



March 12, 2025 SC 23070.00

ADDENDUM NO. 4

To the Contract Documents for:

BICENTENNIAL BARN - MCCAMMON CREEK PARK

6844 Bale Kenyon Road Lewis Center, OH 43035

TO ALL BIDDERS:

This Addendum supplements and amends the original Bidding Documents, shall be taken into account in preparing bids, and shall become a part of the Contract Documents.

The following documents are a part of and are issued with this Addendum and are attached to this Addendum.

Bidder Questions and Answers Section 03 35 43 – Stained Concrete Finishing

ITEM 1 BIDDER QUESTIONS AND ANSWERS

Revised document is attached in this addendum.

SPECIFICATIONS

ITEM 2 SECTION 03 35 43 - STAINED CONCRETE FINISHING

Section replaces one issued in Addendum 2.

END OF DOCUMENT

300 Marconi Boulevard Columbus, Ohio 43215

T 614 628.0300 F 614 628.0311



BIDDERS QUESTIONS AND ANSWERS

PROJECT: Bicentennial Barn-McCammon Creek Park

DATE: 3/12/2025

ADDENDUM 2 (Revised and reissued with Addendum 4)

Q1. Detail 1B on Sheet A404 refers to a ridge roof alternate and I don't see this referenced anywhere else.

- A. Two options are presented for insulating the barn roof cavity. Contractors may choose either assembly.
- Q2. Is there an alternate to use SIP panels in lieu of batt insulation?
 - A. We will consider SIPs as a substitution request.
- Q3. Is there a 3-coat finish on the standing seam roofing? Also, does the gutter have the same finsh as the standing seam roofing?
 - A. Change to a two-coat fluoropolymer finish system on standing seam meatal panels. Yes, the gutter below the standing seam panels is the same finish/color at the addition.
- Q4. Elevation S-2 is the interior storefront entrance, why is the bird glass film required for this elevation? Can you clarify/confirm that this is correct and should not be 1/4" glass?
 - A. Bird glass is not required for this interior storfront assembly, and glazing is to be ¼ inch clear tempered glass.
- Q5. Are there any specific ULs or rated walls? General note I on sheet A102 says all partitions are Type 64-B unless noted otherwise. Is this the case? All partitions on sheet A102 are type 64-B? If not, please provide partition tags for new wall assemblies that are not Type 64-B that are shown on sheet A020
 - A. There are no rated walls, please note the "Acoustic Partitions by Location" on Ao2o. Refer to updated plans in Addendum 2 for other wall type locations.
- Q6. [STRUCTURAL] Will you waive the AISC certification program requirement for the structural steel on this project? It's spec section 051200, 1.02, B, 2. For steel contractors that follow AISC standards, but do not participate in the certification program.
 - A. We are okay with waiving the AISC certification requirement in the structural steel specification. However, it is important to note that per the Ohio Building Code, special inspections are required during fabrication if the contractor is not AISC certified. These special inspections will incur an additional cost to the Contractor.

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- Q7. Are contractors responsible for pricing the letters on the west elevation of the building? They are shown in the drawings but are not detailed in the drawings or mentioned in the specifications.
 - A. This signage will be owner provided and contractor installed.
- Q8. [MECHANICAL] Would the owner be open to using Trane as an approved BAS system manufacturer/ contractor for controls?
 - A. Substitions should be submitted with contractor bids. The specification contains 6 different BAS manufacturers currently.
- Qg. Referencing bid set drawings A103 Roof coded Notes R5 and R4 indicate use of Galvanized gutter and galvanized gutter. o7 3126 2.02 Has copper sheet metal flashings and 2.05 indicate use of brass snow guards with copper straps. While possible to paint the interior of gutter services to prevent galvanic action as indicated in o7 92 oo 3.02 B, this would not prevent galvanic actions of the downspouts. Please advise on correct action or change in materials.
 - A. Coded notes R4 and R5 are correct as shown on the Roof Plan as galvanized steel half-round gutter and galvanized steel round downspouts. The gutters and downspouts on the new construction portions are aluminum with Kynar painted finish. Architect will add coded note R9 to the roof plan for kynar finished aluminum gutters and downspouts at the addition.
- Q10. Current barn structure has galvanized painted ridge roll. 07 31 26 -3.05 D 3-4 indicate installing saddle ridge instead of historic ridge roll. Please confirm.
 - A. The intent is to match or reuse the existing system at the ridge.
- Q11. Addendum AD101 Demolition General Notes H: regarding cleaning of all salvaged materials. Does this include salvages slates and salvaged lightning rod, lightning rod cable and weathervane. If slate is to be included, it would be recommended for cleaning to be done after installation so that any slate that has been replaced due to breakage will match.
 - A. This demolition note is intended for wood timber framing and siding of the existing barn structure. Note that the method of cleaning was changed in Addendum 1. Cleaning of slate tiles to be done with the most gentle means available; lightning rods and weathervanes to be restored for reuse.
- Q12. What are Door Types: DH62, DH63?
 - A. Refer to Addendum 2 updated door schedule A610
- Q13. Several of the wood doors are only 1-3/8" thick, but they install in hollow metal frames. Is it Ok to switch these doors to a 1-3/4" commercial grade door thickness?
 - A. Yes, all wood doors are to be 1-3/4 inch thickness. Refer to Addendum 2 updated door schedule A610.
- Q14. Door 209B installs in the same wall as 209A, however Elevation 4 on A701 shows this door looking almost like a "hidden" door, matching the surrounding wall (with no horizontal rails). That elevation does not match the WD1 elevation on the Door Schedule Drawing A610, where the same door is just shown as a standard stile and rail door. Please advise which is correct?
 - A. Door schedule is correct, A701 has been updated, Refer to Addendum 2 updated door schedule A610.

- Q15. Please confirm the intent is for the barn ceiling to be insulated from the top side (whether batt and rigid or spray foam)
 - A. Yes, correct.
- Q16. Please confirm the desired R-value for the barn roof insulation. Also, the drawing details appear to show 1-1/2" rigid insulation under the batt, but it notes an R-value of 15, which would be 3" thick. Please confirm.
 - A. Minimum R-30 for the assembly, 1-1/2" of XPS would be around R-7.5. Sheet Ao10 was reissued in Addendum 2.
- Q17. Has anyone confirmed the length x width of the existing slate on the barn? Spec book only has thickness
 - A. No, this will need to be determined during at the start of disassembly of the barn.
- Q18. We noticed that the door schedule does not include the hardware set numbers for each door. Can we get that added to the drawings?
 - A. Updated in Addendum 1, also shown in Addendum 2 sheet A610.
- Q19. The sheet in question is, A201 Exterior elevations, North and South. It calls out for concrete faced panels but does not include dimensions. Can you provide some clarification on this? North elevation calls and shows it for it, but does not show like the South elevation.
 - A. Concrete Faced Panels to extend to a minimum of 12" above exterior grade, siding above to lap over concrete faced panels by a minimum of 2". Refer to Detail 2/A400. Coordinate with civil grading plans.
- Q20. Can they provide more information on the projection system? The plan says see architectural but I am not finding anything in architectural to tell me what projection system they want.
 - A. This will be owner provided and contractor installed. The client wishes to make final product determinations once the barn interior is rebuilt.
- Q21. SC-1 on the finish schedule says stain and seal, spec section 099723.1. The stained concrete spec is 033543 and it is to be polished. Should SC-1 be a stain and seal or polish and stain?
 - A. Lightly ground, stained and sealed concrete. Updated spec section is attached.
- Q22. WB-1 The finish schedule calls for 4" The specs call for 6". Can we clarify if this is to be 4 or 6. Does this need to be Thermoset Rubber per the spec?
 - A. Finish Schedule is correct.
- Q23. [PLUMBING] Detail 4 on P601 shows a detail for the exterior downspout connection. No such connection is shown on the plans. Please clarify the intent of this detail.
 - A. This detail will be deleted. The connection to the downspouts is to be provided by the General Contractor and is included in the Civil Drawings.

- Q24. With the intent to reinstall refurbished wood barn siding, can you provide an allowance for siding that is not salvageable?
 - A. Salvaged barn siding is only used on the main floor interior inside the Barn event space and is no longer used as exterior siding. Because of the removal of the Lean-To as well as the lower floor of the barn we believe there is sufficient existing materials without the need for an additional allowance.
- Q25. As per section o1 35 91 part 1.02 B., PROTECTION OF SITE AND HISTORIC PROPERTIES, the link provided does not provide much information regarding a COA/ permit and who the local preservation commission will be for this project. Please clarify and provide more information if this was submitted with the original building permit or is on the prime contractor to provide with costs associated.
 - A. This section was simply provided to acknowledge the historic nature of this project and to provide practices in the care and treament of existing materials to be removed and salvaged for reuse in the reconstruction.
- Q26. [CIVIL] Per sheet C103, the area with the diamond hatching...is any work to be completed in this area in the base bid?
 - A. This diamond hatched area is not included in the Base Bid. This area will remain as existing gravel drive in the base bid. Paving the drive should only be included in the alternate.
- Q27. [CIVIL] Per sheet C106, will an additional grading plan for Alternate C be issued, or are we to use the grading in this area per C200?
 - A. Sheet C207 shows the Alternate C grading plan.
- Q28. [ELECTRICAL] I2 and I3 listed on E501 are 277V. These should be 120V since there is no 277/480V being ran to the building.
 - A. Correct, there should only be 120V. Emergency lighting will be split into 2 circuits, and require 1 600W 120V inverter for each circuit. See updated drawings in Addendum 2 for clouded corrections.
- Q29. [ELECTRICAL] Are the (6) circles on the columns lines supposed to be floor mounted pokethroughs, or surface mounted receptacles? (Sheet E301)
 - A. They are intended to be flush floor mounted receptacles. The electrical symbols list on sheet Eoo has been updated to clarify this in Addendum 2.
- Q30. [ELECTRICAL] What is the intended route and length for coded note #3? Do we stub them right out the building like a sleeve, or are the supposed to come out 20ft as they are drawn? (Sheet E301)
 - A. Conduits are to be stubbed and capped from the ground floor to 5 feet outside the building for future use. Coded note 3 on Sheet E301 has been updated to clarify this in Addendum 2.
- Q₃1. [ELECTRICAL] Coded note #5 states the company switch is 200a as shown on the 1-line. The circuit on the floor plan is to panel B, which is 20a. Which is it?
 - A. The one-line is correct in showing the company switch powered from DBA at 200A

- Q_{32} . [MECHANICAL] Per specs.: all exposed duct will be wrapped, but states that it's also paint grip. If it's exposed, should it be quoted as single wall, no liner or shoull it be line w/ (fiberglass 1" liner internally) and make it paint grip?
 - A. Detail Spec Sections 23 07 05 and 23 31 10 were re-issued in Addendum 2 with the intent to clarify the below questions:

There are no spaces with exposed ductwork that require "paint grip finish". All spaces with exposed ductwork are in the ground floor mechanical room, "Ground Floor Shell Space" or "Storage Room 207", none of which require the ductwork to be painted. This requirement will be removed from spec. In addition, PVC jacketing for exposed ductwork will be removed from spec (except for ductwork in attic which needs extra protection).

Regarding insulation, I could not find the statement in the spec "all exposed ductwork will be wrapped". The intent of the design is for the following ducts to be "internally lined (so no external insulation unless it passes up into the attic space). (Spec 23 31 10): "1) all return air ductwork to the fan coil units, 2) all transfer air ductwork.

Additional ductwork insulation requirements (Spec 23 o7 o5) calls for the following ductwork to be insulated: "1) supply (this includes fan coil supply and DOAS supply), 2) return/exhaust ducts and transfer air duct in the attic space".

The insulation spec says to wrap the following: 1) exposed round, 2) concealed round, 3) concealed un-lined rectangular.

The insulation spec says to provide board insulation for the following: 1) exposed un-lined rectangular. The insulation spec says to provide closed-cell elastomeric for the following: 1) exposed ductwork in the attic.

- Q33. [MECHANICAL] We do not make double wall plenums. I can quote them as lined though.
 - A. As an alternate to solid double-wall plenums, we will include the insulation criteria for the Outside Air Intake and Exhaust /Relief plenums. The plenums shall be insulated same as exposed, un-lined rectangular ductwork. Minimum insulation thickness to be 2" with a minimum R-Value of 8.7. Please do not use internal lining on these high moisture areas.
- Q₃₄. [MECHANICAL] Should the outside air drops through the floor from the basement to first floor be stainless? Note: we do not do No. 4 finished duct. Is this the only stainless to be quoted on these prints?
 - A. No, there is no requirement for stainless steel ductwork other than the bottom panel of the outside air plenum boxes as identified in Section 23 21 10
- Q35. [ELECTRICAL] The main service does not show a neutral in the feeder schedule. This should have one since this is a 3 phase 4 wire system.
 - A. Correct, the feeder will be corrected to 29A to show a neutral. Omit the ground conductor.
- Q36. [ELECTRICAL] With the DBA panel located at the opposite wall of the meter, should this service have a 600A disconnect on the outside of the building?
 - A. No, since the service conductors will be fed from underground as shown on the site plan, a disconnect is not needed outside.

- Q₃₇. [ELECTRICAL] Since this is a 600A service, should we have a CT cabinet mounted on the outside of the building?
 - A. Correct, the metering cabinet (per AEP requirements) is shown on the north wall on the site plan and on the one line diagram. We anticipate metering configuration will be similar to AEP diagram Fo12B of the AEP Meter and Service Guide. Will add clarification on metering enclosure size.
- Q38. [MECHANICAL] Please provide more information on the DOAS unit mounting frame shown in detail 8 of H601, such as size/type of support steel, stands, and mounting plates.
 - A. Detail issued in Addendum 2 to address the DOAS framing. In addition, we will be revising Detail 8/H601 to be consistent with the following design intent: design intent is for the General Contractor to furnish and install the mounting frame. The mechanical contractor will be required to coordinate the exact size and location of the frame.
- Q39. Are you able to provide a specification for the TPO membrane roof?
 - A. This was provided in Addendum 1.
- Q40. Please provide clarification on the dimensions for the headwall details on sheet C203 detail E. The part of the headwall where the pipe exits says 48" and the mouth of the headwall says 32".
 - A. The width of the headwall where the pipe exits the headwall should be 24" wide. The 32" dimension is correct. The height should be 36"
- Q41. [MECHANICAL] Who is the basis of design or preferred controls contractor?
 - A. The first manufacturer listed in the specs is the basis of design, "Comfort Systems".
- Q42. The signage drawings show 1/4" thick brushed aluminum with rounded corners. The signage specifications say 1/8" thick acrylic. Please confirm which is correct?
 - A. Basis of design is the brushed aluminum.
- Q43. [ELECTRICAL] Is there a spec for the chandelier lifts? We did not see this on the electrical drawings.
 - A. Alternate 4 Basis of design is Alladin Lift with hardwired keyed switch, however we are open to substitution requests. Electrical will add this to their plans in a future revision/bulletin.
- Q44. [ELECTRICAL] Is the assumption for typical wire method to be installing conduit, surface mounted, to the wood barn in the main corridor, multi-purpose event space and exterior lighting and receptacles? Most of the wall details I see will not allow us to conceal conduit within those areas.
 - A. In the corridor it should be in the addition wall or through the attic, through the barn north-side bearing wall (see wall sections 1,2,3 & 4/A312), or flush floor boxes. At the ceiling conduit to suspended fixtures should be held tight to the wood beams at the ceiling/decking and always favoring the eastern side of each beam. Refer to General Note 2 on Addendum 2 Sheet E301.
- Q45. Frame type FH2 is indicated as a hollow metal frame with 1x4 side trim and 1x6 head trim. We will assume the trim is installed in the field by others over our HM frame.

- A. Correct, we assume this would be part of the wooden baseboard trim scope of work as it should closely resemble the wood base boards.
- Q46. Door Type WD3, which is Door 209A is called a "custom barn door" in the elevation. Why is it called a custom door...what are the specifics? It installs in a wall that appears to have vertical barn wood on the walls, so we assume it needs to match the walls in some manner?
 - A. This is a top rail mounted sliding door, it should be made of the same materials as the barn exterior siding and should resemble the swinging doors of the existing barn.
- Q47. Who is responsible for permits & tapping fees?
 - A. Permit fees will be by the contractor, tapping fees will go to the owner.
- Q48. Are there any WBE, MDE, or EDGE goals for this project?
 - A. No
- Q49. Is this project tax exempt?
 - A. Yes
- Q50. Can spoils be left on site?
 - A. Yes, clean fill and topsoil can be left on park property (exact location to be determined).
- Q51. Is it possible to get a more detailed list of the owner-supplied/contractor installed items? For example, I don't see any indication of how many landscaping plants there are.
 - A. Landscape plants will be by owner's team, contractor is responsible for grass/meadow. Goo1 will be updated to exclude plants.
- Q52. [CIVIL] Right now, it looks like the site is going to need around 6,500 CY of dirt imported. I noticed in the plans it mentions a borrow area just off site. Are we able to take from that area and leave a hole to reduce the import?
 - A. The area west of the existing parking lot should be used for borrow earthwork material. The Contractor shall not leave a hole in the borrow location. The area for borrowed fill material should be pulled from the hillside and regraded to maintain the same general drainage pattern with no low spots that do not drain. The borrow material should be graded to resemble a hillside with maximum slope of 4:1 and shall be reseeded.

SECTION 03 35 43

STAINED CONCRETE FINISHING

PART 1 – GENERAL

1.01 SUMMARY

- A. Section includes:
 - 1. Grinding of the slab surface to receive clear reactive, penetrating liquid hardener/densifier.
 - 2. Application of clear reactive, penetrating liquid concrete dve.
 - 3. Application of protective surface treatment.
- B. Related Requirements:
 - 1. Section 03 30 00 Cast-in-Place Concrete for concrete floors.

1.02 REFERENCES

A. American National Standard Institute / National Floor Safety Institute ANSI/NSFI B101.1 Test Method for Measuring Wet SCOF of Common Hard-Surface Floor Materials.

1.03 DEFINITIONS

A. Design Reference Sample: Sample designated by Architect in the Contract Documents that reflects acceptable surface quality and appearance of polished concrete.

1.04 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at Project site.
 - Pre-Installation Meeting: Convene before the start of installation of concrete slabs, and start of application of concrete finish system.
 - 2. Require attendance of parties directly affecting work of this Section, including the manufacturer's Representative, Contractor, Architect, concrete installer, and finish applicator. Meeting should only convene when required parties are present.
 - 3. Review the following:
 - a. Physical requirements of completed concrete slab and slab finish.
 - b. Locations and time of test areas.
 - c. Protection of surfaces not scheduled for finish application.
 - d. Surface preparation.
 - e. Application procedure and sequence.
 - f. Final appearance of dyed concrete.
 - g. Quality control.
 - h. Cleaning.
 - i. Protection of finish system.
 - j. Coordination with other work.

1.05 ACTION SUBMITTALS

- A. Prepare the following submittals in accordance with Section 01 33 00 Submittal Procedures.
 - 1. Product Data: For each type of product.
 - 2. Samples for Initial Selection: For each type of product requiring color selection.
 - 3. Samples for Verification: For each type of exposed color.

1.06 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For Installer.
- B. Material Certificates: For each of the following, signed by manufacturers:

- 1. Repair materials.
- 2. Stain materials.
- 3. Protective sealer.

1.07 QUALITY ASSURANCE

- A. Manufacturer: Minimum 10 years' experience producing concrete coatings.
- B. Installer Qualifications:
 - Applicator to be familiar with the specified requirements and the methods needed for proper performance of work of this section. Applicator must have availability of proper equipment to perform work within scope of this project on a timely basis. Applicator should have successfully performed a minimum of 5 projects of similar scope and complexity
- C. Mockups: Before casting concrete, build separate mockup to verify selections made under Sample submittals and to demonstrate typical joints, surface finish, tolerances, and standard of workmanship. Build mockup to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Notify the above parties one week in advance of date and time when mock-up will be completed.
 - 2. Require attendance of parties directly affecting work of this Section, including the Contractor, Architect, finish applicator, and manufacturer's representative.
 - 3. Build separate standalone mockup in the location and of the size indicated.
 - 4. Adjustments of mock-up may be required until desired finish is achieved.
 - Demonstrate the materials, equipment and application methods to be used for work specified herein in pre-approved location approximately 100 sq. ft. in area or as directed by the Architect.
 - a. Desired finish is indicated in "Finishing Appearance" article in this section.
 - b. Confirm surface preparation procedures, coverage rate, reaction time, finished appearance, etc. per manufacturers' application instructions and allow test area dry thoroughly before inspection.
 - 6. Retain approved mock-up during construction as a standard for judging the completed work. Areas may remain as part of the completed work as determined by the Architect.
- D. Sample Test Area: ColorHard color hardener:
 - 1. Test a minimum 2 ft. by 2 ft. area on each type of surface to confirm suitability and desired results. Use the manufacturer's application instructions. Include representative imperfections in the test area. Floor composition and surface finish affect final color. Let test area of protective treatment cure before inspection. Keep test panels available for comparison throughout the project.

1.08 DELIVERY, STORAGE AND HANDLING

- A. Deliver materials in original containers, with seals unbroken, bearing manufacturer labels indicating brand name and directions for storage.
- B. Store concrete color/hardener and surface protectant treatment in environment recommended on published manufacturer's product data sheets.
 - 1. Store containers upright in a cool, dry, well-ventilated place, out of the sun with temperature between 40 and 100 degrees F (4 and 38 degrees C).
 - 2. Protect from freezing.
 - 3. Store away from other chemicals and potential sources of contamination.
 - 4. Keep lights, fire, sparks and heat away from containers.
 - 5. Do not drop containers or slide across sharp objects.
 - 6. Do not stack pallets more than three high.
 - 7. Keep containers tightly closed when not in use.

1.09 PROJECT CONDITIONS

- A. Environmental limitations:
 - Comply with manufacturer's written instructions for substrate temperature and moisture content, ambient temperature and humidity, ventilation, and other conditions affecting performance and finishing requirements.

- B. Close areas to traffic during floor application and after application for time period recommended in writing by manufacturer.
- C. Protect the completed slab to prevent damage by the other trades during floor completion.
- D. Temperature Limitations:
 - 1. Apply when surface and air temperature are between 40 degrees F (4 degrees C) and above 95 degrees F (35 degrees C) unless otherwise indicated by manufacturer's written instructions.
 - 2. Apply when surface and air temperatures are expected to remain above 40 degrees F (4 degrees C) for a minimum of 8 hours after application, unless otherwise indicated by manufacturer's written instructions.
- E. Apply when air conditions are calm to minimize surface treatment contacting surface not intended to be finished.
- F. Do not apply to frozen substrate. Allow adequate time for substrate to thaw, if freezing conditions exist before application.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Penetrating Concrete One-step Color and Hardener: Lithium silicate hardener/densifier.
 - 1. Product: Consolideck ColorHard, manufactured by PROSOCO, Inc.
 - 2. Color: As selected in samples and mockup.
 - 3. Mix with Consolideck LS or LS/CD before application, in quantity to produce desired color intensity.
- B. Densifier:
 - 1. Product: Consolideck Blended Densifier, manufactured by PROSOCO, Inc.
- C. Interior Concrete Protective Treatment:
 - 1. Product: Consolideck PolishGuard, manufactured by PROSOCO, Inc.

2.02 EQUIPMENT

A. Equipment as required to achieve finishing as approved in mockup.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Examine substrate with installer present for conditions affecting performance of finish. Correct conditions detrimental to timely and proper work. Notify the Architect in writing of conditions detrimental to the proper and timely completion of the work.
- B. Do not begin installation until unsatisfactory conditions are resolved. Beginning work constitutes acceptance of site conditions and responsibility for defective installation caused by prior observable conditions

3.02 PREPARATION

- A. Clean dirt, dust, oil, grease and other contaminants that interfere with penetration or performance of specified product from surfaces. Use appropriate concrete cleaners approved by the concrete surface treatment manufacturer where necessary. Rinse thoroughly using pressure water spray to remove cleaner residues. Allow surfaces to dry completely before application of product.
- B. Repair, patch and fill cracks, voids, defects and damaged areas in surface as approved by the Architect. Allow repair materials to cure completely before application of product.
- C. Variations in substrate texture and color will affect final appearance and should be corrected prior to application of sealer/hardener system and the finishing steps.

- D. Protect surrounding areas prior to application. If product is accidentally misapplied to adjacent surfaces, flush with water immediately before material dries.
- E. Avoid contact in areas not to be treated. Avoid contact with metal, glass and painted surfaces.
- F. Seal open joints in accordance with Section 07 92 00 Joint Sealants.
- G. Apply specified sealants and caulking and allow complete curing before application of penetrating concrete hardener/densifier.
- H. Do not proceed until unsatisfactory conditions have been corrected.

3.03 CONCRETE GRINDING

- A. Adhere to industry standard grinding, and finishing procedures for dry and wet grinding.
- B. Sand, level or grind the concrete surface with a floor sander, orbital floor machine or diamond grinding as needed to achieve desired exposure. Grind floor to 200 grit resin bond diamonds.
- C. Remove all dust and debris using a floor scrubbing machine and fresh water. Allow surfaces to dry.
- D. Scrub and rinse slab surface with clean water and vacuum with auto-scrubber between and after final polishing passes.
- E. Progressively grind, the slab surface utilizing approved diamond segments as necessary to produce Finishing requirements as approved in mockup.

3.04 APPLICATION OF PENETRATING COLORHARD

- A. Verify proper preparation of concrete floor after grinding operations in accordance with manufacturer's recommendations.
- B. Thoroughly mix color concentrate with up to one-gallon of Consolideck® LS® or LS/CS® before application to make one gallon of ready-to-use color hardener. Dilute as required to achieve desired color.
- C. Using low-pressure spray and a conical spray tip, apply enough pre-mixed, ready-to-use ColorHard to wet the surface without producing puddles. Do not over apply. Do not atomize.
- D. Spread the product using pre-wet microfiber pad, immediately spread the dye to ensure uniform wetting and color distribution. Do not overwork or spread once drying begins. On smooth surfaces, spread with a clean microfiber pad prewet with prepared ColorHard. Apply in a smooth, irregular pattern to minimize streaks. On textured surfaces, spread with a clean, soft-fibered push broom.
- E. Allow the floor to dry for at least one hour. Stay off wet surfaces.
- F. Repeat Steps above for increased color intensity and surface hardening.
- G. When dry, burnish smooth surfaces using a high-speed burnishing fitted with a #800 grit (or higher) diamond-impregnated pad.
- H. Clean the floor with an auto-scrubbing machine and Consolideck® LSKlean. Collect ponded water. Allow surfaces to dry.

3.05 APPLICATION OF INTERIOR CONCRETE PROTECTIVE TREATMENT

- A. Verify proper application of color and hardener material.
- B. Lightly wet a clean microfiber pad with PolishGuard, leaving the pad damp.
- C. Using a clean, pump-up sprayer fitted with a 0.5 gpm conical or fan spray tip, spray-apply PolishGuard working from one control joint to another.
- D. Spread with damp microfiber pad, maintaining a thin, even coating and wet edge. Stop spreading once drying begins. Do not overlap.
- E. Allow to dry tack free, and repeat steps above.

3.06 SLAB PROTECTION

- A. Protect finished floors to prevent damage including staining, gouges and scratching by construction traffic and activities until possession.
- B. Do not drag or drop equipment or material across the slab which will scratch or chip it.
- Inspect tires for debris prior to use on slab. Remove embedded items which may cause damage to floor slab.
- D. Clean up spills on slab immediately. Provide cleaning chemicals and absorptive materials.
- E. Develop a concrete protection procedure which addresses the following procedures:
 - 1. Communication of protection plan to subcontractors and vendors.
 - 2. Procedures for cleaning up slab spills, including use of and availability of cleaning chemicals and absorptive materials at Site.
- F. Provide a clean slab using concrete maintenance cleaner within an auto scrubber, equipped with soft nylon brushes, in accordance with manufacturer's recommendations

3.07 FINISHING APPEARANCE

- A. Interior exposed colored finished slab areas must meet the desired sheen and color, as discussed in Pre-Installation meeting and be consistent with approved Mock-up.
- B. Appearance: Interior exposed finished slab areas must consist of the following:
 - 1. Slab surface must meet the desired aggregate exposure, color and sheen, as discussed in Pre-Installation meeting and be consistent with the approved Mock-up.
 - Slab surface must have a consistent look and exhibit a finish that has no evidence of streaking or burnish marks.
 - 3. White residue or hazy appearance is not acceptable.
 - 4. Exposure of aggregate beyond CPAA Class B-Fine Aggregate is not acceptable.
 - 5. Interior exposed finished slab areas must consist of the following CPAA Gloss Level:
 - a. Finished Gloss Level 1 Flat Gloss Appearance.

3.08 CLEANING AND PROTECTION

A. Protection: Do not cover, but protect floor area from paint and other contaminates that could inhibit the stain.

END OF SECTION