KLINGNER & ASSOCIATES, P. C.
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February 18, 2022

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

BIDDING ADDENDUM 02

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 seventeen (17) – 8 1/2" x 11" pages including this cover sheet.

PROJECT MANUAL

1. Section 001113 Advertisement for Bids	**REPLACE** "The Howard-Cooper County Regional Port Authority will receive Bids for Grain Bin Project until Tuesday, February 22, 2022 at 10:00 a.m. local…" with "The Howard-Cooper County Regional Port Authority will receive Bids for Grain Bin Project until Tuesday, March 1, 2022 at 10:00 a.m. local…"
2. Section 312300 Excavation and Fill, 2.1, A, 1	**REMOVE** CP.
3. Section 312300 Excavation and Fill, 2.1, B	**REMOVE** MG and DH.
4. Section 321217 Aggregate Surface Course	**REPLACE** Section 321217 Aggregate Surface Course in its entirety.

ATTACHMENTS

Section 001113 Advertisement for Bids - (1 pg., 8.5 x 11)
Section 312300 Excavation and Fill – (11 pgs., 8.5 x 11)
Section 321217 Aggregate Surface Course – (2 pgs., 8.5 x 11)
Letter for Contractor Questions / Responses and Clarifications – (1 pg., 8.5 x 11)

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

END OF ADDENDUM 02

SECTION 001113

ADVERTISEMENT FOR BIDS

(Revised Addendum 2 – February 18, 2022)

The **Howard-Cooper County Regional Port Authority** will receive Bids for **Grain Bin Project** until **Tuesday, March 1, 2022** at **10:00 a.m.** local prevailing time, at **the MFA Training Center, 1761 Industrial Drive, Boonville, MO 65233** at which time and place all bids will be publicly opened and read aloud.

Bids are advertised as follows:

A new 72ft diameter grain bin is being proposed for construction adjacent to the Port Authority's existing grain bins. The project includes construction of the bin foundation, grain bin, and conveying systems.

A pre-bid conference is scheduled for Friday, February 11, 2022 at 10:00 am at the Project Location.

Contract documents including plans and specifications may be obtained electronically at no charge at www.klingnerplanroom.com. **Bidders may call the office of Klingner & Associates, P.C. at (217) 223-3670 and obtain a project key number for access.** Printing and shipping costs for hard copies are the responsibility of the Contractor. You must register with City Blue as a prime bidder or sub bidder to receive addendums and notices relative to the bid.

A certified check or bank draft, payable to the order of **Howard-Cooper County Regional Port Authority,** negotiable U.S. Government bonds (at par value) or a satisfactory Bid Bond executed by the Bidder and an acceptable surety in an amount equal to five percent (5%) of the total Bid shall be submitted with each Bid.

Attention is called to the fact that no less than the minimum salaries and wages as set forth in the Contract Documents must be paid on this project, and that the Contractor must ensure that employees and applicants for employment are not discriminated against because of their race, color, religion, sex or national origin.

The **Howard-Cooper County Regional Port Authority** reserves the right to reject any or all Bids or to waive any informality in the bidding.

Bids may be held by the **Howard-Cooper County Regional Port Authority** for a period not to exceed 45 days from the date of the opening of Bids for the purpose of reviewing the Bids and investigating the qualifications of Bidders, prior to awarding of the Contract.

January 25, 2022

By: Kendall Kircher

Title: Board President

END OF SECTION 001113

SECTION 312300
EXCAVATION AND FILL
(Revised Addendum 2 – February 18, 2022)

PART 1 - GENERAL

1.1 SUMMARY

A. Excavate, backfill, compact, and grade the site to the elevations shown on the Drawings, as specified herein, and as needed to meet the requirements of the construction shown in the Contract Documents. Work includes topsoil stripping, topsoil stockpiling, excavation, furnish embankment, preparation & compaction of subgrades for roadway, topsoil respreading and erosion control.

B. Related work:

1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 QUALITY ASSURANCE

A. Codes and Standards:
1. Perform Field Quality Controls Testing as specified herein.
2. Perform excavation and embankment work in compliance with applicable rules and regulations of DNR, MoDOT, and OSHA.
3. Obtain any necessary permits for this section of work and pay any fees required for permits.
4. The entire installation shall fully comply with all local and State laws and ordinances and with all established codes applicable thereto.

B. Testing and Inspection:
1. Cost of field and laboratory testing will be borne by the Contractor. Lab reports shall be simultaneously forwarded to the Owner, Contractor & Engineer.
2. Contractor shall cooperate with testing laboratory and geotechnical engineer in coordination of compaction tests.

1.3 REFERENCES

A. Standard Specifications for Highway Construction, 2018, Missouri Department of Transportation, herein noted as the Standard Specifications.

B. ASTM D698 Test Methods for Moisture Density Relations of Soils and Soil Aggregate Mixtures, Using 5.5 lb. Rammer and 12 inch Drop.

C. ASTM D1556 Test Method for Density of Soil in Place by the Sand Cone Method.

D. ASTM D2487 Classification of Soils for Engineering Purposes.

E. ASTM D6938 Test Method for Moisture Content of Soil and Soil Aggregate in Place by Nuclear Methods (Shallow Depth).

1.4 CONSTRUCTION STAKING AND SURVEYS

A. General: From lines and levels established by property survey, and as shown in relation to the work, Contractor to establish and maintain benchmarks, base lines, and other dependable markers to set lines and levels for the work.

B. Owner Property Surveys: Owner reserves the rights to hire an independent Engineer to survey the site for compliance with the contract documents. The Contractor will be required to correct all work not in compliance with the plans and specifications.

1.5 JOB CONDITIONS

A. Existing Utilities:

1. Locate existing underground utilities in areas of work. If utilities are to remain in place, provide adequate means of support and protection during demolition operations.
2. Underground utilities shown on the drawings have been taken from existing public records, Owner's records, and available as-built drawings and are indicated to the best of our knowledge and provided for information only.
3. Should uncharted, or incorrectly charted, piping or other utilities be encountered during excavation, consult utility owner immediately for directions. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities caused by Contractor's negligence to the satisfaction of utility owner at no cost to the Project Owner.
4. Do not interrupt existing utilities serving facilities occupied and used by Owner or others, during occupied hours, except when permitted in writing by Owner and then only after acceptable temporary utility services have been provided.
5. Provide minimum of 48-hours notice to Owner and Engineer and receive written notice to proceed before interrupting any utility.
6. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies for shut-off of services if lines are active.

B. Protection of Persons and Property:

1. Barricade open excavations occurring as part of this work and post with warning lights.
2. Operate warning lights as recommended by authorities having jurisdiction.
3. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by demolition operations.
4. Perform excavation within drip-line of large trees to remain by hand, and protect root system from damage or dry out to the greatest extent possible. Maintain moist condition for root system and cover exposed roots with burlap. Paint root cuts of 1" diameter and larger with emulsified asphalt tree paint.

C. Contract Limits:

1. Contract limits are shown on the drawing:

a. Contractor will maintain his construction operations within the contract limits.

b. Disturbance or damage occurring outside of the contract limits as a result of the Contractor's operations will be repaired to the original condition at no expense to the Owner.

1.6 SUBMITTALS

A. Samples: Submit, in air-tight containers, 50 lb. sample of each type of fill to testing laboratory.

B. Materials Source: Submit name of imported materials source.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS/DEFINITIONS

A. Satisfactory soil materials are defined as follows:
1. Those complying with ASTM D2487 soil classification groups CL, GC, GW, GM, ML, SC, SM, SW, and SP.
2. Predominately granular or non-expansive soils, free from organic matter and deleterious substances, containing no rocks over 3" in greatest dimension and having a minimum Standard Proctor Density of not less than 100 lbs./cu ft.
3. Material is subject to the approval of the A/E and may be removed from onsite excavations or imported from off-site borrow areas.
4. The upper 12" of fill or embankment shall not have rocks greater than 1" in dimension.

B. Unsatisfactory soil materials are defined as those complying with ASTM D2487 soil classification groups CH, OL, OH, PT, and any bedrock material.

C. Fill Materials:

1. The fill material type shall be cohesive, non-expansive soil having a "CL" or "CL-ML" classification in accordance with the Unified Soil Classification System and shall have a maximum laboratory dry density (100%) of 100 pounds per cubic foot or more as determined by ASTM D698 (Standard Proctor). Fill material placed beneath and within 10 feet structures or pavements shall have a liquid limit of less than 45% and a plasticity index of less than or equal to 22%
2. No organic dark colored soils or plastic and potentially expansive soils, such as clay shale, are considered suitable engineered fill materials. Topsoil should be sorted and stockpiled for landscaping purposes.
3. When fill material includes rock, the maximum rock size acceptable shall be three inches (3"). No large rocks shall be allowed to nest and all voids must be carefully filled with small stones or earth, properly compacted. No large rocks will be permitted within twelve inches (12") of the finished grade.

2.2 TOPSOIL

A. Topsoil shall consist of friable, fertile soil of a loamy character. It shall be relatively free from large roots, sticks, weeds, brush, or stones larger than 25mm (1 inch) in diameter, or other litter and waste products. At least 90 percent must pass the 2.00 mm (No. 10) sieve and the pH must be between 5.5 and 7.0.

B. Obtain topsoil from sources within the project limits, or provide imported topsoil obtained from sources outside the project limits, or from both sources.

C. Re-spread stripped topsoil to *six inches (6")* thick over all disturbed project areas designated as lawn/grass and to fill islands as shown. Use satisfactory soil materials meeting the requirements above.

2.3 GRANULAR FILL

A. Material consisting of crushed stone reasonably well graded from 1" to no more than 20% passing the 200 sieve.

B. Drainage Layers: Material consisting of clean crushed stone or gravel graded from 1" to no more than 5% passing the 200 sieve.

2.4 SOURCE QUALITY CONTROL

A. Section 014529 – Testing Laboratory Services: Testing and Inspection Services Testing and analysis of soil material.

B. Testing and Analysis of Subsoil Material: Perform in accordance with ASTM D698. ASTM D2167. ASTM D6938.

C. Testing and Analysis of Topsoil Material: Perform in accordance with ASTM D698. ASTM D2167. ASTM D6938.

D. If tests indicate materials do not meet specified requirements, change material and retest. Provide materials of each type from same source throughout the Work.

PART 3 - EXECUTION

3.1 SURFACE CONDITIONS

A. Examine the areas and conditions under which work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the Work. Do not proceed until unsatisfactory conditions are corrected.

3.2 FINISH ELEVATIONS AND LINES

A. Finish grading shall be to contours or elevations indicated on the drawings. Rocks and other debris unearthed during finish grading operations shall be removed from construction area and disposed of elsewhere.

B. The Contractor shall provide field engineering services as required but not limited to:

1. Establish and maintain lines and levels.
2. Structural design of shores, forms, and similar items as part of his/her means and methods of construction.

3.3 PROCEDURES

A. Utilities:

1. Unless shown to be removed, protect active utility lines shown on the Drawings or otherwise made known to the Contractor prior to excavating. If damaged, repair or replace at no additional cost to the Owner.
2. If active lines are encountered, and are not shown on the Drawings or otherwise made known to the Contractor, promptly take necessary steps to assure that service is not interrupted.
3. If service is interrupted as a result of work under this Section, immediately restore service by repairing the damaged utility at no additional cost to the Owner.
4. If existing utilities are found to interfere with the permanent facilities being constructed under this Section, immediately notify the Architect/Engineer (A/E) to secure instructions from the Owner or his/her onsite representative.
5. Do not proceed with permanent relocation of utilities until written instructions are received from the Owner or his/her onsite representative.

B. Protection of persons and property:

1. Furnish, install and maintain barricades, warning lights, and/or warning tape at open holes and depressions or other potential hazards occurring as part of this Work.
2. Operate warning lights during hours from dusk to dawn each day and as otherwise required.
3. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, washout, and other hazards created by operations under this Section.
4. Provide traffic control items in accordance with the Manual of Uniform Traffic Control Devices (MUTCD), and the requirements of the governmental agency having jurisdiction, when work is being complete on or adjacent to public streets and/or Right-of-ways.

C. Dewatering:

1. Prevent surface water and subsurface or ground water from flowing into excavations and from flooding project site and surrounding area.

2. Do not allow water to accumulate in excavations.

3. Remove all water, including rainwater, encountered during trench and substructure work to an approved location by pumps, drains, and other approved methods.
4. Keep excavations and site construction area free from water.

D. Storm Water Permit:

1. The project will result in disturbance of less than one (1) acre of land and compliance with the National Pollutant Discharge Elimination System (NPDES) Storm Water Permit is not required. The contractor shall be responsible for managing erosion control during construction as follows:

   a. The Contractor shall be responsible for developing and implementing a storm water pollution prevention plan in accordance with good engineering practice.
   b. The plan shall identify potential sources of pollution, which may be expected to affect the quality of storm water discharges. In addition, the plan shall describe and ensure the implementation of practices which will be used to reduce the pollutants in the storm water discharges associated with the project.

3.4 CLEARING AND STRIPPING

A. Clear the site by removing and disposing of all obstructions such as fences, walls, foundations, buildings, accumulations of rubbish of whatever nature, shrubs, bushes, saplings, grass, weeds, stumps and other vegetation to a depth of at least 12" below proposed ground surface or proposed subgrade, whichever is lower. Removed materials shall be properly disposed offsite.

B. After the area is cleared, strip topsoil to the depth of maximum 8" in areas of proposed structures or pavements.

C. Sufficient topsoil shall be stockpiled in an area clear of the proposed construction for placement to a depth of 4" in proposed areas of turf, plantings and to fill planters. Excess topsoil shall be removed offsite.

D. Subgrade preparation (at paving excavation and fill sections):

1. Scarify and proof roll or otherwise mechanically test subgrade in new paving areas and in building slab areas.

2. The Geotechnical Engineer will inspect the subgrade conditions and identify any unsuitable areas.

E. Additional Excavation:

1. Unsuitable areas will be undercut to a depth determined by the Geotechnical Engineer and replaced with suitable fill material compacted in accordance with fill compaction requirements specified herein.
2. Unsuitable soils excavated as undercut will be removed from site.
3. Rubble, debris, and rock excavated as undercut will be removed from the site and disposed of by the Contractor.
4. Removal or reworking of unsuitable material and its replacement, as directed, will be paid for on basis of contract conditions relative to changes in the work.

F. STOCKPILING
1. Stockpile materials on site at locations designated by Owner.
2. Stockpile in sufficient quantities to meet Project schedule and requirements.
3. Separate differing materials with dividers or stockpile apart to prevent mixing.
4. Prevent intermixing of soil types or contamination.
5. Direct surface water away from stockpile site to prevent erosion or deterioration of materials.
6. Material shall be stockpiled on impervious material and covered over with same material, until disposal.

3.5 EXCAVATING

A. Perform excavation within the project limits to the lines, grades, and elevations indicated and specified herein. Excavation is unclassified, and includes excavation to subgrade elevations indicated, regardless of character of materials and obstructions encountered.

B. Excavated Materials:

1. Satisfactory materials shall be used for fill or embankments within the project limits.
2. Unsatisfactory materials shall be excavated to a depth below grade sufficient to provide a suitable subgrade support and backfill and compact with satisfactory materials.

C. Surplus materials:

1. Dispose of unsatisfactory excavated materials, and surplus excavated material, offsite at disposal areas arranged and paid for by the Contractor.

D. Excavate and backfill in a manner and sequence that will provide proper drainage at all times.

E. Unauthorized Excavation:

1. Consists of removal of materials beyond indicated subgrade elevations or dimensions without specific direction of Geotechnical Engineer.
2. Unauthorized excavation, as well as remedial work directed by Geotechnical Engineer shall be at Contractor's expense.
3. Backfill and compact unauthorized excavations as specified for authorized excavations of same classification, unless otherwise directed by Geotechnical Engineer.

F. Borrow:

1. Obtain material required for fill or embankment in excess of that produced within the grading limits of the project from borrow areas identified and approved by the Owner or his/her representative as indicated on the Drawings.

G. Stability of Excavations:

1. Perform excavations and trenches in accordance with OSHA excavating and trenching rules and regulations.
2. Slope sides or shore and brace where sloping is not possible because of space restrictions of stability of the materials being excavated.
3. Maintain sides and slopes of excavations in a safe condition until completion of backfilling.

H. Excavating for Structures:

1. Excavate to elevations and dimensions shown within a tolerance of 0.05ft., and extending a sufficient distance from footings and foundations to permit placing and removing concrete formwork, installation of services and for inspection.
2. Excavation for footings and foundations shall not disturb the bottom of the excavation:

    a. Excavate and trim with hand tools as necessary to final grade just before concrete is placed.

I. Excavating for pavements:

1. Excavate subgrade under pavements to within 0.05 ft of the proposed subgrade.
2. Prepare subgrade as specified herein.

J. Cold weather protection:

1. Protect excavation surfaces from freezing when an atmospheric temperature is less than 35 degrees F.

3.6 FILLING AND BACKFILLING

A. Backfill excavations as promptly as progress of the Work permits, but not until:

1. Acceptance of construction below finish grade.
2. Concrete formwork is removed.
3. Shoring and bracing are removed, and voids have been backfilled with satisfactory materials.
4. Trash and debris have been removed.

B. Ground surface preparation:

1. Remove vegetation, topsoil, obstructions, and deleterious materials from the ground surface prior to placement of embankment per Section 3.4.
2. Disk area to a depth of 8”, unless sand or aggregate. Proof roll and prepare the surface per Section 3.8. Unsuitable material or material not achieving the specified density and moisture requirements after three consecutive good drying days of moisture conditioning and compaction, consisting of at least two processing’s utilizing discs or tillers, shall be removed and/or replaced, or shall be further treated per instructions of the soils engineer. Additional work required after the three-day conditioning period to stabilize the material, when approved in writing by the Owner or his/her representative, shall be performed in accordance with Article 10 of the General Conditions.

C. Placing and compacting:

1. Place backfill and fill materials in layers not more than 8" in loose depth, unless otherwise approved by the A/E.
2. Before compacting, moisten or aerate each layer as necessary to provide the specified moisture content.
3. Compact each layer to required percentage of maximum density for the area.
4. Do not place backfill or fill material on surfaces that are muddy, frozen, or containing frost or ice.
5. Place backfill and fill materials evenly adjacent to structures, to required elevations.
6. Prevent wedging action of backfill against structures by carrying the material uniformly around the structures to approximately the same elevation in each lift.
7. The building embankment shall be constructed at minimum 5 feet beyond the proposed building line and pending approval of the compacted fill, shall be cut back at a 1:1 slope extending from the top of the proposed footing to 4 feet inside the building wall.
8. Placement of granular drainage material beneath the floor slab will be completed by the Building Contractor.

3.7 GRADING

A. General:

1. Uniformly grade the areas within project limits under this Section, including adjacent transition areas.
2. Finished surfaces within specified tolerance.
3. Compact with uniform levels or slopes between points where elevations are shown on the Drawings, or between such points and existing grades.
4. Where a change of slope is indicated on the Drawings, construct a rolled transition section having a minimum radius of approximately 8'-0", unless adjacent construction will not permit such a transition, or if such a transition defeats positive control of drainage.

B. Grading inside building lines:

1. Provide drainage away from structures during construction of the embankments to prevent ponding.

2. Finish surface within 0.05 foot of the proposed subbase elevation.

C. Grading outside building lines:

1. Provide drainage in areas adjacent to buildings away from the structures, and to prevent ponding.
2. Finish areas under walks and pavements to within 0.05 ft above or below the required subgrade elevation.

3.8 COMPACTING

A. Control material compaction during construction to provide the minimum Standard Proctor Density (SPD) specified, within moisture requirements, for each area as determined according to (ASTM D 698).

B. Place fill in 6”-8” uniform lifts.

C. Provide not less than the following minimum densities for layer or lift of material placed:

Standard Proctor (ASTM D698)		
Construction Type	**Cohesive Soils**	**Cohensionless Soils**
Pavements, Roadway, and critical backfill area beneath same; e.g., trenches.	98%	98%
Lawn areas. Non-critical areas – moderate subsidence possible.	85%	88%

D. Moisture Control and Soils Content:

1. Moisture content for compaction purposes shall be within the range of 3% below to 3% above optimum moisture as established by ASTM D698.
2. Existing ground surface or embankment layer of material if necessary, shall be moisture-conditioned before compacting by:

   a. For material below specified moisture parameters, uniformly apply water to surface of the material and incorporate with a disk or tiller in a manner to prevent free water from appearing on the surface during or subsequent compaction operations.
   b. For material above the specified moisture parameters, air dry with disks and tillers.
   c. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density. at the Contractor’s expense.

3. Process material to provide uniform moisture and clod reduction throughout.
4. Unsuitable material removed due to high moisture may be spread and allowed to dry until suitable.

E. Proof roll:

1. Prior to placement of granular subbase material on building and pavement areas, the subgrade shall be "proof rolled" with a pneumatic-tired, a three-wheel, or a tandem roller. The rollers shall weigh from 6 to 10 ton and develop not less than 200 pounds or more than 325 pounds per square inch of roller or tire surface. Any areas of significant deflection shall be removed and recompacted until stable.

3.9 EROSION PROTECTION

A. The Contractor shall comply with soil erosion control requirements of the Missouri DNR and the local ordinances. The Contractor shall take all necessary measurements to protect against erosion and dust pollution on this project site and all off-site borrow or deposit areas, during performance or as a result of performance.

B. The Contractor shall take all steps necessary to protect adjoining property, including public sanitary and storm drainage systems and streets, from any damage resulting from the movement of earth or other debris thereto from the site; and such steps as are necessary to prevent the accumulation of earth or debris on adjoining public or private property from the construction site. The Contractor shall take into consideration all factors which might cause the movement of earth or debris from the construction site onto any adjoining public or private property.

C. The Contractor shall take immediate corrective action should damage occur to adjoining public or private property (including sanitary or storm drainage systems and streets). The Contractor shall take immediate corrective action to remove any debris should any earth or other debris move from the construction site to adjoining public or private property. Further, the Contractor shall take steps required to prevent the repetition of any instance where dirt or other debris moves from the construction site to adjoining public or private property.

D. The Contractor will hold the Owner harmless from any and all claims of any type whatsoever resulting from damages to adjoining public or private property, including reasonable attorney's fees incurred to Owner. Further, if the Contractor fails to take necessary steps to promptly remove earth or debris which comes onto adjoining public or private property, the Owner may, but need not, remove such debris and deduct the cost thereof from amounts due the Contractor.

E. The Contractor shall maintain storm sewer systems throughout construction and provide erosion control measures acceptable to protect against siltation and erosion or any adverse conditions resulting from storm water. Use silt fence and other means at all intakes and outfall structures and at all locations where erosion or siltation is anticipated or occurring; including drainage courses and swales.

3.10 FIELD QUALITY CONTROL

A. The Contractor shall provide testing services of a soils engineer and/or independent laboratory approved by the Owner.

B. Upon completion of each test and/or inspection, promptly distribute copies of test or inspection reports to the A/E.

C. Testing Requirements:

1. Standard Proctor Density/Moisture (ASTM D 698):

a. 1 per the insitu fill material.

b. 1 per each source of offsite fill material.

2. Field density/moisture tests (ASTM D6938):

a. Paved Areas: 1 per 5000 sq ft per 8" lift.

3.11 NATURAL AND ARTIFICIAL DRAINAGE

A. If necessary, during the progress of the work, to interrupt the natural drainage of the surface water, Contractor shall provide approved temporary drainage facilities.

B. If necessary, to interrupt any field tile drains that might be encountered in this work, the Contractor shall restore or extend drains as necessary.

3.12 DISPOSAL OF EXCESS AND WASTE MATERIALS

A. Removal from Project Site: Remove excess soils, including unacceptable excavated material, from site to an approved location on the coordinate with owner.

B. Remove from the Owner's Property waste materials, trash, debris, utility pipes, etc. to an approved legal waste site.

3.13 MAINTENANCE

A. Protection of newly graded areas:

1. Protect newly graded areas from traffic and erosion, and keep free from trash and weeds;
2. Repair and reestablish grades in settled, eroded, and rutted areas to the specified tolerances.

B. Where completed compacted areas are disturbed by subsequent construction operations or adverse weather, scarify the surface, reshape, and compact to the required density prior to further construction.

3.14 CERTIFICATION

A. Upon completion of this portion of the work, and as a condition of its acceptance, deliver to the Owner or his/her site representative a written report from the independent soils engineer or testing laboratory certifying that the compaction requirements have been obtained. Include in the report the soil classification, standard proctor density, optimum moisture content and plasticity index of the onsite and borrow materials used in the areas of embankment.

END OF SECTION 312300

SECTION 321217
AGGREGATE SURFACE COURSE
(Revised Addendum 2 – February 18, 2022)

PART 1 - GENERAL

1.1 SUMMARY

A. Provide aggregate surface course where shown on the Drawings, and as specified herein.

B. Work shall consist of preparing the completed subgrade. It shall include shaping and final compaction of the subgrade material for the construction of the surface course.

1.2 REFERENCES

A. *Standard Specifications for Highway Construction*, 2021, Missouri Department of Transportation (MODOT) herein noted as the Standard Specifications.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Provide materials in accord with referenced Articles in the Standard Specifications.

B. Aggregate:

1. Section 1006 – Grade B

PART 3 - EXECUTION

3.1 GENERAL

A. The entire subgrade shall be prepared by removing all vegetation, filling all depressions, and bringing the surface to grade. Soft and unsuitable material that will not compact when rolled or tamped shall be processed as described below or removed, disposed and replaced with suitable material.

B. The subgrade shall be compacted to 95 percent of standard proctor density.

C. In cut sections the Contractor shall take the following steps to obtain not less than 95% of the standard proctor density in the subgrade.

1. Step 1 - Cut plan ditches which are to drain the area at least two weeks prior to Step 2
2. Step 2 - Air dry the top 8” of the subgrade. This procedure shall include at least two 8” depth processings utilizing discs or tillers each day for three consecutive days.

3. Step 3 - Recompact the layer processed in Step 2 to achieve the required density or until a roller which has the ability to obtain the density has made at least 9 passes over the area.

D. If the subgrade does not meet the density requirements after processing, the Engineer shall be notified to determine how the density shall be obtained. Work completed after processing to obtain a satisfactory subgrade density in an area shall be paid for as Extra Work.

3.2 AGGREGATE SURFACE

A. General: The subgrade shall be constructed so that after being compacted, it will conform to the alignment, grade and cross section shown on the plans prior to placement of the Aggregate Surface Course.

B. The aggregate surface shall be constructed to the thickness shown on the plans. The aggregate shall be placed such that the required amount of material will be deposited uniformly along the central portion of the roadbed and spread to the proposed cross section. When the constructed thickness is less than 90% of the thickness shown on the plans, aggregate shall be added to obtain the required thickness.

C. The aggregate shall be compacted to 98% standard proctor density.

END OF SECTION 321217

KLINGNER
& ASSOCIATES, P. C.
Engineers • Architects • Surveyors

616 N. 24th Street • Quincy, IL 62301 • voice 217.223.3670 • fax 217.223.3603

February 18, 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

1. **Question:** "Is it acceptable to use 1" clean rock as fill inside the bin walls?"
    a. **Response:** Fill within the bin foundation walls shall meet Project Specification Section 312300 for granular fill. The fill within the bin foundation walls shall also meet the aggregate fill requirements as described in the Geotechnical Report section related to the grain bin.

2. **Question:** "Does the Project Manual require the successful contractor to do any road work?"
    a. **Response:** It is the responsibility of the contractor to ensure that truck traffic has a sufficient road and space around the new grain bin on the North and East sides upon completion. Should damage be done to the existing road, it shall be repaired to its existing condition or better using aggregate as described within the Project Specification Section 321217.

3. **Clarification:** Due to the bid extension, additional questions will be accepted until Friday, February 25, 2022. Questions must be submitted to Alan Balzer (abalzer@klingner.com) by 3:00pm on the date noted above.