ADDENDUM NO. 4 (RE-BID) SECTION 00 91 13

TO: DRAWINGS and SPECIFICATIONS

FOR: ASU Grain Bin

May 17, 2024

This Addendum forms a part of the Contract Documents and modifies or interprets the Project Manual and Drawings, as noted below.

GENERAL:

1. The stainless steel cables and displays referenced on 5/A-1.2 and 3/A-4.2 will be by the owner. They are not included in the bid but shown only for reference.

SPECIFICATIONS:

- 1. Section 01 23 00 Alternates; Paragraph 3.1.A.2: ADD sentence as follows: "Add an eybrow canopy at Door 100/2, identical to one specified at door 100/1 if Alternate #2 is accepted."
- 2. Section 05 73 00 Metal Railings: ADD section attached.
- 3. Section 07 54 23 TPO Single Ply Membrane Roofing; Paragraph 2.2.B: OMIT paragraph in its entirety.

DRAWINGS:

- 1. Sheet A-0.1: REPLACE sheet with revised attached.
- 2. Sheet A-1.1: REPLACE sheet with revised attached.
- 3. Sheets P-1.1 & P-3.1: CHANGE label at the water fountain from previous P-4 to P-7. P-7 to be Elkay Push Button, ADA compliant drinking fountain/cooler, wall mounted. Provide water and drain connections as required.

ATTACHMENTS: Section 05 73 00 Metal Railings (4 pages); Drawings A-0.1 (1 sheet) & A-1.1 (1 sheet)

END OF ADDENDUM NO. 4 (RE-BID)

SECTION 05 73 00

METAL RAILINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Steel and iron decorative railings.
- B. Related Sections:
 - 1. Section 09 91 00 Painting

1.2 PERFORMANCE REQUIREMENTS

- A. Structural Performance: Railings shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:
 - 1. Handrails and Top Rails of Guards:
 - a. Uniform load of 50 lbf/ft. applied in any direction.
 - b. Concentrated load of 200 lbf applied in any direction.
 - c. Uniform and concentrated loads need not be assumed to act concurrently.
 - 2. Infill of Guards:
 - a. Concentrated load of 50 lbf applied horizontally on an area of 1 sq. ft.
 - b. Infill load and other loads need not be assumed to act concurrently.
- B. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.3 SUBMITTALS

- A. Product Data: For the following:
 - 1. Manufacturer's product lines of railings assembled from standard components.
 - 2. Grout, anchoring cement, and paint products.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.
- C. Samples: For each type of exposed finish required.

05 73 00-1

1.4 QUALITY ASSURANCE

A. Product Options: Information on Drawings and in Specifications establishes requirements for system's aesthetic effects and performance characteristics. Do not modify intended aesthetic effects, as judged solely by Architect, except with Architect's approval.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Julius Blum & Co. is specified, or approved equal.

2.2 METALS, GENERAL

A. Brackets, Flanges, and Anchors: Same metal and finish as supported rails unless otherwise indicated.

2.3 STEEL AND MALLEABLE IRON

- A. Tubing: ASTM A 500 (cold formed).
- B. Moldings, Bars: Hot-rolled, carbon steel complying with ASTM A 29/A 29M, Grade 1010. In profiles shown on drawings.
- C. Plates, Shapes, and Bars: ASTM A 36/A 36M.
- D. Cast Iron: Either gray iron, ASTM A 48/A 48M, or malleable iron, ASTM A 47/A 47M, unless otherwise indicated.

2.4 FASTENERS

- A. Fastener Materials: Unless otherwise indicated, provide either stainless steel or hot dipped galvanized.
- B. Anchors, General: Anchors capable of sustaining, without failure, a load equal to six times the load imposed when installed in unit masonry and four times the load imposed when installed in concrete, as determined by testing according to ASTM E 488, conducted by a qualified independent testing agency.

2.5 MISCELLANEOUS MATERIALS

A. Etching Cleaner for Galvanized Metal: Complying with MPI#25.

- B. Galvanizing Repair Paint: High-zinc-dust-content paint complying with SSPC-Paint 20 and compatible with paints specified to be used over it.
- C. Shop Primers: Provide primers that comply with Section 099100 "Exterior Painting".
- D. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.

2.6 FABRICATION

- A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.
- B. Connections: Fabricate railings with welded connections unless otherwise indicated.
- C. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.
 - 1. At exposed connections, finish exposed welds to comply with NOMMA's "Voluntary Joint Finish Standards" for Type 1 welds: no evidence of a welded joint.
 - 2. At exposed connections, finish exposed surfaces smooth and blended so no roughness shows after finishing and brazed surface matches contours of adjoining surfaces.
- D. Bend members in jigs to produce uniform curvature for each configuration required; maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.
- E. Close exposed ends of hollow railing members with prefabricated end fittings.
- F. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated.
- G. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.

2.7 STEEL AND IRON FINISHES

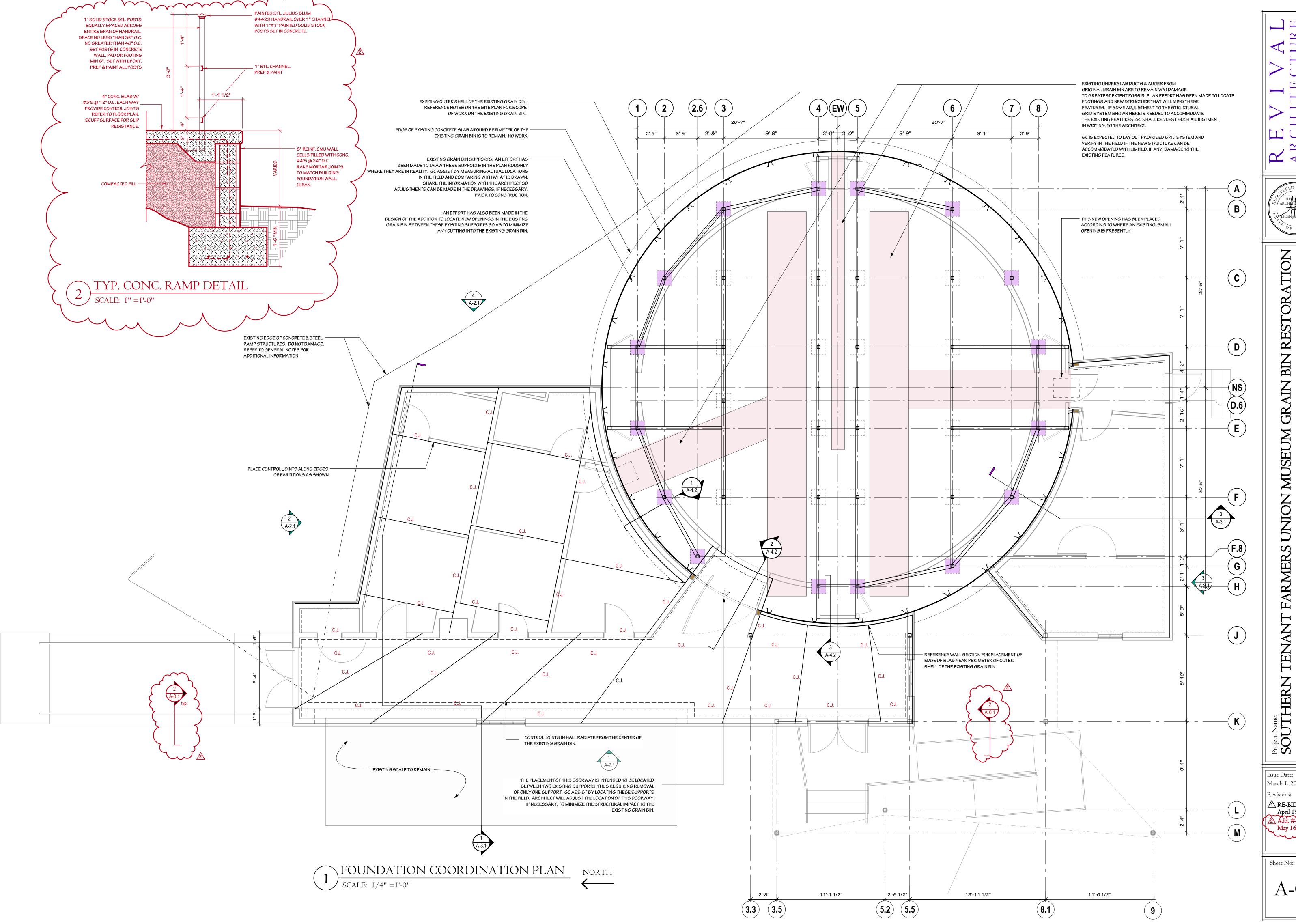
- A. Preparing Non-galvanized Items for Shop Priming: Prepare uncoated ferrous-metal surfaces to comply with SSPC-SP 6/NACE No. 3, "Commercial Blast Cleaning."
- B. Primer Application: Apply shop primer to prepared surfaces of railings unless otherwise indicated. Comply with requirements in SSPC-PA 1.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.
 - 1. Set posts plumb within a tolerance of 1/16 inch in 3 feet.
 - 2. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.
- B. Corrosion Protection: Coat concealed surfaces that will be in contact with grout, concrete, masonry, wood, or dissimilar metals, with a heavy coat of bituminous paint.
- C. Use steel pipe sleeves preset and anchored into concrete for installing posts. After posts have been inserted into sleeves, fill annular space between post and sleeve with grout.
- D. Form or core-drill holes not less than 5 inches deep and 3/4 inch larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with grout.
- E. Anchor posts to metal surfaces as indicated using fittings designed and engineered for this purpose.
- F. Anchor railing ends to concrete and masonry with brackets on underside of rails connected to railing ends and anchored to wall construction with anchors and bolts.
- G. Attach handrails to walls with wall brackets except where end flanges are used.
- H. Touchup Painting: Immediately after erection, clean field welds, bolted connections, and abraded areas of shop paint, and paint exposed areas with the same material as used for shop painting to comply with SSPC-PA 1 for touching up shop-painted surfaces.

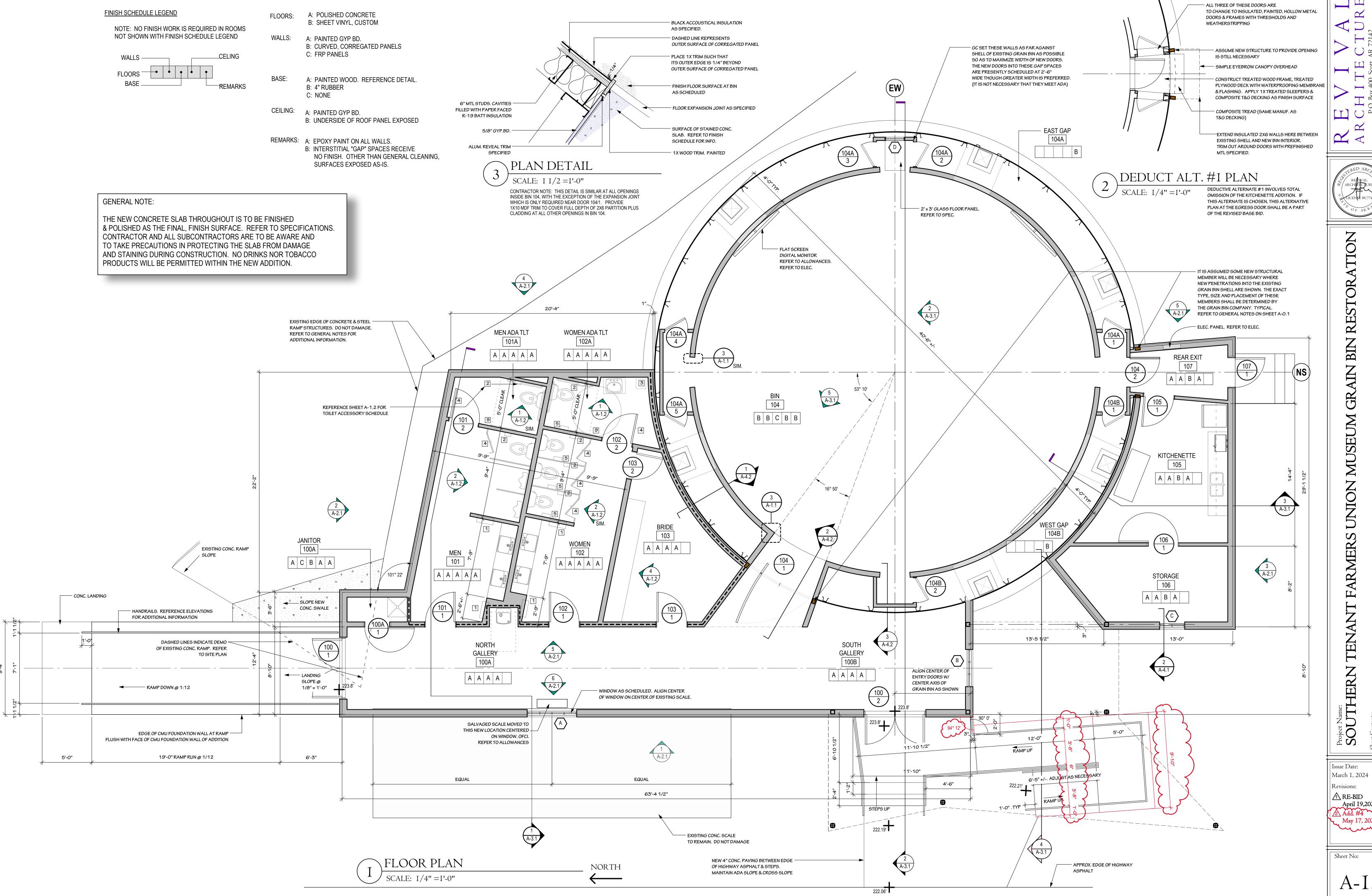
END OF SECTION



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March I, 2024 ⚠ RE-BID

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Sheet Contents: FLOOR April 19,2024 Add. #4 May 17, 2024

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