# 2.02 SCREENINGS WASHER COMPACTOR EQUIPMENT

- A. Screenings Washer Compactor Body
  - 1. The screenings washer body shall be from 1/8" thick AISI 316 stainless steel. The 8-3/8" diameter screenings washer body shall include a nominal 35-3/8" x 9-3/4" or 24" x 12-5/8" trough opening for screenings deposit. A level mounting flange shall be provided around the trough for the transitional hopper that directs the screenings into the trough of the screenings washer. The hopper shall be fabricated from 1/8" or 3/32" thick stainless steel.
  - 2. The screenings washer compactor body shall house the shafted screw, and shall include one (1) ½" or 3/4" diameter wash water connections in the compaction zone, one (1) 3/8" or 3/4" diameter connection in the screenings trough, and shall include one (1) connection to the drain pan to flush any debris from the drainage pan.
  - 3. The screenings washer body shall include 3/16" diameter perforations spaced 13/32" center-to-center in a vertical alignment in the washing and compaction zones to drain the excess wash water and filtrate water pressed from the screenings to the drain pan.

11331-6 SCREENINGS WASHER COMPACTOR

4. The screenings washer body shall be equipped with not less than six (6) guide bars made of abrasion resistant carbon steel (CHT series 400) Hardox 400 Abrasion resistant plate. The guide bars shall be bolted from the outside of the tube for easy access and removal. The guide bars shall be at least. The guide bars shall be bolted from the outside of the tube for easy access and removal. The guide bars shall be at least 12-7/8" or 14-1/2" (370 mm) long, 1" wide and the thickness shall be not less than 1/4" (6 mm). Welded guide bars shall be not allowed.

## B. Shafted Screw

- 1. The shafted screw shall transport the screenings from the trough area (washing zone) into the compaction zone and shall force the compacted screenings out the discharge pipe. The shafted screw shall be fabricated from 3/16" thick AISI 316 stainless steel.
- 2. The screw flights shall have a minimum thickness of 3/16" to ½" in the trough area, a thickness of 13/32" in the perforated washing zone, and a thickness of 25/32" in the compression zone. The outside diameter of the screw shall be 8-1/16" and shall include a 6" flight pitch in the trough area and washing zone, and a 4-3/4" pitch in the compaction zone.
- Screw flights in the compaction zone shall be constructed of an abrasion resistant material. The last flight of the screw shall have hard metal seams welded around the external surface of the flight.
- A stainless steel backed brush with nylon bristles shall be attached to the shafted screw with set screws for the full length of the perforated washing zone

### C. Wash Water Manifold

- The screenings washer shall be equipped with a manifold to provide plant water to the different washing inlet locations. The screenings washer shall be provided with not less than two (2) separate connections for injecting wash water into the screenings and one (1) connection to the drain pan underneath the washer compactor body. The unit shall be designed to accept wash water from the facility's non-potable water system, which is sourced from final plant effluent.
- 2. Wash water connections shall be sized and positioned by the unit manufacturer. Maximum water consumption for the unit shall be 13 gallons per minute. The water pressure range required at the connection to the unit for proper unit operation shall be 30-75 psi.

11331-7 SCREENINGS WASHER COMPACTOR

3. The main wash water supply line to the washer compactor unit shall be installed by the Contractor as shown on the attached drawings (Attachment B). Sufficient quantities of normally-closed solenoid valves with maximum operating pressure of 140psi shall be furnished and installed. The solenoid valves shall be independently controlled by the PLC in the control panel. One solenoid valve shall supply wash water directed against the rotation of the screw flights in the inlet hopper and into the compaction zone of the washer compactor. The second solenoid valve shall direct wash water to the drain pan beneath the screenings washer body.

## D. Drain Pan

- 1. The drain pan shall collect the spent wash water and filtrate water squeezed from the screenings. The drain pan shall be fabricated from 1/8" thick stainless steel and shall connect to the screenings washer body with stainless steel clasps for easy removal.
- 2. The drain pan shall include one (1) 3/4" threaded inlet connection for wash water from the manifold to flush the trough for cleaning purposes. A 3-1/2" diameter drain connection shall be provided to discharge the drained water back into the channel on the downstream side of the screen.

# E. Screenings Discharge Pipe

1. The washer compactor discharge pipe shall be made of stainless steel and shall be connected to the screenings washer body by an 8" diameter flange. The diameter of the straight section of the discharge pipe shall increase in size to ease the transport of the screenings. The diameter of the discharge pipe straight section shall increase from 8-7/16" to 12". The bend fittings on the unit's discharge pipe shall have a radius that is three times (3x) larger than the pipe diameter.

# F. Gear Motor Drive

1. The drive unit shall be a gear motor rated for continuous duty and shall be selected to match the requirements of the equipment provided. The drive motor shall be a 5 HP, totally enclosed fan cooled (TEFC) unit designed for application in a Class 1, Division 2 area. The motor shall be a constant speed unit rotating at 1760 rpm, and shall be powered by 230/460 VAC, 60 Hz, 3 phase power.

11331-8 SCREENINGS WASHER COMPACTOR

- 2. The drive unit shall be direct coupled to the unit drive shaft through the gear box. The gear box housing shall be constructed from ASTM A-48, Class 30 cast iron.
- Nominal and minimum motor efficiencies shall comply with NEMA MG 1. The gear box shall be designed for AGMA Class II, 24 hour duty.
- 4. The screenings washer compactor shall be equipped with electronic overload protection by true-power monitor to stop the screen and initiate an alarm in the event of overload.

## 2.03 CONTROLS

- A. The controls for the screenings washer compactor shall be integrated into a single local control panel with mechanical screen specified in Section 11332.
- B. The control strategy for the screenings washer compactor shall be programmed into the PLC specified in Section 11332.

## PART 3 - EXECUTION

## 3.01 TESTING

A. All components in the control panel shall be electrically and mechanically factory-tested prior to shipment. The manufacturer shall certify that all tests passed and shall note all failures and corrections made.

# 3.02 MANUFACTURER'S SERVICE

- A. A factory representative for the equipment specified herein shall be present at the jobsites for inspection and certification of the installation, functional testing, start-up, and for the training of operating personnel. The representative shall be present for the services herein under.
  - 1. As required for installation supervision, inspection, and certification if installation.
  - 2. As required for functional testing upon startup.
  - 3. 8 hours for the training of the University's operating staff.
- B. A written report covering the technician's findings and installation approval shall be submitted to the Engineer prior to starting the equipment. The installation inspection report shall cover inspections performed, outline in detail any deficiencies observed and outline in detail corrective measures

taken. The technician shall remain on the job site until all deficiencies are corrected or shall make as many additional trips as required to determine the installation is proper. Any extra time or trips shall be provided at no additional cost to the University.

- C. A written report covering equipment start-up shall be submitted to the Engineer not more than two weeks after equipment start-up. The start-up report shall cover start-up procedures, outline in detail any discrepancies, deficiencies or failures occurring during start-up, and outline in detail corrective measures taken.
- D. Prior to initial start-up, the manufacturer's representative shall provide written certification to the University that the equipment has been installed, tested in accordance with the Manufacturer's approved method, and testing requirements specified herein and shall certify that the equipment is ready for permanent operation.

# 3.03 PAINTING

- A. The screen drive assembly and all other cast iron, malleable iron or carbon steel stationary surfaces shall be shop coated with one coat of moisture-cured rust-inhibitive urethane primer, 2.0 to 3.0 mils dry film thickness.
- B. All exposed metal surfaces other than aluminum and stainless steel shall be shop primed and painted.

**END OF SECTION** 

### **SECTION 11332**

# MECHANICAL SCREEN

### PART I – GENERAL

### 1.01 SCOPE OF WORK

- A. Provide one (1) fully automatic perforated plate 316 S.S. mechanical raw sewage screen with all controls, control panels and appurtenances necessary to provide a complete and operational system as shown on the attached drawings (Attachment B) and specified herein. The equipment shall be of the latest design and shall be fabricated of materials and in a fashion that will fully perform the functions described below.
- B. The screenings washer compactor specified in Section 11331 shall be furnished by the same manufacturer as the mechanical screen specified herein, who shall be responsible for the design, coordination and proper operation of the entire mechanical screen, washer compactor system and booster pump system.
- C. A local control panel (LCP) equipped with a Programmable Logic Controller (PLC) shall be furnished and installed with complete control components to control both the mechanical screen and the screenings washer and compactor units. A separate LCP for each unit shall not be acceptable.
- D. These Specifications are intended to give a general description of the system required, but do not cover all details; which will vary in accordance with the requirements of the equipment as offered. They are, however, intended to cover the furnishing, shop testing, delivery and complete installation and field testing of all materials, equipment and appurtenances for the complete unit as herein specified, whether specifically mentioned in these Specifications or not. The scope of work includes providing a manufacturer's authorized representative to perform start up of the equipment, and to instruct the University's personnel in the care, operation and maintenance of all equipment provided under this section.

## 1.02 SUBMITTALS

- A. Submittal shall be as specified in Section 4.0 of the ITN document and as stated below.
- B. Submit the following:
  - 1. Manufacturer's Certificate of Compliance certifying compliance with the referenced Specification and standard.

11332-1 MECHANICAL SCREEN

- 2. Certified copies of reports of factory tests specified in this Section and required by the referenced standards.
- 3. Product Data: Include the following:
  - a. Descriptive literature, brochures, and/or catalogs of the equipment.
  - b. Motor characteristics and performance information.
  - c. Gear reducer data including service factor, efficiency, torque rating, and materials.
- 4. Parts and materials list including a list of recommended spare parts.
- 5. Shop drawings with performance data and physical characteristics and additional information as described below:
  - a. Manufacturer's installation drawings.
  - b. Wiring and schematic diagrams.
  - c. Operations and maintenance manual: d. Installation reference list.
  - e. Equipment weights and lifting points.
  - f. Recommendations for short and long term storage.
  - g. A copy of the manufacturer's warranty
- C. Operation and Maintenance Manuals: At minimum, the manuals shall include equipment descriptions, operating instructions, drawings, exploded views, parts listings, troubleshooting techniques, a recommended maintenance schedule, and the recommended lubricants.
- D. Submittal must include all drawings applicable to the equipment specified in this section.

# 1.03 REFERENCE STANDARDS

- A. Codes, Specifications and standards referred by number or title shall form a part of this Specification to the extent required by the references thereto. Latest revisions as of the date of bid opening shall apply, unless otherwise shown or specified.
  - American Iron and Steel Institute (AISI).
  - 2. American National Standards Institute (ANSI).
  - 3. American Society for Testing and Materials (ASTM).
  - 4. American Bearing Manufacturers Association (ABMA).
  - 5. American Gear Manufacturers Association (AGMA).
  - 6. National Electrical Manufacturers Association (NEMA).
  - 7. National Fire Protection Association (NFPA).

- 8. Underwriters Laboratory (UL).
- 9. Anti-friction Bearing Manufacturers Association (AFBMA)

## 1.04 QUALITY ASSURANCE

A. The Screen shall be a Manufacturer's standard product and only modified as necessary to comply with the drawings, specifications, and specified service conditions. All equipment covered by these specifications shall be manufactured and provided by one manufacturer, and shall be complete including motors and all appurtenances.

# B. Certificate of Compliance

1. The manufacturer shall certify in writing that the Screen to be supplied shall be manufactured in strict compliance with the Contract Specifications and that all quality and quality control standards are met. The manufacturer shall submit the written certification along with the Shop Drawing submittal.

# 1.05 PRODUCT DELIVERY, STORAGE AND HANDLING

- A. Arrange deliveries of equipment in accord with construction schedules, and coordinate to avoid conflict with work and conditions at the site.
  - 1. Equipment shall be delivered in undamaged condition, in manufacturer's original containers or packaging, with identifying labels intact and legible.
  - 2. Immediately on delivery, inspect shipments to assure compliance with requirements of Contract Documents and approved submittals, and that all equipment is properly protected and undamaged.
- B. The manufacturer shall be responsible for promptly removing damaged products from the job site and replacing damaged products with undamaged products.
- C. Thoroughly clean all equipment and subassemblies of all water, sand, grit, weld splatter, grease, oil and other foreign materials before preparation for shipment. Protect all machined surfaces against physical damage and exposure to the elements during shipment, handling, storage and installation.
- D. Pack equipment to provide ample protection from damage during shipment, handling and storage. Cap and seal all openings.

## 1.06 MANUFACTURER QUALIFICATIONS

- A. The screen and the screenings washer and all associated and subordinate equipment shall be supplied by a single manufacturer in order to provide standardization for appearance, operation, maintenance, spare parts and manufacturer's service.
- B. The manufacturer shall be have been regularly engaged in the production of equipment for the specified use for a minimum of 10 years.
- C. Subject to compliance with the requirements of the specification, the acceptable manufactures and products shall be the EscaMax with the integral Wash and Press (WAP) as manufactured by Huber Technology, Inc., the Escalator Fine Screen with the integral Rotopac Type RPW Screw Washer Compactor as manufactured by Veolia, or the Bull Shark Through Flow Screen with Whitetip Shark Washing Compactor as manufactured by Hydro-Dyne Engineering, Inc. or approved equal.

# 1.07 SUBSTITUTIONS

A. Submittals may include any proposed product substitutions. It will be at the University's sole discretion to approve or deny any proposed product substitutions.

# 1.08 WARRANTY

- A. The equipment manufacturer shall submit the standard warranty for the various components of the system. However, all equipment shall be warranted for a minimum period of one (1) year from the date of successful startup of the equipment.
- B. In order to assure the proper performance and compatibility of all equipment supplied within the intent of this Specification, all equipment shall be warranted by the same supplier.
- C. The equipment shall be warranted to be free from defects in workmanship, design and materials. If any part of the equipment should fail or show excessive wear during the warranty period, it shall be replaced at no expense to the University.

## 1.09 SPARE PARTS

A. The following spare parts shall be provided by the manufacturer, as applicable for the screen supplied:

11332-4 MECHANICAL SCREEN

- 1. Two (2) spares for each type fuse or electrical overload device used
- 2. One (1) spare handheld device required for programming as applicable
- 3. Two (2) screen elements
- 4. one (1) complete rotating brush assembly (including brush segments if applicable)
- 5. Two (2) neoprene strips for bottom seal element
- 6. Two (2) sets of twin brushes for bottom seal element
- 7. Six (6) lateral plastic seal plates including fasteners
- 8. Two (2) lower bearings
- 9. Two (2) upper bearings
- 10. One (1) solenoid valve rebuild kit
- B. Spare parts shall be packaged in containers suitable for long term storage and shall bear labels clearly designating the contents and the equipment for which they are intended.

## 1.10 SCREEN DESIGN CRITERIA

- A. The mechanical screen shall be installed in a 2.5 ft wide x 5.0 ft deep channel and shall be capable of processing a current peak flow of 5.0 MGD of municipal wastewater with no less than 12 inches of freeboard. The angle of inclination shall be between 60 to 70 degrees nominal from horizontal. The perforations in the screen elements shall have a diameter 1/8" 9/64" (3.0mm 3.5mm).
- B. Maximum upstream water level shall not exceed 48-inches above channel bottom. The screen shall be capable of processing the peak flow without exceeding the maximum upstream water level based on a 40% reduction of the screen's free open-area.
- C. The downstream water level at the current peak flow (5MGD) shall be approximately 34-inches above the channel bottom.
- D. The portion of the screen above the channel shall be equipped with stainless steel covers to control the emission of odors, prevent water from dripping on the floor behind the screen, and to protect operators from contact with moving parts. All enclosures shall be readily and easily removable. The covers shall have hinged sections on the front and rear of the unit for access. The covers shall be fabricated from 14 gauge 316 SS.

# PART II - PRODUCTS

# 2.01 MATERIALS AND FINISHES GENERAL

A. MATERIALS

11332-5 MECHANICAL SCREEN

1. All stainless steel used for the fabrication of the equipment shall conform to the following standards:

a. Plate and Sheet: ASTM A 167; ASTM A 240

b. Bar: ASTM A 276; ASTM A 479

c. Tube: ASTM A 312

## B. EXTERIOR SURFACES FINISHES

- 1. All surfaces shall be free of sharp edges, weld spatter and residue. All welds shall be ground smooth.
- 2. All stainless steel surfaces shall undergo a passivation that includes treatment with an acid wash in accordance with ASTM A 380 using a pickling bath of nitric acid and hydrofluoric acid to remove any residues that may be present on the material as a result of forming, manufacturing, or handling.

## 2.02 SCREEN EQUIPMENT

## A. Frame

- The unit shall rest at the bottom of the channel, and be anchored at all the operating floor elevations. No mechanical mounting or fastening of the frame to the sidewalls or bottom of the channel shall be allowed. A pivot shaft shall be incorporated into the frame design allowing the screen to swing up and out of the channel for maintenance and inspection without personnel actually entering the channel.
- 2. The side frames of the screen shall be fabricated from a minimum of 3/16" (5 mm) thick stainless steel plates and shall have a minimum of four 90 degree edges. The side frames shall be a minimum of 20.5" (508 mm) wide and 3-1/2" (93 mm) deep. The top plate shall also be fabricated from a minimum of 3/16" (5 mm) thick stainless steel plate. The side frames shall be connected by welded structure, cross braces and/or lateral tubing. 10/64" (4 mm) thick neoprene strips shall be fastened to the side frames to seal the lateral gaps between the side frames and the channel walls.
- 3. The frame shall be designed to handle the forces that may be exerted on the unit during fabrication, shipping, erection, and operation.

### B. Perforated Band Screen

11332-6 MECHANICAL SCREEN

- The screenings shall be positively lifted and prevented from rolling back by means of lifting rakes with tines or ledges. Such lifting rakes shall be attached every 8" or every fourth screen element at distances not exceeding 20" (0.5 m). The screen elements shall be cleaned at the downstream side (back) of the screen by means of a rotating brush and a spray bar. Removed screenings shall be dropped through a discharge chute.
- 2. The screen shall be provided with perforated screen elements. Each screen element shall be made of a single piece on the range of 1/16" to 1/8" (2 mm to 3 mm) thick perforated plate that is convexly curved to provide for sufficient structural stability. The screening elements shall be designed as such that the gaps between the screen elements shall never exceed 0.04" (1 mm) throughout their entire lengths and traveling way. Each screen element shall be bolted with two bolts on each side to a link of the drive chain. Lateral plastic seal plates, made of ¼" (6 mm) thick glass fiber reinforced polypropylene, shall be attached to both ends of each screen element. The seal plates provide slip sealing between the moving screen elements and the frame of the screen. Each screening element shall be removable from the operating floor.
- A chute shall be provided that fully encloses the discharge section of the screen. An access hatch with hinges and handle shall be provided in the chute permitting easy access to the rotating brush and spray bar.
- 4. A lateral bottom seal element shall be attached to and between the side frames. The element shall include a minimum 10/64" (4 mm) thick and 7" wide (179 mm) neoprene flap for sealing the gap between the element and the channel floor. The element shall also include a twin row of brushes made of polypropylene 6.6, each row having a height of 4-3/4" (120 mm) and a width of 3/8" (10 mm) and a bristle diameter of 1/24" (1 mm). The brushes shall be secured with a holder made of stainless steel 304 that permits easy replacement of the brushes. The brushes seal the gap between the element and the screen elements preventing passage of debris while permitting passage of the tines of the lifting rakes.
- 5. The side frames as applicable for the screen supplied shall be provided with roller tracks. The roller tracks shall be bolted to the side frames and shall be made of corner profiles that are a minimum of 13/64" (5 mm) thick and have a cross section of minimum 3 1/8" x 1 3/4" (80 x 45 mm).

11332-7 MECHANICAL SCREEN

- 6. Two endless drive chains shall be provided to move the screen elements. The drive chains shall have links made of 316 stainless steel, with connecting bushes and pins made of 316 stainless steel. The chains shall have a minimum strength of 80,000N (18,000lb.f) and a pitch of 8" (200 mm). If applicable for the screen supplied chain rollers shall be made of polyamide and shall have a minimum diameter of 2 3/8" (60 mm) and a width of 1 ½" (32 mm).
- 7. Lower and upper sprockets (as applicable) shall be provided. The lower sprockets shall be solid. The upper sprockets shall be split to facilitate maintenance. Sprockets shall be made of polyamide. The sprockets shall be a minimum of 1 1/8" (28.5 mm) thick and shall have a reference diameter of 13 3/8" (340 mm).
- 8. As applicable for the screen supplied the lower sprocket bearings shall be slide bearings with a slide bushing made of silicium carbide and with a shaft of white cast iron. The slide bushing shall have an interior diameter of 2 3/8" (59 mm) and a length of 2" (50 mm). Ball or roller bearings, or slide bushings made of metal or plastic material shall not be accepted as lower sprocket bearings or the bottom of the unit frame shall incorporate two revolving element guides. They will move at the same speed as the elements to reduce wear to a minimum on all exposed components. Each 0.75 in [19 mm] thick bottom guide will be carried on a stub shaft incorporating a greasable sealed "Nylatron" sleeve. Each lower stub shaft shall be bolted in place to allow easy removal. Grease lines shall run from the lower shaft to the upper most operating floor to allow easy lubrication
- 9. As applicable for the screen supplied the upper drive shaft bearings shall be ball bearing type provided with nipples for grease lubrication. Their interior diameter shall be a minimum of 2 3/8" (60 mm). Their casing shall be made of painted coated cast iron.
- 10. The drive shaft shall be made of a stainless steel tube with a minimum diameter of 3 ½" (89 mm) and a wall thickness of 13/64" (5 mm). The drive shaft shall be driven by a 0.75HP or 1HP gear motor with a minimum speed of 5.6rpm or 6.14 rpm.
- C. Brush and/or Spray Wash System
  - A manually adjusted rotating brush, self-adjusting rotating brush and/or a spray system shall be provided for the cleaning of the screen elements as applicable for the screen supplied. Mechanical screens using a manually adjusted or a self-adjusting rotating brush shall also be equipped with a spray system.

11332-8 MECHANICAL SCREEN

- a. The manually adjusted rotating brush body shall be divided into 4" wide segments for easy replacement using the existing drive shaft. The distance between the axis of the brush and the screen elements shall be adjustable to allow for wear of the brush. The brush bristles shall be made of polyamide 6.10 with a polypropylene body and shall have a diameter of 13 ½" (340 mm) and a bristle diameter of 1/17" (1.5 mm). The brush shall be driven by a 2.0 HP motor with a speed of 58rpm.
- b. The Self- adjusting rotating brush shall have a minimum diameter of 17.75 in (451 mm) and have, when in operation, a surface contact ratio of 50:1 with element. The rotating brush shall be assembled on a straight shaft of sufficient size to operate without distortion. The brush shaft shall be mounted on a self-adjusting support assembly including a pivoting shaft with self-aligning ball bearings. These bearings shall be mounted on pillow blocks located on each side of the structural frame top plate. Lever assembly arms shall be fixed on the pivoting shaft ends. Gas springs attached to the levers shall insure a constant pressure on the perforated plate elements to provide optimum contact and cleaning. The brush shall be driven by a 1.0 HP motor with a speed of 130.40 rpm.
- c. A spray pipe wash system shall be provided for washing of the screen elements. The spray system shall have minimum 316 stainless steel nozzles and solenoid valves. The wash water flow per nozzle shall meet the minimum water pressure required by the manufacture.

## D. Gear Motor Drive Mechanism

- Motors shall be UL rated for operation in Class1 Division 2 environment. Motors shall be inverter duty rated and equipped with thermostats. Motors shall be TEFC 460 Volts, 60 Hz, 3-phase, with a service factor of 1.15. Motors shall be rated for operation in a 104 degree F (40 degree C) environment.
- 2. The drive unit shall be direct coupled to the screen drive shaft through the gear box. The gear box housing shall be constructed from ASTM A-48, Class 30 cast iron. The drive unit shall be sealed from the screenings transport area with a stainless steel plate, which is welded to the frame and forms the drive console.

11332-9 MECHANICAL SCREEN

- Nominal and minimum motor efficiencies shall comply with NEMA MG 1. The gear box shall be designed for AGMA Class II, 24 hour duty.
- 4. The screen shall be equipped with electronic overload protection by true-power monitor to stop the screen and initiate an alarm in the event of overload.

## E. Covers

1. The screen shall include 316 stainless steel covers for odor control and general plant safety. The covers shall extend from the deck level to the top of the screen. The covers on the front of the screen shall be easily removable and shall include a keyed locking mechanism. The covers on the sides and the back of the screen shall be fastened in place by screws.

# 2.03 RCW BOOSTER PUMP

- A. To assure unity of responsibility the pump, motor, strainer, pressure regulator and controls shall be furnished and coordinated by the screen equipment manufacturer.
- B. The existing RCW system at the WRF operates at 45-85 psi. The equipment supplier shall furnish a new booster pump to provide adequate pressure for cleaning of the mechanical screen and washer compactor.
- C. The booster pump shall be design for 30 gpm at 130' TDH. Pump Efficiency shall be a minimum of 60%.
- D. The booster pump shall be a vertically oriented multi stage pump with a stainless body and 304 stainless steel impellers. A mechanical seal that uses the pumped media as the seal water shall be installed on the pump.
- E. The booster pump motor shall be 3HP, 460/480VAC, 3 phase, TEFC, Premium Efficiency with 1.15 S.F. The motor shall be non-overloading, without use of the service factor, at any point on the driven pump's performance curve. The pump motor shall comply shall be UL rated for operation in Class1 Division 2 environment.
- F. The motor fan guard shall be made of a non-corrosive material.
- G. Booster pump shall be as manufactured by Goulds, Xylem, Ruhrpumpen or approved equal.
- H. The booster pump should run based on the screen and washer compactor cleaning cycles and the controls shall be integrated into the mechanical screen control panel.

11332-10 MECHANICAL SCREEN

## 2.04 CONTROLS

## A. Control Panel

- A local control panel (LCP) equipped with a Programmable Logic Controller (PLC) shall be furnished and installed with complete control components to control both the mechanical screen, the RCW booster pump and the screenings washer and compactor unit specified in Section 11331.
- 2. The controls shall be incorporated into a single control panel with a NEMA4X, 316 stainless steel lockable enclosure. All components of the control panel shall meet requirements as specified herein. The control panel shall contain the following logic devices for proper operation of the equipment as a minimum:
- 3. The enclosure shall provide:
  - a. The control panel shall accept a 460/480 VAC, 60 hertz, 3-phase power input and be equipped with a door interlocked fused disconnect. When the disconnect switch is in the open position, all power shall be removed from the control system.
  - b. Motor starters, type IEC with overload and fused branch circuit protection
  - c. A power monitoring relay to detect over-current power consumption by the screen motor. The power monitor shall measure the input power and will provide a discrete output that can be used to stop the operation of the unit in the event of a jam.
  - d. A control power transformer, single phase, 480 120 V AC with branch circuit fuses.
  - e. A transient voltage surge suppressor TVSS, 120 V AC single phase by Phoenix Contact or approved equal.
  - f. Ethernet surge protection by Phoenix Contact or approved equal.
  - g. A Programmable controller: Allen Bradley CompactLogix 1769-L33ER with Ethernet Communications and sufficient I/O cards/modules for all I/O plus 10% installed spare I/O cards/modules.
  - h. Allen Bradley PanelView 800 with 7" touchscreen (2711R-T7T) and Ethernet Communications
  - i. Elapsed time meter displayed at operator interface
  - j. Terminal Blocks
  - k. Remote dry contacts: remote start/failure indication/indicating screen is running
  - I. UL labeled

11332-11 MECHANICAL SCREEN

- m. All equipment in a control panel including switches, fiber optic converters, PLCs, etc. shall be connected to an Uninterruptible Power Supply (UPS). The UPS shall be capable of sustaining the equipment for a minimum one (1) hour in the event of a power failure. There shall be no measureable break in the output power of the UPS during transfer from normal AC line supply to battery power or from battery power back to normal AC line supply. UPS shall be Allen Bradley 1609 Series
- n. One (1) managed switch equipped with four (4) Ethernet ports and two (2) fiber optic ports. Managed switches shall be Allen Bradley Stratix 5700.
- o. VFD and Circuit Breaker Branch Circuit Protection for screen cleaning brush motor by Allen-Bradley.

# 4. Door mounted equipment:

- a. Indicator lights:
  - i. Power on (white)
  - ii. Mechanical Screen drive running (red)
  - iii. Mechanical Screen overload (amber)
  - iv. Mechanical Screen torque overload (amber)
  - v. Washer Compactor drive running (red)
  - vi. Washer Compactor overload (amber)
  - vii. Washer Compactor torque overload (amber)
  - viii. Booster Pump running (red)
  - ix. Booster Pump alarm (amber)
  - x. Brush motor running (Red)
  - xi. Brush motor fault (amber)
- b. E-stop push button
- c. Selector switches
  - i. Mechanical Screen drive: Hand-OFF-Automatic
  - ii. Brush drive: Hand-OFF-Automatic (if applicable)
  - iii. Washer Compactor drive: Forward-OFF-Reverse Washer Compactor drive: Hand-OFF-Automatic (if applicable)
  - iv. Washer Compactor Hopper Wash: Hand-OFF-Automatic (if applicable)
  - v. Washer Compactor Press Zone Wash: Hand-OFF-Automatic (if applicable)
  - vi. Washer Compactor Pan Wash: Hand-OFF-Automatic (if applicable)
  - vii. RCW Booster Pump: Hand-OFF-Automatic

11332-12 06/08/18

MECHANICAL SCREEN

- viii. Other lights, buttons, switches that may be applicable for the mechanical screen furnished.
- d. System Reset push button

# B. Mechanical Screen Control Strategy

- In AUTO the mechanical screen shall be controlled by the water level sensors. Screen operation shall be started when the water level sensors monitor a certain water level difference, when the float switch senses high water level, or when a certain time has passed since the last operation of the screen. Screen operation shall be stopped when the water difference is below a certain value and when the float switch does not indicate high water alarm, or when a certain run time has expired (if operation was started by timer).
- 2. Operation of the screen starts the screen and brush motors and opens the solenoid valve for spray water.
- 3. In the event of high water level indication, the indicator light is on and an alarm is rendered.
- 4. In the event that fault of the screen motor is detected by the VFD, the screen shall immediately be stopped and the indicator light shall be illuminated and an alarm shall be rendered.
- 5. Setting the switch into HAND position shall set the screen into operation. The screen and brush motors will run and the solenoid valve for spray water will be open.
- 6. Reset is manually performed after correction of any cause for a tripout.

# C. Washer Compactor Control Strategy

- 1. The washer compactor shall operate based on the run time of the associated screen. The washer compactor shall receive a signal from the mechanical screen when in operation and accumulate the time the mechanical screen is in operation. The washer compactor shall start the wash cycle when the accumulated mechanical screen operation time reaches an adjustable elapsed time set point.
- 2. Wash cycle:
  - a. Wash water supply is activated: ON/OFF mode with adjustable timers for each operational condition

11332-13 MECHANICAL SCREEN

- Drive runs forward also controlled by timers with adjustable ON / OFF sequence
- c. Wash cycle is followed by discharge cycle: screw is running forward for an adjustable time
- d. Press zone washing/ washing system is activated
- e. Pan wash is activated (if applicable)
- f. Wash cycle finished
- 3. High screening load condition: When mechanical screen is discharging very high amount of screenings the washer compactor switches into discharge mode. This condition is determined by the accumulated run time of the screen.
- 4. The washer compactor shall have the ability to clear blocking automatically. When the current monitoring relay senses a high load condition, the screw stops and a clearing cycle is initiated. The screw stops immediately and reverses (time is adjustable at operator interface) then restarts running forward. The number of attempts to clear the blocking shall be adjustable. Should the screw fail to clear itself after the allowed number of attempts or the overload is sensed during reversing, the system stops immediately and an alarm signal is rendered.
- 5. The set points shall be adjustable at the OIT.
- D. A NEMA 4X polycarbonate emergency stop push button station shall be mounted on the frame of the unit with a ½" NPT conduit connection.
- E. The PLC furnished within the control panel shall also be with sufficient quantities of I/O modules to monitor and control the following instrumentation/equipment:
  - 1. One (1) RCW Booster Pump, RBP-100
  - 2. Two (2) Level Transducers, LIT-100 and LIT-101
- F. The equipment manufacturer shall furnish two (2) level transducers for the control of the mechanical screen. The ultrasonic level transducer shall include two ultrasonic level transducers unit with 4-20 mA output to the PLC located in the local control panel specified herein.
- C. The equipment manufacturer shall furnish all necessary hardware modules, transmitters or power supplies to send the two (2) level signals to the PLC.
- D. One (1) ultrasonic level transducer shall be installed mounted upstream of the mechanical screen above the channel and one (1) ultrasonic level transducer shall be installed mounted downstream of the mechanical

11332-14 MECHANICAL SCREEN

screen above the channel. The level transducer shall have a minimum level detection range of 0-6 ft. The level transducer shall have accuracy of 0.25% of the measuring range. The transducers shall be designed and furnished with Factory Mutual (FM) intrinsically safe approval with Class 1, Division 1 certification.

- E. The level transducer shall be furnished with sufficient length cable for connection from the transducer to the PLC without splices.
- F. The ultrasonic level transducer shall be model 3107 as manufactured by Rosemount Emerson Process Management or approved equal.
- G. Operator Interface Terminal (OIT) Graphic Screens
  - The equipment manufacturer shall be responsible for developing OIT graphics on the Allen Bradley PanelView 800 mounted on the LCP for control and monitoring of the following:
    - a. Mechanical Screen specified herein;
    - b. Washer and compactor unit specified in Section 11331;
    - c. RCW Booster Pump specified herein;
    - d. Level Transducer specified herein;
  - 2. Level Transmitters (LIT-100, LIT-101)
    - a. The water level in the headworks shall be displayed at the OIT.
    - b. Each headworks level shall have an operator adjustable low level alarm and high level alarm that shall be indicated and alarmed at the OIT. The low level and high level setpoints shall be operator-adjustable at the OIT.
    - c. Separate operator-adjustable setpoints for initiating the cleaning of the mechanical screen shall be provided at the OIT.
    - d. A headworks level general fault alarm shall be displayed at the OIT.
  - 3. Headworks Mechanical Screen System (MSU-211, WCU-211)
    - a. The following run status, alarm/fault status shall be indicated at the OIT.
      - i. Mechanical Screen drive running
      - ii. Mechanical Screen overload
      - iii. Mechanical Screen torque overload
      - iv. Washer Compactor drive running
      - v. Washer Compactor overload
      - vi. Washer Compactor torque overload

11332-15 MECHANICAL SCREEN

- vii. Booster Pump running
- viii. Booster Pump alarm
- ix. Brush motor running
- x. Brush motor fault
- 4. The elapsed run time for the following equipment shall be displayed on the OIT. An elapsed runtime RESET software pushbutton shall be provided at the OIT.
  - a. Headworks mechanical screen
  - b. Washer compactor unit
  - c. Booster Pump
- The equipment manufacturer shall be responsible for developing all other necessary OIT graphics for setpoints, run indication, alarms, etc. for a complete and operational system whether specified herein or not.

## PART III - EXECUTION

## 3.01 TESTING

A. All rotating components in the mechanical screen and components in the local control panel shall be electrically and mechanically factory-tested prior to shipment. The manufacturer shall certify that all tests passed and shall note all failures and corrections made.

# 3.01 MANUFACTURER'S SERVICE

- A. A factory representative for the equipment specified herein shall be present at the jobsites for inspection and certification of the installation, functional testing, start-up, and for the training of operating personnel. The representative shall be present for the services herein under.
  - 1. As required for installation supervision, inspection, and certification if installation.
  - 2. As required for functional testing upon startup.
  - 3. 4 hours for the training of operating personnel.
- B. A written report covering the technician's findings and installation approval shall be submitted to the Engineer prior to starting the equipment. The installation inspection report shall cover inspections performed, outline in detail any deficiencies observed and outline in detail corrective measures

11332-16 MECHANICAL SCREEN

taken. The technician shall remain on the job site until all deficiencies are corrected or shall make as many additional trips as required to determine the installation is proper. Any extra time or trips shall be provided at no additional cost to the University.

- C. A written report covering equipment start-up shall be submitted to the Engineer not more than two weeks after equipment start-up. The start-up report shall cover start-up procedures, outline in detail any discrepancies, deficiencies or failures occurring during start-up, and outline in detail corrective measures taken.
- D. Prior to initial start-up, the manufacturer's representative shall provide written certification to the University that the equipment has been installed, tested in accordance with the Manufacturer's approved method, and testing requirements specified herein and shall certify that the equipment is ready for permanent operation.

# 3.05 PAINTING

- A. The paint system shall include the CORO 3 with IP 66 advanced corrosion protection. Both the drive shaft and eccentric blocks shall be coated with grease after installation. Manufacturer shall supply the recommended type and quantity of grease required. All The screen drive assembly and all other cast iron, malleable iron or carbon steel stationary surfaces shall be shop coated with one coat of moisture-cured rust-inhibitive urethane primer, 2.0 to 3.0 mils dry film thickness.
- B. All exposed metal surfaces other than aluminum and stainless steel shall be shop primed and painted.
- C. Surface preparation and shop prime painting shall be performed as required.

**END OF SECTION** 



