

MAINE DEPARTMENT OF

INLAND FISHERIES AND WILDLIFE

ADDENDUM NO. 1

14-OCT-24

TO THE SPECIFICATIONS, PROPOSAL, CONTRACT AND BOND

FOR THE CONSTRUCTION OF

EFFLUENT CHARACTERISTIC DESIGN AT EMBDEN REARING STATION

SOMERSET COUNTY

BGS PROJECT NO.: 3289

hdrinc.com

2040 W. Iles Ave., Suite C, Springfield, IL (217) 585-8300



SUBJECT:	ADDENDUM NO. 1
PROJECT:	Effluent Characteristic Design at Embden Rearing Station
то:	Richard Parker - DIFW
FROM:	Andrew Gurski – HDR

This Addendum is issued to known individuals, firms or corporations holding Bidding Documents and Contract Documents for above listed project.

The pre-bid conference was held on **Tuesday, October 08**. The sign-in list is attached below.

This Addendum is hereby made a portion of Bidding Documents and Contract Documents.

PART 1 - QUESTIONS AND ANSWERS

1. QUESTION:

- a. I don't see any structural drawings for the Sludge Storage tank.
- b. I don't see any roof framing material sizes identified for the Sludge Mixing Pump Building.
- c. The roof detail for the Sludge Mixing Pump Building shows 3 layers of $\frac{1}{2}$ rigid on the roof. Can I layer of $1\frac{1}{2}$ be used?

ANSWER:

- a. See Part 3 for sheet updates.
- b. Framing for the sludge storage building shall be 2x12 # SP or better spaced @ 16" OC.
 Roof sheathing shall be 5/8" APA structural 1 attached to framing with 8d nails at 4" on center at panel edges and 12" on center field. See Part 3.

c. Yes. A single $1-\frac{1}{2}$ " layer of rigid insulation may be used in place of (3) $\frac{1}{2}$ " layers. **SOURCE:** Joe LaRose <u>ilarose@gannestonconstruction.com</u> *Fri 10/4/2024 04:24*

2. QUESTION: Specification section 01 30 00 paragraph 1.4 calls that we are required to provide a project sign as specified. Please clarify this is mandatory and, if so, provide detail of sign indicating names, logos, etc......

ANSWER: No signs are required for this project. **SOURCE:** Joe LaRose <u>ilarose@gannestonconstruction.com</u> Fri 10/4/2024 05:06

3. QUESTION:

- a. Please clarify which structures require the Water Tightness testing per specification section 01 45 25.
- Please clarify which elements of this project are considered "water bearing structures" per specification section 03 11 13 requiring concrete forms to be left in place a minimum of 72 hours.
- Please clarify which elements of this project are considered "water bearing concrete " per specification section 03 31 30 requiring concrete to receive Crystalline Cementitious Waterproofing admixture



ANSWER: Water-bearing structures are the clarifier and sludge storage tanks. **SOURCE:** Joe LaRose <u>ilarose@gannestonconstruction.com</u> *Fri 10/4/2024 05:35*

4. QUESTION:

- There is a specification section 06 82 00 AMATS & FIBERGLASS REINFORCED PLASTIC FABRICATIONS. I don't see where any of this would pertain on this project. Please confirm.
- b. There is a specification section 07 13 26 SELF-ADHERING SHEET MEMBRANE WATERPROFING. I don't see where this is indicated on the drawings.
- c. There is a specification section 08 51 13 ALUMINUM WINDOWS. I don't see where these are indicated on the drawings.
- d. There is a specification section 09 77 61 FIBERGLASS REINFORCED PLASTIC (FRP) PANELS. I don't see where these are indicated on the drawings.
- e. There is a specification section 10 14 00 IDENTIFICATION DEVICES. I don't see where these types are indicated on the drawings. Please clarify intended signage scope.
- f. There is a specification section 46 71 33 ROTARY DRUM FILTER. It appears the existing Drum Filter Building is staying and I do not see any new Drum Filters being installed.
- g. Some of the site plans seem to graphically indicate what appears to be an exterior pad attached to the Sludge Pump Building & Chemical Building. Please clarify if there are any exterior building pads required.
- h. Please confirm there are no stairs required on this project per detail 6/10S-503. None are indicated on the plans.

ANSWER:

- a. This specification section will be deleted.
- b. This is to be placed between CMU bricks and building siding
- c. There are no windows on this project. This specification section will be deleted.
- d. These are intended to go on the outside walls of the CMU buildings
- e. Per 10 14 00 signage is to be field located by Owner or Engineer.
- f. Correct, new drum filter is not being installed
- g. Exterior pad is for propane tanks. As called out on plans.
- h. Minimum of one step stair is required near clarifier bridge.

SOURCE: Joe LaRose jlarose@gannestonconstruction.com Fri 10/4/2024 09:08

5. QUESTION:

- a. Please clarify who is responsible for a.) furnishing & b.) installing the following items in the Alternate 1 Chemical Dosing Building & specify if applicable:
 - i. Spill containment platform & ramp
 - ii. Gravity Fed Safety Shower
 - iii. Storage Cupboard For PPE & Equipment

ANSWER:

- I. Spill containment platform & ramp
 - a. Furnishing: Contractor
 - b. Installing: Contractor
 - c. Specs: See 22 20 00

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- II. Gravity fed safety shower
 - a. Furnishing: Contractor
 - b. Installing: Contractor
 - c. Specs: See 22 20 00
- III. Storage cupboard for PPE & equipment
 - a. Furnishing: Contractor
 - b. Installing: Contractor
 - c. Specs:
 - i. Material: Metal (min. 18 ga. Steel)
 - ii. Size: Minimum 30" wide x 27" tall x 14" deep
 - iii. Mounting: Wall Mounted
 - iv. Shelves: Minimum (3) shelves, adjustable.
 - v. Doors: (2) hinged doors. Lockable.

SOURCE: Joe LaRose <u>jlarose@gannestonconstruction.com</u> *Fri 10/4/2024 10:31*

6. QUESTION:

- a. There are no equipment or electrical drawings in the bid set for the clarifier.
- b. In general, there appear to missing many missing drawings.
- c. Does the grot in the clarifier trough start at 5" at the high end and slope continuously to 1" at the drain? Or is it 5" all around with a slope only at the discharge pipe?

ANSWER:

- a) There are no electrical sheets intended for the clarifier. The design is covered on other sheets. 11E-101 will be revised to include additional detail.
- b) Noted in Part 3.
- c) Starts at 5" and slopes continuously to 1".
- **SOURCE:** Joe LaRose <u>jlarose@gannestonconstruction.com</u> *Tue 10/8/2024 04:35*

7. QUESTION:

- a. There are no dimensions for the Sludge Pump Building foundation (footing/wall thickness).
- b. General Notes on Drawing 15S-101 refer to drawings 00S-100 & 00S-500 series. There are no 00S series drawings in the set.

ANSWER:

- a. Dimension shown on Sheet 15S-101.
- b. Drawings are 10S-001 and 10S-500 series.

SOURCE: Joe LaRose <u>ilarose@gannestonconstruction.com</u> *Tue 10/8/2024 05:22*

- QUESTION: There is no door schedule or hardware sets indicated.
 ANSWER: Door schedule will be supplied with Addendum #2.
 SOURCE: Joe LaRose <u>ilarose@gannestonconstruction.com</u> *Tue 10/8/2024 05:36*
- **9. QUESTION:** Note 1 on drawing 15A-101 says all door frames shal be FRP. There is no specification section for FRP door frames.

ANSWER: Door frames shall be hollow metal door frames per specifications section 081100 to be coordinated with the hollow metal insulated doors.

SOURCE: Joe LaRose <u>jlarose@gannestonconstruction.com</u> *Tue* 10/8/2024 05:39



- 10. QUESTION: Drawing 15S-301 indicates a 7 ¼" insulated concrete floor but there are no details of slab thickness, insulation thickness, is there an underlab vapor barrier?
 ANSWER: Bottom slab is 4" thick reinforced with #5@12" OC, EW. 2" rigid insulation. Top slab is 2" thick concrete slab reinforced with WWF 6x6-W2.9xW2.9.
 SOURCE: Joe LaRose jlarose@gannestonconstruction.com Tue 10/8/2024 05:45
- **11. QUESTION:** Drawing 12S-101 ALTERNATE 1 Chemical Dosing Building Foundation Plan notes 1" thick topping slab. Drawing 12S-301 Section notes 2" topping slab. Which is correct?
 ANSWER: 2" is correct.
 SOURCE: Joe LaRose jlarose@gannestonconstruction.com Tue 10/8/2024 06:34
- QUESTION: There are no structural drawings for the Sludge Storage Tank.
 ANSWER: Drawing 15S-102 attached to this addendum. See Part 3
 SOURCE: Joe LaRose <u>ilarose@gannestonconstruction.com</u> *Tue 10/8/2024 06:51*
- 13. QUESTION: In the notice to contractors section , item #7 both boxes are checked for the prequalification status requirements. Can you clarify intent?
 ANSWER: There are no contractor prequalification's required.
 SOURCE: Michael Vining mikegcmaine@gmail.com Thu 10/10/2024 08:29
- **14. QUESTION:** ASR testing per ASTM 1778 instead of our normal mitigation at 50% replacement we do for MDOT.

ANSWER: ASR Testing requirements will be revised to match MDOT specifications. **SOURCE:**

PART 2 - PROJECT MANUAL UPDATES

15. DIVISION 01

a. SECTION 01 11 00 - SUMMARY OF WORK

- i. Part 1.1, A., Add:
 - 3. Water flows continuously through the hatchery at ~3,300 gpm and cannot be reduced most months.

In December 2024 and January and 3rd week of May until July 15, 2025, the hatchery staff can reduce hatchery flow to ~2,500 gpm and it can leave the existing drumfilters via an existing 18" drain that leads to the existing clarifier. See Sheet 11D-101. This will allow part of the 21" piping work to occur without flow in the 21" pipe.

South of the existing Settling Basin, while the existing 24" outfall pipe is flowing ~2,500 gpm or while Contractor does temporary bypass pumping with Contractor's own equipment and materials, to the existing 24" pipe add a watertight 45 deg el or watertight wye with watertight couplings adapted to 21" PVC. If a wye is chosen, the

> upstream end of the 24" piping shall be capped or plugged to facilitate other work after the 21" pipe is back in service. The existing 21" pipe shall be intercepted upstream of the existing settling tank with a manhole and offset around the settling tank to the fitting added to the 24" pipe. See sheet 11D-101.

Two existing drumfilters are manually alternated and each has a 33-gpm backwash pump that continuously rinses the filter to a gravity backwash pipe. See Sheet 13D-101. Water in this pipe must be continuously treated with a flow-through settling tank, a temporary settling tank of the Contractor's when the Contractor has the existing settling tank out of service. The Contractor's temporary settling tank shall have a piped overflow, opposite the Contractor's influent pipe, and the volume of the tank below this overflow shall be at least 4,000 gallons. The tank shall be one that allows a septic hauler to vacuum fluid from the bottom of the tank. The MDIFW will hire a septic hauler to take away 4,000 gpm of fluid monthly.

Drumfilters can be bypassed to stop their backwash for no longer than 36 hours.

Before the Contractor takes the existing settling tank and piping thereto out of service, the Contractor shall provide the functioning pump station on Sheet 13D-401, with temporary force-main to the Contractor's temporary settling tank or the Contractor shall use Contractor's own pump(s) to transfer the backwash water.

16. DIVISION 03

a. SECTION 03 31 30 - CONCRETE MATERIALS AND PROPORTIONING

i. PART 2.2 MIXES: **REMOVE PARAGRAPH G.-2.** "Continue testing for 64 weeks in accordance with ASTM C157 and submit results to Engineer as Informational Submittals."

17. DIVISION 06 82

a. SECTION 06 82 00 - MATS & FIBERGLASS REINFORCED PLASTIC FABRICATIONS i. REMOVE SECTION

18. DIVISION 22

a. ADD: SECTION 22 20 00 – PLUMBING FIXTURES AND EQUIPMENT

PART 3 - DRAWING UPDATES

19. SHEET 11D-101

- a. UPDATE: Update 21" outfall pipe.
- 20. SHEET 11E-101
 - a. UPDATE: SHEET
- 21. SHEET 14D-401
 - a. ADD: SHEET

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22. SHEET 15D - 402

- **a. UPDATE:** Section 2, left side arrowed labels: to "TYPICAL FOR TWO PLACES" add "INSULATE ELBOW AND INSULATE PIPE TO AT LEAST 5' DEEP".
- 23. SHEET 15S-102
 - a. ADD: SHEET
- 24. SHEET 15E-101
 - a. UPDATE: SHEET

END OF ADDENDUM 1

EMBDEN EFFLUENT TREATMENT PRE-BID MEETING ATTENDANCE - 10/8/24

Name	Company	Email	Phone #
BRUCE DAMON	DAMM MECHANICAL	BDATEN & Down WEHEORL	Rom 209-784
Joe CARDSE	GANNESTON CONST.	JLAROSE CGANNESTON CONSTRUCT	102, COM 615-7534
SLOTT STOUTAMYER	TARVERS ELECTRIC INC.	SCOTT OTRAVERS CLEUTRIC. COM	474-5829
STEPHAN MICHAOD	DOTEN'S GNETRUCTION	TYLER & DOTENS. COM	207 - 233 - 9005
Jeremy Moody	Ranger Contraction	Jerenny Moudy - Rauger Contraligat	207-612-6346
Jaremy Cupero	Nemo	SCUPEROD NEMOLOR. N	207-653-2774
Bithie Peller	Pellerin & Sons Plumbing	Pichie @ pellering of Sonts . com	207-270-8017
Jasm Stutbeit	C.E.M.	Jason @ cem maine. ccn	207-848-7486
Cooper Richard	E.H.M	Cooper@EHM-corp.Con	207-212-8856
Steve Shapleigh	Benchmark	Krice OBenchmark construction.	org 207-831-1421
DON PERKINS	Quality Elt	Quality Electric 01 - con	207.431-0850
- breton Cartier	Phoepix Welding	10antis 10 dagen ix welding - com	2017479518
Todd Langevin	MDIFW	Todd.Langevin@maine.gov	
Kevin Sousa	MDIFW	Kevin.L.Sousa@maine.gov	
Andrew Gurski	HDR	andrew.gurski@hdrinc.com	

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SECTION 22 20 00 PLUMBING FIXTURES AND EQUIPMENT

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Plumbing fixtures, trim, and equipment.
- B. Related Specification Sections include but are not necessarily limited to:
 - 1. Section 01 61 03 Equipment Basic Requirements.
 - 2. Section 40 05 00 Pipe and Pipe Fittings Basic Requirements.

1.2 QUALITY ASSURANCE

- A. Referenced Standards:
 - 1. Americans with Disabilities Act (ADA):
 - a. Accessibility Guidelines for Buildings and Facilities (ADAAG).
 - 2. American National Standards Institute (ANSI):
 - a. Z358.1, Emergency Eyewash and Shower Equipment.
 - 3. American Society of Heating, Refrigerating and Air Conditioning Engineers/Illuminating Engineering Society of North America (ASHRAE/IESNA):
 - a. 90.1 IP, Energy Standard for Buildings Except Low-Rise Residential Buildings.
 - 4. American Society of Mechanical Engineers (ASME):
 - a. A112.19.3, Stainless Steel Plumbing Fixtures (Designed for Residential Use).
 - 5. American Society of Sanitation Engineers (ASSE):
 - a. 1011, Performance Requirements for Hose Connection Vacuum Breaker.
 - 6. Canadian Standards Association (CSA).
 - 7. NSF International (NSF).
 - 8. Underwriters Laboratories, Inc. (UL).

1.3 SUBMITTALS

- A. Shop Drawings:
 - 1. See Specification Section 01 61 03 and Specification Section 40 05 00.
 - 2. Color selection charts for Owner color selection.
 - 3. Fabrication and/or layout drawings:
 - a. Layout plan(s) showing dimensions, elevations, etc.
 - b. Details showing connections, installation, rough-in locations, etc.
 - 4. Product technical data including:
 - a. Acknowledgement that products submitted meet requirements of standards referenced.
 - b. Manufacturer's installation instructions.
 - c. Chemical-resistance data.
- B. Contract Closeout Information:
 - 1. Operation and Maintenance Data:
 - a. See Specification Section 01 78 23 for requirements for the mechanics, administration, and the content of Operation and Maintenance Manual submittals.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Subject to compliance with the Contract Documents, the following manufacturers are acceptable:
 - 1. Spill Containment Platform & Ramp:

HDR Project No. 10377389

89 MDIFW EFFLUENT CHARACTERISTIC DESIGN AT EMBDEN REARING STATION

SEPTEMBER 11, 2024 ISSUED FOR BID

- a. Eagle- Justrite Safety Group
- b. Or Equal
- 2. Emergency shower and eyewash:
 - a. Bradly Corp.
 - b. Or Equal.

2.2 MANUFACTURED UNITS

- A. Emergency Fixtures:
 - 1. Emergency shower and eye/face wash (ESEW):
 - a. ANSI Z358.1.
 - b. Flow switch:
 - 1) Rating: 125/250 V, 5 A.
 - 2) Single pole, double throw.
 - 3) UL listed.
 - c. Deluge shower head:
 - 1) Stay-open ball valve.
 - 2) Pull-chain.
 - d. Eye/face wash:
 - 1) Aerated eye/face wash with stainless steel bowl.
 - 2) Stay-open full port ball valve.
 - 3) Push handle control for eye/face wash.
 - 4) Supply line strainer for eye/face wash.
 - e. Type:
 - 1) ESEW-1 (free standing, cast flange base and pull-chain for shower): Guardian G1994.
 - 2) ESEW-2 (freezeproof, wall-mounted, and push handle for shower): Guardian G1205 and G1724.
 - 2. Spill Containment Platform & Ramp
 - a. EPS 40
 - b. CFR 264.175
 - c. With out Drain
 - d. Material: HDPE

2.3 FABRICATION

- A. Trench Sections:
 - 1. Pre-cast fiberglass modular channel sections.
 - 2. Nominal Dimensions: 8 inches interior width, 1.0% slope built into the bottom, 6 feet length.
 - 3. Vertical side walls and a radiused bottom.
 - 4. 2 inches bolted lap joint.
 - 5. End caps: Same material as channel, design that allows the caps to interlock with channel sections and either close off the end of the channel or provide for drain pipe connection.
 - 6. Bottom outlet:
 - a. Where shown on Drawings.
 - b. Same material as channel.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Cross Connection: Do not install any plumbing components that will provide a cross connection between potable and non-potable or drainage systems.
- B. Fixtures:
 - 1. Install fixtures at locations indicated on Drawings and in compliance with local Codes.
 - 2. Connect plumbing supply, drain and vent line sizes as shown on Drawings.

HDR Project No. 103773	89 MDIFW	SEPTEMBER 11, 2024
	EFFLUENT CHARACTERISTIC DESIGN AT EMBDEN REARING STATION	ISSUED FOR BID
	PLUMBING FIXTURES AND EQUIPMENT	
	22 20 00 - 2	

- 3. Set proper grounds to form secure base for each fixture and rigid setting.
- 4. Install fixtures except water closets with water supply above rim and with Code approved backflow preventers.
- 5. Seal fixture joints abutting walls and floors with silicone sealant.
- 6. Connect exposed traps and supply pipes for fixtures and equipment to rough piping systems at wall, unless otherwise specified.
- 7. Install emergency fixtures in accordance with ANSI Z358.1.
- C. Drains:
 - 1. Install drains at locations indicated on Drawings and in compliance with local Codes.
 - 2. In quarry tile floors:
 - a. 24 x 24 inches 6 pound lead sheet clamped to drain.
 - b. Set 1-1/2 inches above structural slab for mortar set and 1/2 inches for thin set.
 - 3. In uncovered concrete slabs:
 - a. Install at the low points of surface areas to be drained or as indicated.
 - b. Set tops of drains flush with the finished floor.
 - c. Install drain flashing collar or a flange so that no leakage occurs between the drain and the adjoining surfaces.
 - d. Maintain the integrity of waterproof membranes, where penetrated.
 - 4. Trench drains:
 - a. Install in accordance with manufacturer's instructions and approved Shop Drawings.
 - b. Install trench sections with the top edges level and straight at elevations indicated.
 1) Support channel sections in place while concrete is placed under and around sections as indicated.

3.2 FIELD QUALITY CONTROL

A. Test piping and fixtures for leaks per Specification Section 40 05 00.

END OF SECTION

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PROJECT MANAGER	A. GURSKI
CIVIL	J. GAGNON
STRUCTURAL	B. BRADLEY
ARCHITECTURAL	M. BASKIN
PROCESS	J. CHANDLER
MECHANICAL	J. CHANDLER
ELECTRICAL	A. KANER
PROJECT NUMBER	10377389

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		10/15/2024 ADDENDUM # 09/11/2024 ISSUED FOR BI	1 DS	

DESCRIPTION

ISSUE

DATE



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4

Effluent Characteristic Designs at Embden Rearing Station

ELECTRICAL A. KANER

		8
		GENERAL NOTES
	1.	HVAC CONTROLS AND AUXILIARY INSTRUMENTS (T-STAT, DAMPERS, ETC.) NOT SHOWN. REFER TO MECHANICAL DRAWINGS FOR DETAILS. REFER TO SPECIFICATION 23 09 00 FOR ADDITIONAL WIRING REQUIREMENTS.
	2.	VERIFY/COORDINATE RATINGS FOR EQUIPMENT SUPPLIED BY THE SELECTED MANUFACTURER. WHERE RATINGS ARE OTHER THAN AS REQUIRED FOR SPECIFIED UNIT, DISCONNECTS, MOTOR STARTERS, OVERCURRENT DEVICES AND RELATED REVISIONS SHALL BE PROVIDED ACCORDINGLY. THE CONTRACTOR THAT FURNISHES EQUIPMENT WITH RATINGS OTHER THAN AS NOTED SHALL BE RESPONSIBLE FOR COORDINATION AND COSTS FOR REVISIONS TO ACCOMMODATE SELECTED.
	3.	MOTORS RATED 120 VOLT AND LESS THAN 1/3 HP SHALL HAVE 15/1 BRANCH CIRCUIT BREAKER IN PANEL. MOTORS RATED 120 VOLT, 1/3 HP AND LARGER SHALL HAVE 20/1 BRANCH CIRCUIT BREAKER IN PANEL.
	4.	WHERE DISCONNECT IS NOT SHOWN ON PLANS, LOCATE AT EQUIPMENT PER NEC.
	5.	ELECTRICAL CONTRACTOR SHALL PROVIDE CIRCUIT TO EQUIPMENT AS INDICATED.
	6.	SAFETY SWITCHES SHALL BE FUSIBLE UNLESS NOTED OTHERWISE. PROVIDE FUSES SIZED PER MANUFACTURERS RECOMMENDATIONS.
	7.	FRACTIONAL HORSEPOWER SINGLE PHASE MOTORS SHALL BE PROVIDED WITH INTEGRAL OVERLOAD PROTECTION.

7

6

SLUDGE MIXING PUMP BUILDING POWER PLAN

SCALE 1/2" = 1'-0"

FILENAME 10377389-15-ME.rvt

SHEET 15E-101

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