Engineers • Architects • Surveyors

KLINGNER

& A S S O C I A T E S, P. C.

February 16, 2022

Howard-Cooper County Regional Port Authority Kendall Kircher & John Sponagule 609 Main Street Boonville, MO 65233

# **BIDDING ADDENDUM 01**

For work titled: Grain Bin Project

Boonville, MO Project Number: 20-0330

### TO ALL BIDDERS

#### **GENERAL NOTES**

This addendum is issued for the purpose of clarifying the intent of the contract documents or for making necessary corrections, deletions, and/or additions to the documents on all items of discrepancy raised up to the time of the issuance of this addendum.

Each bidder is hereby instructed and authorized to incorporate into his proposal the instructions contained in this addendum. This addendum forms a part of the bidding and contract documents and modifies the original bidding documents, dated January 10, 2022. Acknowledge receipt of this addendum in space provided on Bid Form. FAILURE TO DO SO MAY SUBJECT BIDDER TO DISQUALIFICATION.

This addendum consists of eighteen  $(18) - 8 \frac{1}{2} \times 11^{\circ}$  pages including this cover sheet.

#### PROJECT MANUAL

1.	Section 033000 Cast-in-Place Concrete, 2.1, B	REPLACE "B. Blended Cement: ASTM C595; Type IP (25% Class F), gray." with "Not used".
2.	Section 033000 Cast-in-Place Concrete, 2.1, C, 1	REPLACE the following sentence "Coarse Aggregate Maximum Size: 1" inches, <sup>3</sup> / <sub>4</sub> " inches, in accordance with ACI 318." with "Coarse Aggregate Maximum Size: <sup>3</sup> / <sub>4</sub> " inches, in accordance with ACI 318."
3.	Section 033000 Cast-in-Place Concrete, 2.5, B, 1	<ul> <li>CHANGE aggregate size from 1 inch to ¾ inch maximum.</li> <li>CHANGE slag percent of cementitious materials by weight from 20 percent to 15 percent maximum.</li> <li>CHANGE slump after water reducer from 8 inches to 6 inches maximum.</li> </ul>
4.	Section 033000 Cast-in-Place Concrete, 2.5, B, 2	<ul> <li>CHANGE aggregate size from 1 inch to ¾ inch maximum.</li> <li>CHANGE slag percent of cementitious materials by weight from 20 percent to 15 percent maximum.</li> <li>CHANGE slump after water reducer from 8 inches to 6 inches maximum.</li> </ul>

# ATTACHMENTS

Section 033000 Cast-in-Place Concrete - (10 pgs., 8.5 x 11) Letter for Contractor Questions / Responses and Clarifications – (5 pgs., 8.5 x 11) Pre-Bid Meeting Attendance – (1 pg., 8.5 x 11)

All other terms and conditions of the Project Manual and Drawings shall remain unchanged.

#### END OF ADDENDUM 01

# SECTION 033000 CAST-IN-PLACE CONCRETE (Revised Addendum 1 – February 16, 2022)

# PART 1 - GENERAL

#### 1.1 SUMMARY

- A. Section includes cast-in-place concrete for the following:
  - 1. Foundations
  - 2. Foundation walls.
  - 3. Supported slabs.
  - 4. Slabs on grade.
  - 5. Control, expansion and contraction joint devices.
  - 6. Equipment pads.
  - 7. Other items as indicated on drawings
- B. Related Sections:
  - 1. Section 031000 Concrete Forming and Accessories: Formwork and accessories.
  - 2. Section 032000 Concrete Reinforcing.

#### 1.2 REFERENCES

- A. American Concrete Institute:
  - 1. ACI 301 Specifications for Structural Concrete.
  - 2. ACI 305 Hot Weather Concreting.
  - 3. ACI 306.1 Standard Specification for Cold Weather Concreting.
  - 4. ACI 308.1 Standard Specification for Curing Concrete.
  - 5. ACI 318 Building Code Requirements for Structural Concrete.
- B. ASTM International:
  - 1. ASTM C31 Standard Practice for Making and Curing Concrete Test Specimens in the Field.
  - 2. ASTM C33 Standard Specification for Concrete Aggregates.
  - 3. ASTM C39 Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens.
  - 4. ASTM C42 Standard Test Method for Obtaining and Testing Drilled Cores and Sawed Beams of Concrete.
  - 5. ASTM C94 Standard Specification for Ready-Mixed Concrete.
  - 6. ASTM C143 Standard Test Method for Slump of Hydraulic Cement Concrete.
  - 7. ASTM C150 Standard Specification for Portland Cement.
  - 8. ASTM C172 Standard Practice for Sampling Freshly Mixed Concrete.
  - 9. ASTM C173 Standard Test Method for Air Content of Freshly Mixed Concrete by the Volumetric Method.
  - 10. ASTM C231 Standard Test Method for Air Content of Freshly Mixed Concrete by the Pressure Method.
  - 11. ASTM C260 Standard Specification for Air-Entraining Admixtures for Concrete.

- 12. ASTM C330 Standard Specification for Lightweight Aggregates for Structural Concrete.
- 13. ASTM C494 Standard Specification for Chemical Admixtures for Concrete.
- 14. ASTM C595 Standard Specification for Blended Hydraulic Cements.
- 15. ASTM C618 Standard Specification for Coal Fly Ash and Raw or Calcined Natural Pozzolan for Use as a Mineral Admixture in Concrete.
- 16. ASTM C685 Standard Specification for Concrete Made By Volumetric Batching and Continuous Mixing.
- 17. ASTM C845 Standard Specification for Expansive Hydraulic Cement.
- 18. ASTM C989 Standard Specification for Ground Granulated Blast-Furnace Slag for Use in Concrete and Mortars.
- 19. ASTM C1017 Standard Specification for Chemical Admixtures for Use in Producing Flowing Concrete.
- 20. ASTM C1064 Standard Test Method for Temperature of Freshly Mixed Hydraulic-Cement Concrete.
- 21. ASTM C1107 Standard Specification for Packaged Dry, Hydraulic-Cement Grout (Nonshrink).
- 22. ASTM C1116 Standard Specification for Fiber-Reinforced Concrete and Shotcrete.
- 23. ASTM C1157 Standard Performance Specification for Hydraulic Cement.
- 24. ASTM C1218 Standard Test Method for Water-Soluble Chloride in Mortar and Concrete.
- 25. ASTM C1240 Standard Specification for Silica Fume Used in Cementitious Mixtures.
- 26. ASTM D994 Standard Specification for Preformed Expansion Joint Filler for Concrete (Bituminous Type).
- 27. ASTM D1751 Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (Nonextruding and Resilient Bituminous Types).
- 28. ASTM D1752 Standard Specification for Preformed Sponge Rubber and Cork Expansion Joint Fillers for Concrete Paving and Structural Construction.
- 29. ASTM D6690 Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements.
- 30. ASTM E96 Standard Test Methods for Water Vapor Transmission of Materials.
- 31. ASTM E119 Standard Test Methods for Fire Tests of Building Construction and Materials.
- 32. ASTM E1643 Standard Practice for Installation of Water Vapor Retarders Used in Contact with Earth or Granular Fill under Concrete Slabs.
- 33. ASTM E1745 Standard Specification for Plastic Water Vapor Retarders Used in Contact with Soil or Granular Fill under Concrete Slabs.

# 1.3 SUBMITTALS

- A. Submittal procedures per the general conditions.
  - 1. Submittals shall bear the contractor's review stamp prior to submitting to the reviewing engineer.
- B. Material Certificates: Submit material certificates signed by the manufacturer for the following:
  - 1. Admixtures
  - 2. Cement
  - 3. Coarse Aggregate
  - 4. Fine Aggregate
- C. Design Data:
  - 1. Submit concrete mix design for each concrete strength. Submit separate mix designs when admixtures are required for the following:

- a. Include justification of concrete strength per ACI 318 Chapter 5.
- b. Hot and cold weather concrete work.
- c. Air entrained concrete work.
- 2. Identify mix ingredients and proportions, including admixtures.
- 3. Identify chloride content of admixtures and whether or not chloride was added during manufacture.
- D. Product Data:
  - 1. Submit data on vapor barrier materials include tape and accessories.
- E. Manufacturer's Installation Instructions: Submit installation procedures and interface required with adjacent Work.
- 1.4 QUALITY ASSURANCE
  - A. Perform Work in accordance with ACI 301 and ACI 318.
  - B. Conform to ACI 305 when concreting during hot weather.
  - C. Conform to ACI 306.1 when concreting during cold weather.
  - D. Acquire cement and aggregate from one source for Work.
  - E. Perform Work in accordance with State and local standards.

#### 1.5 ENVIRONMENTAL REQUIREMENTS

- A. Maintain concrete temperature after installation at minimum 50 degrees F for minimum 7 days.
- B. Maintain high early strength concrete temperature after installation at minimum 50 degrees F for minimum 3 days.

#### 1.6 COORDINATION

A. Coordinate placement of joint devices with erection of concrete formwork and placement of form accessories.

#### PART 2 - PRODUCTS

- 2.1 CONCRETE MATERIALS
  - A. Cement: ASTM C150, Type I Normal, Type 1A Air Entraining, Portland type
  - B. Not used.
  - C. Normal Weight Aggregates: ASTM C33.

- 1. Coarse Aggregate Maximum Size: <sup>3</sup>/<sub>4</sub>" inches, in accordance with ACI 318.
- 2. Aggregate sources shall not have a history of alkali silica reactivity.
- D. Water: ASTM C1602; potable, without deleterious amounts of chloride ions according to ACI 318.

#### 2.2 ADMIXTURES

- A. All admixtures shall be sourced from a single manufacturer and be approved for use in the concrete mix design.
- B. Air Entrainment: ASTM C260.
- C. Chemical: ASTM C494.
  - 1. Type A Water Reducing.
  - 2. Type B Retarding.
  - 3. Type C Accelerating.
  - 4. Type D Water Reducing and Retarding.
  - 5. Type E Water Reducing and Accelerating.
  - 6. Type F Water Reducing, High Range.
  - 7. Type G Water Reducing, High Range and Retarding.
- D. Fly Ash: ASTM C618 Class F or (Class C at interior locations only).
- E. Silica Fume: ASTM C1240.
- F. Slag: ASTM C989; Grade 80, 100, or 120; ground granulated blast furnace slag.
- G. Plasticizing: ASTM C1017
  - 1. Type I, plasticizing
  - 2. Type II, plasticizing and retarding.

#### 2.3 ACCESSORIES

- A. Bonding Agent:
  - 1. Manufactures:
    - a. Sika Sikadur 32 High-Mod.
    - b. Euclid Duralbond.
    - c. Substitutions: Permitted upon approval of Engineer
- B. Non-Shrink Grout: ASTM C1107; premixed compound consisting of non-metallic aggregate, cement, water reducing and plasticizing agents; capable of developing minimum compressive strength of 2,400 psi in 48 hours and 7,000 psi in 28 days.

#### 2.4 JOINT DEVICES AND FILLER MATERIALS

A. Joint Filler Type A: ASTM D1751 or ASTM D994; Asphalt impregnated fiberboard or felt, 1/2 inch thick; tongue and groove profile.

- B. Joint Filler Type B: ASTM D1752; recycled PVC.
- C. Joint Filler Type C: ASTM D1752; Premolded sponge rubber.
- D. Sealant type, as specified in Section 079200.

### 2.5 CONCRETE MIX

- A. Select proportions for concrete in accordance with ACI 318 trial mixtures or field experience.
- B. Provide concrete to the following criteria:
  - 1. Exterior concrete and concrete exposed to the weather or earth:

Material and Property	Measurement		
Compressive Strength (7 day)	3000 psi		
Compressive Strength (28 day)	4500 psi		
Cement Type	ASTM C150, ASTM C595, ASTM C1157		
Cement Content (minimum)	564 pounds/cu yd		
Aggregate Type	Normal weight		
Water-Cement Ratio (maximum)	0.45 by weight		
Aggregate Size (maximum)	3/4 inch		
Aggregate Size (minimum)	1/2 inch		
Air Content	5 percent to 8 percent		
Fly Ash, Pozzolan Content:	20 percent of cementitious materials by weight, maximum		
Silica Fume Content:	20 percent of cementitious materials by weight, maximum		
Slag	15 percent of cementitious materials by weight, maximum		
Slump	4 inches maximum prior to water reducer 6 inches maximum after water reducer		

2. Interior concrete:

Material and Property	Measurement	
Compressive Strength (7 day)	3000 psi	
Compressive Strength (28 day)	4500 psi	
Cement Type	ASTM C150, ASTM C595, ASTM C1157	
Cement Content (minimum)	564 pounds/cu yd	
Aggregate Type	Normal weight	
Water-Cement Ratio (maximum)	0.45 by weight	

Aggregate Size (maximum)	3/4 inch		
Aggregate Size (minimum)	1/2 inch		
Air Content	0 to 3 percent entrapped		
Fly Ash, Pozzolan Content:	20 percent of cementitious materials by weight, maximum		
Silica Fume Content:	20 percent of cementitious materials by weight, maximum		
Slag	15 percent of cementitious materials by weight, maximum		
Slump	4 inches maximum prior to water reducer 6 inches maximum after water reducer		

- C. Admixtures: Include admixture types and quantities indicated in concrete mix designs only when approved by Architect/Engineer.
  - 1. Use accelerating admixtures in cold weather. Use of admixtures will not relax cold weather placement requirements.
  - 2. Do not use calcium chloride nor admixtures containing calcium chloride.
  - 3. Use set retarding admixtures during hot weather.
  - 4. Add air entrainment admixture to concrete mix for work exposed to freezing and thawing, or deicing chemicals.
  - 5. For concrete exposed to deicing chemicals, limit fly ash, pozzolans, silica fume, and slag content as required by ACI 318.
- D. Average Compressive Strength Reduction: Permitted in accordance with ACI 318.
- E. Ready Mixed Concrete: Mix and deliver concrete in accordance with ASTM C94.
- F. Site Mixed Concrete: Not permitted

# PART 3 - EXECUTION

#### 3.1 EXAMINATION

- A. Verify requirements for concrete cover over reinforcement.
- B. Verify anchors, seats, plates, reinforcement and other items to be cast into concrete are accurately placed, positioned securely, and will not interfere with placing concrete.

#### 3.2 PREPARATION

- A. Prepare previously placed concrete by cleaning with steel brush and applying bonding agent. Remove laitance, coatings, and unsound materials.
- B. In locations where new concrete is doweled to existing work, drill holes in existing concrete, insert steel dowels and pack solid with non-shrink grout.

- C. Remove debris and ice from formwork, reinforcement, and concrete substrates.
- D. Remove water from areas receiving concrete before concrete is placed.
- E. Concrete can be place under water using tremie as approved by engineer.
- 3.3 PLACING CONCRETE
  - A. Place concrete in accordance with ACI 301 and ACI 318.
  - B. Notify testing laboratory and Architect/Engineer minimum 24 hours prior to commencement of operations.
  - C. Ensure reinforcement, inserts, embedded parts, formed expansion and contraction joints, and are not disturbed during concrete placement.
  - D. Place joint filler in floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.
  - E. Install construction joint devices in coordination with floor slab pattern placement sequence. Set top to required elevations. Secure to resist movement by wet concrete.
  - F. Install joint covers in longest practical length, when adjacent construction activity is complete.
  - G. Apply sealants in joint devices in accordance with Section 079200.
  - H. Deposit concrete at final position. Prevent segregation of mix.
  - I. Place concrete in continuous operation for each panel or section determined by predetermined joints.
  - J. Consolidate concrete.
  - K. Maintain records of concrete placement. Record date, location, quantity, air temperature, and test samples taken.
  - L. Place concrete continuously between predetermined expansion, control, and construction joints.
  - M. Do not interrupt successive placement; do not permit cold joints to occur.
  - N. Place floor slabs in saw cut pattern indicated.
  - O. Saw cut joints within 12 hours after placing. Use 3/16 inch thick blade, cut into 1/3 depth of slab thickness.
  - P. Screed floors and slabs on grade level, maintaining surface flatness of F<sub>f</sub> of 25 maximum 1/8 inch in 10 ft.
  - Q. In areas with floor drains, maintain floor elevation at walls; pitch surfaces uniformly to drains at 1/8 inch per foot nominal unless otherwise indicated on drawings. Areas that have floor drains shall not be required to meet the levelness tests.

#### 3.4 CONCRETE FINISHING

- A. Provide formed concrete surfaces as follows:
  - 1. Rough formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
    - a. Apply to concrete surfaces not exposed to public view.
  - 2. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
    - a. Apply to concrete surfaces exposed to public view.
  - 3. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.
- B. Finish concrete floor surfaces in accordance with ACI 318.
- C. Steel trowel surfaces which are indicated to be exposed at interior spaces.

#### 3.5 CURING AND PROTECTION

- A. Immediately after placement, protect concrete from premature drying, excessively hot or cold temperatures, and mechanical injury.
  - 1. Protect concrete footings from freezing until the concrete has reached the specified 28 day strength and a minimum of 5 days.
- B. Maintain concrete with minimal moisture loss at relatively constant temperature for period necessary for hydration of cement and hardening of concrete.
- C. Cure concrete in accordance with ACI 308.1.
- D. Cure concrete and floor surfaces in accordance with ACI 301 and ACI 318.

#### 3.6 FIELD QUALITY CONTROL

- A. The contractor shall engage a qualified testing and inspecting agency to perform field special structural inspections and testing in accordance with the applicable International Building Code and to submit reports.
- B. The contractor shall be responsible for scheduling the tests. The contactor shall be required to notify the owner's representative a minimum of 48 hours prior to all placement of concrete.
- C. Provide free access to Work and cooperate with appointed firm.

- D. Submit proposed mix design of each class of concrete to inspection and testing firm for review prior to commencement of Work.
- E. Concrete Inspections:
  - 1. Continuous Placement Inspection: Inspect for proper installation procedures.
  - 2. Periodic Curing Inspection: Inspect for specified curing temperature and procedures.
- F. Strength Test Samples:
  - 1. Sampling Procedures: ASTM C172.
  - 2. Cylinder Molding and Curing Procedures: ASTM C31, 4"x8" cylinder specimens, standard cured.
  - 3. Sample concrete and make one set of four cylinders for every 75 cu yds or less of each class of concrete placed each day and for every 5,000 sf of surface area for slabs.
  - 4. When volume of concrete for any class of concrete would provide less than 5 sets of cylinders, take samples from five randomly selected batches, or from every batch when less than 5 batches are used.
  - 5. Make one additional cylinder specimen during cold weather concreting, and field cure.
- G. Field Testing:
  - 1. Slump Test Method: ASTM C143.
  - 2. Air Content Test Method: ASTM C231 normal weight concrete or ASTM C173
  - 3. Temperature Test Method: ASTM C1064.
  - 4. Measure slump and temperature for each compressive strength concrete sample.
  - 5. Measure air content in air entrained concrete for each compressive strength concrete sample.
- H. Cylinder Compressive Strength Testing:
  - 1. Test Method: ASTM C39.
  - 2. Test Acceptance: In accordance with ACI 318.
  - 3. Test one cylinder at 7 days.
  - 4. Test three cylinders at 28 days.
  - 5. Retain one cylinder for 56 days for testing when requested by Engineer.
  - 6. Dispose of remaining cylinders when testing is not required.
- I. Core Compressive Strength Testing: Notify Architect/Engineer prior to core testing.
  - 1. Sampling and Testing Procedures: ASTM C42.
  - 2. Test Acceptance: In accordance with ACI 318.
  - 3. Drill three cores for each failed strength test from concrete represented by failed strength test. Locate reinforcing steel and avoid damaging reinforcing steel when cores are drilled.
- J. Maintain records of concrete placement. Record date, location, quantity, air temperature and test samples taken.

#### 3.7 PATCHING

- A. Allow Architect/Engineer to inspect concrete surfaces immediately upon removal of forms.
- B. Excessive honeycomb or embedded debris in concrete is not acceptable. Notify Architect/Engineer upon discovery.

C. Patch imperfections in accordance with ACI 301 and ACI 318.

#### 3.8 DEFECTIVE CONCRETE

- A. Defective Concrete: Concrete not conforming to required lines, details, dimensions, tolerances or specified requirements.
- B. Repair or replacement of defective concrete will be determined by Architect/Engineer.
- C. Do not patch, fill, touch-up, repair, or replace exposed concrete except upon express direction of Architect/Engineer for each individual area.
- D. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or corrective work.

END OF SECTION 033000



ING

February 16, 2022

All Bidders on Howard-Cooper County Regional Port Authority Grain Bin Project

RE: Contractor Clarifications

Dear Bidders:

Clarifications to Contractor questions are below.

# **Contractor Clarifications**

- <u>Question</u>: "On Sukup bins, I can use a 17-ring bin with an eave height of 62'5" or I can use an 18-ring bin with an eave height of 66'-1". Which would you prefer based on your concrete design? In the specs it's a 64-2" eave height. Sukup and GSI use different ring sizes."
  - a. <u>**Response:**</u> The end goal of the Port Authority and their operator is to have a 240,000-bushel storage bin, our foundation design was based on this assumption. That said, please provide the bin eave height that gets them as close to 240,000 bushels as possible.
- 2. **Question:** "Where is the bin located?"
  - a. <u>**Response:**</u> The bin is to be field located with the owner and their operator within the limits of the bidding documents.
- 3. **Question:** "May the concrete ring walls be taller than specified in the contract documents?"
  - a. <u>Response:</u> The maximum ring wall height shall be 10'. Should the installing contractor feel they need to be taller, please coordinate with the Engineer of Record.
- 4. **Question:** "Is the 4' over excavation and rock fill required under the entire bin?"
  - a. <u>Response:</u> Please review the Geotechnical Report included in the project specifications. The over excavation and rock fill is required under the entire bin footprint.
- 5. **Question:** "What are the lengths of the reclaim conveyor and other appurtenant equipment?"
  - a. <u>**Response:**</u> Please review the appendices of the project specifications. The Owner's operator has developed sketches and specifications for the grain bin and grain bin appurtenant equipment that is included in the appendices. These items are to be field located and field verified with the Owner and the Owner's operator.

- 6. **Question:** "Are we allowed to use one tower for the catwalk in lieu of two towers?"
  - a. <u>Response:</u> It is acceptable to use one tower for the support of the catwalk. The towers shown in the Appendix are proposed only and the Contractor is responsible for the design of the tower(s) and the catwalk. A submittal of the proposed configuration / layout shall be provided by the Contractor for Owner/Owner's operator approval.
- 7. <u>Clarification</u>: Existing tower shall not support any additional loads.
- 8. <u>Question:</u> "Due to manufacturing constraints from the bin manufacturers, can the completion date be moved back if the bin is unavailable to be delivered and erected by June 15, 2022?"
  - a. <u>Response:</u> It is understood that due to the industry and timing of the project, the completion date of the grain bin, the grain bin foundation, and the appurtenant equipment is a challenge. The June 15, 2022 is applicable to the proof of purchase for all the materials required to complete the project. The June 15, 2022 date is also applicable to a completed bin foundation. The grain bin and its ancillary equipment shall be installed and operational by October 15, 2022.
- Question: "Who will be performing the construction material testing?" <u>Response:</u> Review the project specifications. The Contractor is responsible for engaging a qualified testing agency.
- 10. **Question:** "What are the required equipment capacities?"
  - a. <u>**Response:**</u> New equipment shall be 15,000 bph. Review the project specifications.
- 11. **Questions:** "What's the capacity of the existing equipment?"
  - a. **<u>Response</u>**: The existing equipment has a capacity of less than 10,000 bph.
- 12. Question: "Commercial or farm duty 10,000 bushel per hour capacity sweep?"
  - a. <u>**Response:**</u> Commercial sweep with capacity of 10,000 bph or daily bid paddle sweep with a 5,500 bph will be acceptable.
- 13. **Question:** "Is there a recommended manufacturer for bin sweep?"
  - a. **<u>Response</u>**: Open to any commercial sweep manufacturer.
- 14. Question: "Is there a recommended manufacturer for chain drag conveyor?"
  - a. **<u>Response</u>**: Open to any manufacturer of commercial grain handling equipment.
- 15. Question: "In regards to fill drag #1, plug switch? Chain slack switch?"

- a. **<u>Response</u>**: End relief door switch and slack chain switch required.
- 16. **Question:** "In regards to reclaim drag #2, plug switch? Chain slack switch?"
  - a. **<u>Response</u>**: End relief door switch and slack chain switch required.
- 17. Question: "What is the specification for the spouting?"
  - a. **<u>Response</u>**: Spouting shall be 7GA carbon steel.
- 18. **Question:** "How many total HP piles are available for the retaining wall?"
  - a. <u>**Response:**</u> There are 10 total 40ft long piles available.
- 19. **Question:** "Should the steel plates between the piles be driven or dug in?"
  - a. <u>**Response:**</u> The steel plates can be installed in either fashion, but the spacing and welding as specified on the project plans shall be adhered to.
- 20. <u>Question:</u> "Regarding the sheet piling, is it acceptable to move the piling centers from 8' 5" down to 8' 4" or 8' 3" in order to allow the sheet piling steel planks to be installed without having to be welded to the pilings?"
  - a. <u>**Response:**</u> Installing contractor to verify if temporary shoring is required based on limitations given in the geotechnical report. The temporary shoring shall be installed as detailed.
- 21. Question: "Who is providing the temporary shoring?"
  - a. <u>**Response:**</u> Shoring is provided by the Owner and installed / removed by the Contractor.
- 22. Question: "Are the bonds required to be carried for a year following completion?"
  - a. <u>**Response:**</u> Please review the project specifications, specifically the EJCDC documents.
- 23. Question: "Is the project exempt from sales tax?"
  - a. <u>**Response:**</u> See section 002113 Instruction to Bidders, 22.0 Sales and Use Taxes.
- 24. Question: "How can bids be submitted?"
  - a. <u>Response:</u> Bids can be mailed prior to the bid opening to the Port Authority Office. Bids can be hand delivered at the bid opening (prior to 10:00am). Bids can be emailed to the project engineer (<u>grisley@klingner.com</u>). Emailed bids must be time stamped on or prior to 10:00am on February 22, 2022. Calling to confirm receipt of emailed bids is recommended, Gavin Risley 217-779-3552.

- 25. <u>Clarification</u>: The existing conveyor pointing North will be removed prior to construction commencing.
- 26. Clarification: No side draws are required on the bin.
- 27. Question: "Where can spoils be hauled?"
  - a. <u>Response:</u> The Port Authority owns additional property down the road to the East from the project site. Spoils that are not used at the project site can be hauled and dumped on this additional property. The spoils do not need to be spread on this additional property.
- 28. <u>Question:</u> "Will construction staking be provided? Center of bin and x/y axis off set points for tunnel location layout."
  - a. <u>**Response:**</u> Construction staking is to be provided by the contractor. Bin placement is to be within the limitations of the bidding documents and coordinated with the owner and their operator.
- 29. <u>Question:</u> "S701 notes Final Grade: Adjust accordingly for access to tunnel, TYP. Considering the steep grade change, would retaining walls be required to maintain 4' minimum coverage over new footing at the Northern end?"
  - a. <u>Response:</u> The road to the North may be raised by a maximum of 4' using acceptable materials. The road must stay on the Owner's property. Coordinate the property lines with the Owner. The 4' minimum coverage over the new footing is required and if it is felt that a retaining wall is required by the contractor, then please state what will be provided in said contractor's bidding package.
- 30. <u>Question:</u> "S702 Please provide a detail for the W8 x 67 x 9'0" long beam at each tunnel access. Would this be a beam pocket and the beam would be a lentil or would it be cast in a concrete lentil?"
  - a. <u>**Response:**</u> See detail 5/S703. The beam is intended to be installed and cast in a concrete lintel.
- 31. **Question:** "Are we as to supply an electrical bid for the project?"
  - a. <u>**Response:**</u> Yes, based on electrical loads given by the grain bin and ancillary equipment manufacturers.
- 32. Question: "Are we to provide VFDs?"
  - <u>Response</u>: The Owner's operator will provide and install the VFDs later if required.

All Bidders on Howard-Cooper County Regional Port Authority Grain Bin Project February 16, 2022 Page 5

33. <u>Clarification:</u> Additional questions will be accepted until Friday, February 18, 2022. Questions must be submitted to Alan Balzer (<u>abalzer@klingner.com</u>) by 3:00pm on the date noted above.

# ATTENDANCE

Meeting Description:	Howard-Cooper Regional Port Authority Grain Bin Project Pre-Bid Meeting	_ Project #	20-0330
Time:	10am		
Place:	Project Site		
Date:	02/11/2022		
Page:	1 of 1		

# Attendees:

Name	Representing (if appropriate)	Phone Number	E-Mail address
Alan Balzer	Klingner & Associates, P.C.	N/A	N/A
Kendall Kircher	Port Authority	N/A	N/A
Mason Nichols	Seed & Farm	N/A	N/A
Shad Singleton	SMA	N/A	N/A
Ronnie	MFA	N/A	N/A
Greg White	Seed & Farm	N/A	N/A
Mike Ecton	Ecton Construction Inc.	N/A	N/A
Nathan Belstle	MFA	N/A	N/A
Travis Summers	CT Summers	N/A	N/A
Tug Summers	CT Summers	N/A	N/A
John Sponaugle	Port Authority	N/A	N/A
Amanda Schuster	Port Authority	N/A	N/A
Travis Button	CT Summers	N/A	N/A
Rodney Norder	Industrial Systems	N/A	N/A
Aaron Jones	Industrial Systems	N/A	N/A



616 North 24th Street • Quincy, IL 62301 217.223.3670 • 217.223.3603 (Fax) • www.klingner.com