

	Hayden Wickelman Unified School District, #41		824 Thorne Avenue Winkelman, AZ 85192
	Amendment #1		
	IFB: 20-02-20 PROJECT: Flooring Project at Hayden Winkelman High School.	Page 1 of 78	

June 3, 2020

This amendment is released to all interested parties.

1. A non-mandatory pre-bid meeting was held on June 1, 2020 at 10:30. The Sign-In Sheet is attached for reference. Items contained within this Amendment are intended to clarify and/or change items within the bid as a result of discussions at meeting and walk-through of the sites.



Sign-In Sheet.pdf

2. Technical clarifications are attached within Addendum No. 1 from Architechnology it is 74 pages.



Hayden HS Flooring
Addendum No. 1 Binn

3. The **due date has changed** and is now **June 17, 2020 no later than 12:00, Noon**. A new Bid Package Label is attached that reflects the new due date and time. Remember, you cannot to drop off bids, only bids delivered through the PO Box 409 will be accepted.
4. All other terms and conditions remain the same.
5. Please remember to acknowledge this Amendment #1 with your offer.
6. End of Amendment #1.

CUT ALONG THE LINE AND AFFIX TO THE FRONT OF YOUR **BID** CONTAINER

SEALED BID PACKAGE – *MAILING LABEL*

Submitted by:	
Address:	
City, State, Zip:	

IFB # 20-02-20 for Flooring Project at Hayden Winkelman High School.

Due: **No later than June 17, 2020 by 12:00PM Noon (Mountain Standard Time)**

Hayden Winkelman Unified School District, #41
District Office
PO Box 409
Winkelman, AZ 85192



Non-Mandatory: Parking Lot at Hayden Winkelman High School Campus, 824 Thorne Avenue, Winkelman, AZ 85192 June 1 at 11:00 AM

Firm	Representative	Phone	Email
PGPC	KC Brackley	(480) 204-0446	kc@pgpc.org
ARCHITECTURAL VOICES	Pat Prince	602.327.1129	patprincearchitecturalvoices.com
Redtree co	Will Borner	602 576 4383	willborner@redtree.com wborner@redtree.com
Hayden-Winkelman	Paul Unger	520-827-2011	ungerpaul@redtree.com paul-unger@redtree.com
Continental Flooring	Chris Kuechenberg	480-736-9673	chris@kuechenbergcontinentalflooring.com
Sun Country Floors	Taft Smithson	480-818-8571	taft@suncountryfloors.com
AV Contracting	Kevin Driscoll	480-497-1010	Kevin@avcontracting.us
Pages Bee	Dustin Bird	480 399 028	pagesbee@pagesbee.com
Kenny Carlisle	POET Elbert	480-843-0506	kennycarlisle@peiddecorative.com
Interior Work	Magas Tussell	480-404-4157	mtussell@interiorwork.com
Taylor's Flooring	Rich Bodero	480-236-7467	richb@taylorstoflooring.com

Hayden Winkelman Unified School District, #41
Pre-Rid Conference Sign-In Sheet

Pre-Bid Conference Sign-In Sheet

IFB: 20-02-20
PROJECT: Flooring Project Hayden-Winkelmann High School.

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of 3

824 Thorne Avenue
Winkelman, AZ 85192

Non-Mandatory: Parking Lot at Hayden Winkelman High School Campus, 824 Thorne Avenue, Winkelman, AZ 85192 June 1 at 11:00 AM

[illegible]

ADDENDUM: Number 01
DATE: June 1, 2020
TO: Interested Bidders
CLIENT: Hayden Winkelman Unified School District
Winkelman, Arizona
PROJECT: Hayden High School Flooring Improvements
SITE: Hayden High School
Winkelman, Arizona
ARCHITECT: Architechnology, Inc.
5229 North 7th Avenue, Suite 101
Phoenix, Arizona 85013



AT PROJECT NO: 19-164

1. INSTRUCTIONS

1. This supplement to Bid Documents is issued prior to the receipt of bids. All Work covered in the supplement shall be included in the original quotation and the Supplement will be considered an integral part of the Contract Documents.
2. All work performed under this Supplement shall be subject to the General Conditions of the Contract and the Specifications for similar work in connection with this Project.



EXPIRES: 3-21-22

A. General Items – Clarification

- a. School District to move building contents and furniture as required for flooring project.
- b. All concrete floors to be ground and polished shall include staining. Stain product shall be Cohills Pro Series UV Stable Concrete Dye, or approved equal. Stain stock color to be selected by the School District.
- c. New rubber cove base shall be 4-1/2" high and black in color.
- d. New walk off carpet tiles shall be an area the size of 4'-0" x 6'-0" at exterior door entrances shown on Addendum drawings. New walk off carpet tiles shall be Mohawk Group Tuff Stuff II collection; QL315 First Step II Tile, or approved equal. Color to be selected by School District. Install reducer strip at all edges of carpet may areas.
- e. Install new 3" saddle aluminum threshold, as manufactured by Pemko, or approved equal at transition from existing Saltillo tile building entry to new ground / polished concrete surfaces.

B. Contract Drawings – Change

- a. Delete bid drawings in their entirety and replace with attached Addendum No. 1 drawings, dated June 1, 2020.

C. Specifications – Change

- a. Delete Bid specifications in their entirety and replace with attached Addendum No. 1 specifications, dated June 1, 2020.



EXPIRES: 3-21-22

Hayden – Winkleman Unified school District

Project Manual

For

Hayden High School Campus Buildings – SFB 1004 Flooring Renovations

SFB Project No. 040241004-1004-012-BRG

**June 2, 2020
Addendum No. 1 Specifications**



ARCHITECHNOLOGY

**5229 North 7th Avenue, Suite 101
Phoenix, Arizona 85013**



EXPIRES: 3-21-22

SECTION 00 01 10

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EXPIRES: 3-21-22

SECTION 01 10 00

SUMMARY

PART 1 GENERAL

1.01 PROJECT

- A. Project Name: Hayden High School
- B. Owner's Name: Hayden – Winkleman Unified School District
- C. The Project consists of flooring renovations in building 1004.

1.02 CONTRACT DESCRIPTION

- A. Contract Type: A single prime contract.

1.03 DESCRIPTION OF ALTERATIONS WORK

- A. Scope of demolition and removal work is shown on drawings and specified in Section 02 25 50.

1.04 OWNER OCCUPANCY

- A. Owner intends to occupy the Project upon Substantial Completion.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate Owner occupancy.

1.05 CONTRACTOR USE OF SITE AND PREMISES

- A. Provide access to and from site as required by law and by Owner:
 - 1. Emergency Building Exits During Construction: Keep all exits required by code open during construction period; provide temporary exit signs if exit routes are temporarily altered.
 - 2. Do not obstruct roadways, sidewalks, or other public ways without permit.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 20 00

PRICE AND PAYMENT PROCEDURES

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Procedures for preparation and submittal of applications for progress payments.

1.02 SCHEDULE OF VALUES

- A. Submit a printed schedule on AIA Form G703 - Application and Certificate for Payment Continuation Sheet. Contractor's standard form or electronic media printout will be considered.
- B. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement, but must be approved before submission of first pay application.
- C. Revise schedule to list approved Change Orders, with each Application For Payment.

1.03 APPLICATIONS FOR PROGRESS PAYMENTS

- A. Payment Period: Submit at intervals stipulated in the Agreement.
- B. Present required information in typewritten form.
- C. Form: AIA G702 Application and Certificate for Payment and AIA G703 - Continuation Sheet including continuation sheets when required.
- D. Execute certification by signature of authorized officer.
- E. Use data from approved Schedule of Values. Provide dollar value in each column for each line item for portion of work performed and for stored Products.
- F. List each authorized Change Order as a separate line item, listing Change Order number and dollar amount as for an original item of Work.
- G. Submit three copies of each Application for Payment.
- H. Include the following with the application:
 - 1. Any documents required by Owner as stipulated in the Conditions of the Contract.

1.04 MODIFICATION PROCEDURES

- A. Architect will advise of minor changes in the Work not involving an adjustment to Contract Sum or Contract Time as authorized by the Conditions of the Contract by issuing supplemental instructions on AIA Form G710.
- B. Construction Change Directive: Architect may issue a document, signed by Owner, instructing Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
 - 1. The document will describe changes in the Work, and will designate method of determining any change in Contract Sum or Contract Time.
 - 2. Promptly execute the change in Work.
- C. Proposal Request: Architect may issue a document which includes a detailed description of a proposed change with supplementary or revised Drawings and specifications, a change in Contract Time for executing the change with a stipulation of any overtime work required and the period of time during which the requested price will be considered valid. Contractor shall prepare and submit a fixed price quotation within 14 days.
- D. Contractor may propose a change by submitting a request for change to Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and the effect on the Contract Sum and Contract Time with full documentation and

a statement describing the effect on Work by separate or other contractors. Document any requested substitutions in accordance with Section 01 60 00.

- E. Computation of Change in Contract Amount:
 - 1. For change requested by Architect for work falling under a fixed price contract, the amount will be based on Contractor's price quotation.
 - 2. For change requested by Contractor, the amount will be based on the Contractor's request for a Change Order as approved by Architect.
- F. Execution of Change Orders: Architect will issue Change Orders for signatures of parties as provided in the Conditions of the Contract on AIA G701.
- G. After execution of Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Sum.
- H. Promptly revise progress schedules to reflect any change in Contract Time, revise sub-schedules to adjust times for other items of work affected by the change, and resubmit.
- I. Promptly enter changes in Project Record Documents.

1.05 APPLICATION FOR FINAL PAYMENT

- A. Prepare Application for Final Payment as specified for progress payments, identifying total adjusted Contract Sum, previous payments, and sum remaining due.
- B. Application for Final Payment will not be considered until the following have been accomplished:
 - 1. All closeout procedures specified in Section 01 70 00.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 30 00

ADMINISTRATIVE REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Preconstruction meeting.
- B. Progress meetings.
- C. Construction progress schedule.
- D. Submittals for review, information, and project closeout.
- E. Number of copies of submittals.
- F. Submittal procedures.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PRECONSTRUCTION MEETING

- A. Owner will schedule a meeting after Notice of Award.
- B. Attendance Required:
 - 1. Owner.
 - 2. Architect.
 - 3. Contractor.
- C. Agenda:
 - 1. Execution of Owner-Contractor Agreement.
 - 2. Submission of executed bonds and insurance certificates.
 - 3. Distribution of Contract Documents.
 - 4. Submission of list of Subcontractors, list of Products, schedule of values, and progress schedule.
 - 5. Designation of personnel representing the parties to Contract, Owner and Architect.
 - 6. Procedures and processing of field decisions, submittals, substitutions, applications for payments, proposal request, Change Orders, and Contract closeout procedures.
 - 7. Scheduling.
- D. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.02 PROGRESS MEETINGS

- A. Schedule and administer meetings throughout progress of the Work at maximum weekly intervals.
- B. Make arrangements for meetings, prepare agenda with copies for participants, preside at meetings.
- C. Attendance Required: Job superintendent, major Subcontractors and suppliers, Owner, Architect, as appropriate to agenda topics for each meeting.
- D. Agenda:
 - 1. Review minutes of previous meetings.
 - 2. Review of Work progress.

3. Field observations, problems, and decisions.
 4. Identification of problems which impede planned progress.
 5. Review of submittals schedule and status of submittals.
 6. Maintenance of progress schedule.
 7. Corrective measures to regain projected schedules.
 8. Planned progress during succeeding work period.
 9. Maintenance of quality and work standards.
 10. Effect of proposed changes on progress schedule and coordination.
 11. Other business relating to Work.
- E. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

3.03 CONSTRUCTION PROGRESS SCHEDULE

- A. Within 1 day after date of the Agreement, submit preliminary schedule defining planned operations for the first 60 days of Work, with a general outline for remainder of Work.
- B. If preliminary schedule requires revision after review, submit revised schedule within 5 days.
- C. Within 5 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
 1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- D. Within 5 days after joint review, submit complete schedule.
- E. Submit updated schedule every 30 days.

3.04 SUBMITTALS FOR REVIEW

- A. When the following are specified in individual sections, submit them for review:
 1. Product data.
 2. Shop drawings.
 3. Samples for selection.
 4. Samples for verification.
- B. Submit to Architect for review for the limited purpose of checking for conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only for aesthetic, color, or finish selection.
- D. After review, provide copies and distribute in accordance with SUBMITTAL PROCEDURES article below and for record documents purposes described in Section 01 78 00 - CLOSEOUT SUBMITTALS.

3.05 SUBMITTALS FOR INFORMATION

- A. When the following are specified in individual sections, submit them for information:
 1. Design data.
 2. Certificates.
 3. Test reports.
 4. Inspection reports.
 5. Manufacturer's instructions.
 6. Manufacturer's field reports.
 7. Other types indicated.
- B. Submit for Architect's knowledge as contract administrator or for Owner. No action will be taken.

3.06 SUBMITTALS FOR PROJECT CLOSEOUT

- A. When the following are specified in individual sections, submit them at project closeout:
 1. Project record documents.

2. Operation and maintenance data.
3. Warranties.
4. Bonds.
5. Other types as indicated.

B. Submit for Owner's benefit during and after project completion.

3.07 NUMBER OF COPIES OF SUBMITTALS

- A. Documents for Review:
 1. Small Size Sheets, Not Larger Than 8-1/2 x 11 inches: Submit the number of copies which the Contractor requires, plus two copies which will be retained by the Architect.
 2. Larger Sheets, Not Larger Than 36 x 48 inches: Submit the number of opaque reproductions which Contractor requires, plus two copies which will be retained by Architect.
- B. Documents for Information: Submit two copies.
- C. Documents for Project Closeout: Make one reproduction of submittal originally reviewed. Submit one extra of submittals for information.
- D. Samples: Submit the number specified in individual specification sections; one of which will be retained by Architect.
 1. After review, produce duplicates.
 2. Retained samples will not be returned to Contractor unless specifically so stated.

3.08 SUBMITTAL PROCEDURES

- A. Transmit each submittal with approved form.
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. Apply Contractor's stamp, signed or initialed certifying that review, approval, verification of Products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents.
- E. Deliver submittals to Architect at business address.
- F. Schedule submittals to expedite the Project, and coordinate submission of related items.
- G. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- H. Identify variations from Contract Documents and Product or system limitations which may be detrimental to successful performance of the completed Work.
- I. Provide space for Contractor and Architect review stamps.
- J. When revised for resubmission, identify all changes made since previous submission.
- K. Distribute copies of reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.
- L. Submittals not requested will not be recognized or processed.

END OF SECTION

SECTION 01 40 00

QUALITY REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. References and standards.
- B. Quality assurance submittals.
- C. Mock-ups.
- D. Control of installation.
- E. Tolerances.
- F. Testing and inspection services.
- G. Manufacturers' field services.

1.02 SUBMITTALS

- A. Test Reports: After each test/inspection, promptly submit two copies of report to Architect and to Contractor.
 - 1. Test reports are submitted for Architect's knowledge as contract administrator or for the Owner, for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.
- B. Certificates: When specified in individual specification sections, submit certification by the manufacturer and Contractor or installation/application subcontractor to Architect, in quantities specified for Product Data.
 - 1. Indicate material or product conforms to or exceeds specified requirements. Submit supporting reference data, affidavits, and certifications as appropriate.
 - 2. Certificates may be recent or previous test results on material or product, but must be acceptable to Architect.
- C. Manufacturer's Instructions: When specified in individual specification sections, submit printed instructions for delivery, storage, assembly, installation, start-up, adjusting, and finishing, for the Owner's information. Indicate special procedures, perimeter conditions requiring special attention, and special environmental criteria required for application or installation.
- D. Manufacturer's Field Reports: Submit reports for Architect's benefit as contract administrator or for Owner.
 - 1. Submit for information for the limited purpose of assessing conformance with information given and the design concept expressed in the contract documents.

1.03 REFERENCES AND STANDARDS

- A. For products and workmanship specified by reference to a document or documents not included in the Project Manual, also referred to as reference standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Conform to reference standard of date of issue current on date of Contract Documents, except where a specific date is established by applicable code.
- C. Obtain copies of standards where required by product specification sections.
- D. Maintain copy at project site during submittals, planning, and progress of the specific work, until Substantial Completion.

- E. Should specified reference standards conflict with Contract Documents, request clarification from Architect before proceeding.
- F. Neither the contractual relationships, duties, or responsibilities of the parties in Contract nor those of Architect shall be altered from the Contract Documents by mention or inference otherwise in any reference document.

1.04 TESTING AND INSPECTION AGENCIES

- A. Contractor shall employ and pay for services of an independent testing agency to perform other specified testing.
- B. Employment of agency in no way relieves Contractor of obligation to perform Work in accordance with requirements of Contract Documents.
- C. Contractor Employed Agency:
 - 1. Testing agency: Comply with requirements of ASTM E 329, ASTM E 543, and ASTM C 1077.
 - 2. Laboratory: Authorized to operate in Phoenix, Arizona.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 CONTROL OF INSTALLATION

- A. Monitor quality control over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.
- B. Comply with manufacturers' instructions, including each step in sequence.
- C. Should manufacturers' instructions conflict with Contract Documents, request clarification from Architect before proceeding.
- D. Comply with specified standards as minimum quality for the Work except where more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- E. Have Work performed by persons qualified to produce required and specified quality.
- F. Verify that field measurements are as indicated on shop drawings or as instructed by the manufacturer.
- G. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, and disfigurement.

3.02 MOCK-UPS

- A. Tests will be performed under provisions identified in this section and identified in the respective product specification sections.
- B. Assemble and erect specified items with specified attachment and anchorage devices, flashings, seals, and finishes.
- C. Accepted mock-ups shall be a comparison standard for the remaining Work.
- D. Where mock-up has been accepted by Architect and is specified in product specification sections to be removed, remove mock-up and clear area when directed to do so.

3.03 TOLERANCES

- A. Monitor fabrication and installation tolerance control of products to produce acceptable Work. Do not permit tolerances to accumulate.

- B. Comply with manufacturers' tolerances. Should manufacturers' tolerances conflict with Contract Documents, request clarification from Architect before proceeding.
- C. Adjust products to appropriate dimensions; position before securing products in place.

3.04 TESTING AND INSPECTION

- A. See individual specification sections for testing required.
- B. Testing Agency Duties:
 - 1. Provide qualified personnel at site. Cooperate with Architect and Contractor in performance of services.
 - 2. Perform specified sampling and testing of products in accordance with specified standards.
 - 3. Ascertain compliance of materials and mixes with requirements of Contract Documents.
 - 4. Promptly notify Architect and Contractor of observed irregularities or non-conformance of Work or products.
 - 5. Perform additional tests and inspections required by Architect.
 - 6. Submit reports of all tests/inspections specified.
- C. Limits on Testing/Inspection Agency Authority:
 - 1. Agency may not release, revoke, alter, or enlarge on requirements of Contract Documents.
 - 2. Agency may not approve or accept any portion of the Work.
 - 3. Agency may not assume any duties of Contractor.
 - 4. Agency has no authority to stop the Work.
- D. Contractor Responsibilities:
 - 1. Deliver to agency at designated location, adequate samples of materials proposed to be used which require testing, along with proposed mix designs.
 - 2. Cooperate with laboratory personnel, and provide access to the Work and to manufacturers' facilities.
 - 3. Provide incidental labor and facilities:
 - a. To provide access to Work to be tested/inspected.
 - b. To obtain and handle samples at the site or at source of Products to be tested/inspected.
 - c. To facilitate tests/inspections.
 - d. To provide storage and curing of test samples.
 - 4. Notify Architect and laboratory 24 hours prior to expected time for operations requiring testing/inspection services.
 - 5. Employ services of an independent qualified testing laboratory and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
 - 6. Arrange with Owner's agency and pay for additional samples, tests, and inspections required by Contractor beyond specified requirements.
- E. Re-testing required because of non-conformance to specified requirements shall be performed by the same agency on instructions by Architect. Payment for re testing will be charged to the Contractor by deducting testing charges from the Contract Price.

3.05 MANUFACTURERS' FIELD SERVICES

- A. When specified in individual specification sections, require material or product suppliers or manufacturers to provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to initiate instructions when necessary.
- B. Report observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

3.06 DEFECT ASSESSMENT

- A. Replace Work or portions of the Work not conforming to specified requirements.

- B. If, in the opinion of Architect, it is not practical to remove and replace the Work, Architect will direct an appropriate remedy or adjust payment.

END OF SECTION

SECTION 01 50 00

TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Temporary utilities.
- B. Temporary telephone service.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.
- H. Project identification sign.
- I. Field offices.

1.02 TEMPORARY UTILITIES

- A. Provide and pay for all electrical power, lighting, water, heating and cooling, and ventilation required for construction purposes beyond those made available by Owner.
- B. Existing facilities may be used.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

1.03 TELEPHONE SERVICE

- A. Provide, maintain, and pay for telephone service to field office if required at time of project mobilization.
- B. Telephone service may be provided through a mobile phone service.

1.04 TEMPORARY SANITARY FACILITIES

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
- B. New permanent facilities may not be used during construction operations.
- C. Maintain daily in clean and sanitary condition.
- D. At end of construction, return facilities to same or better condition as originally found.

1.05 BARRIERS

- A. Provide barriers to prevent unauthorized entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

1.06 FENCING

- A. Provide 8-foot-high fence around construction site; equip with vehicular and pedestrian gates with locks.

1.07 EXTERIOR ENCLOSURES

- A. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance

of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

1.08 SECURITY

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

1.09 VEHICULAR ACCESS AND PARKING

- A. Coordinate access and haul routes with governing authorities and Owner.
- B. Provide and maintain access to fire hydrants, free of obstructions.
- C. Provide means of removing mud from vehicle wheels before entering streets.
- D. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

1.10 WASTE REMOVAL

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically.
- C. If materials to be recycled or re-used on the project must be stored on-site, provide suitable non-combustible containers; locate containers holding flammable material outside the structure unless otherwise approved by the authorities having jurisdiction.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

1.11 PROJECT IDENTIFICATION

- A. Provide project identification sign of design and construction indicated on Drawings.
- B. Erect on site at location indicated.
- C. No other signs are allowed without Owner permission except those required by law.

1.12 FIELD OFFICES

- A. Office: Weathertight, with lighting, electrical outlets, heating, cooling equipment, and equipped with sturdy furniture and drawing display table if required by the Owner.
- B. Provide space for Project meetings, with table and chairs to accommodate 6 persons.
- C. Locate offices a minimum distance of 30 feet from existing structures.
- D. District will provide a classroom space for a temporary field office. Contractor shall return the space to the district in the same or better condition upon completion.

1.13 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary work.
- C. Restore existing facilities used during construction to original condition.
- D. Restore new permanent facilities used during construction to specified condition.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION - NOT USED

END OF SECTION

SECTION 01 60 00

PRODUCT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. General product requirements.
- B. Re-use of existing products.
- C. Transportation, handling, storage and protection.
- D. Product option requirements.
- E. Substitution limitations and procedures.
- F. Spare parts and maintenance materials.

1.02 SUBMITTALS

- A. Product Data Submittals: Submit manufacturer's standard published data. Mark each copy to identify applicable products, models, options, and other data. Supplement manufacturers' standard data to provide information specific to this Project.
- B. Shop Drawing Submittals: Prepared specifically for this Project; indicate utility and electrical characteristics, utility connection requirements, and location of utility outlets for service for functional equipment and appliances.
- C. Sample Submittals: Illustrate functional and aesthetic characteristics of the product, with integral parts and attachment devices. Coordinate sample submittals for interfacing work.
 - 1. For selection from standard finishes, submit samples of the full range of the manufacturer's standard colors, textures, and patterns.

PART 2 PRODUCTS

2.01 EXISTING PRODUCTS

- A. Do not use materials and equipment removed from existing premises unless specifically required or permitted by the Contract Documents.
- B. Existing materials and equipment indicated to be removed, but not to be re-used, relocated, reinstalled, delivered to the Owner, or otherwise indicated as to remain the property of the Owner, become the property of the Contractor; remove from site.
- C. Reused Products: Reused products include materials and equipment previously used in this or other construction, salvaged and refurbished as specified.

2.02 NEW PRODUCTS

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Do not use products having any of the following characteristics:
 - 1. Made using or containing CFC's or HCFC's.
- C. Adhesives and Joint Sealants:
 - 1. Definition: This provision applies to gunnable, trowelable, and liquid-applied adhesives, sealants, and sealant primers used anywhere on the interior of the building inside the weather barrier, including duct sealers.
 - 2. Specific Product Categories: Comply with limitations specified elsewhere.

2.03 PRODUCT OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- B. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- C. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

2.04 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Provide spare parts, maintenance, and extra products of types and in quantities specified in individual specification sections.
- B. Deliver to Project site; obtain receipt prior to final payment.

PART 3 EXECUTION

3.01 SUBSTITUTION PROCEDURES

- A. Instructions to Bidders specify time restrictions for submitting requests for substitutions during the bidding period. Comply with requirements specified in this section.
- B. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- C. A request for substitution constitutes a representation that the submitter:
 - 1. Has investigated proposed product and determined that it meets or exceeds the quality level of the specified product.
 - 2. Will provide the same warranty for the substitution as for the specified product.
 - 3. Will coordinate installation and make changes to other Work which may be required for the Work to be complete with no additional cost to Owner.
 - 4. Waives claims for additional costs or time extension which may subsequently become apparent.
- D. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- E. Substitution Submittal Procedure:
 - 1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
 - 2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
 - 3. The Architect will notify Contractor in writing of decision to accept or reject request.

3.02 TRANSPORTATION AND HANDLING

- A. Coordinate schedule of product delivery to designated prepared areas in order to minimize site storage time and potential damage to stored materials.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- D. Promptly inspect shipments to ensure that products comply with requirements, quantities are correct, and products are undamaged.
- E. Provide equipment and personnel to handle products by methods to prevent soiling, disfigurement, or damage.

- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

3.03 STORAGE AND PROTECTION

- A. Designate receiving/storage areas for incoming products so that they are delivered according to installation schedule and placed convenient to work area in order to minimize waste due to excessive materials handling and misapplication.
- B. Store and protect products in accordance with manufacturers' instructions.
- C. Store with seals and labels intact and legible.
- D. Store sensitive products in weather tight, climate controlled, enclosures in an environment favorable to product.
- E. For exterior storage of fabricated products, place on sloped supports above ground.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Prevent contact with material that may cause corrosion, discoloration, or staining.
- H. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

END OF SECTION

SECTION 01 70 00

EXECUTION AND CLOSEOUT REQUIREMENTS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Examination, preparation, and general installation procedures.
- B. Requirements for alterations work, including selective demolition.
- C. Cutting and patching.
- D. Cleaning and protection.
- E. Starting of systems and equipment.
- F. Demonstration and instruction of Owner personnel.
- G. Closeout procedures, except payment procedures.

1.02 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Cutting and Patching: Submit written request in advance of cutting or alteration which affects:
 - 1. Structural integrity of any element of Project.
 - 2. Integrity of weather exposed or moisture resistant element.
 - 3. Efficiency, maintenance, or safety of any operational element.
 - 4. Visual qualities of sight exposed elements.

1.03 PROJECT CONDITIONS

- A. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- B. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere.
- C. Noise Control: Provide methods, means, and facilities to minimize noise produced by construction operations.
- D. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations.

1.04 COORDINATION

- A. Coordinate scheduling, submittals, and work of the various sections of the Project Manual to ensure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Notify affected utility companies and comply with their requirements.
- C. Verify that utility requirements and characteristics of new operating equipment are compatible with building utilities. Coordinate work of various sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.

- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2 PRODUCTS

2.01 PATCHING MATERIALS

- A. New Materials: As specified in product sections; match existing products and work for patching and extending work.
- B. Type and Quality of Existing Products: Determine by inspecting and testing products where necessary, referring to existing work as a standard.
- C. Product Substitution: For any proposed change in materials, submit request for substitution described in Section 01 60 00.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that existing site conditions and substrate surfaces are acceptable for subsequent work. Start of work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new work being applied or attached.
- C. Examine and verify specific conditions described in individual specification sections.
- D. Take field measurements before confirming product orders or beginning fabrication, to minimize waste due to over-ordering or misfabrication.
- E. Verify that utility services are available, of the correct characteristics, and in the correct locations.
- F. Prior to Cutting: Examine existing conditions prior to commencing work, including elements subject to damage or movement during cutting and patching. After uncovering existing work, assess conditions affecting performance of work. Beginning of cutting or patching means acceptance of existing conditions.

3.02 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance.
- B. Seal cracks or openings of substrate prior to applying next material or substance.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

3.03 GENERAL INSTALLATION REQUIREMENTS

- A. Install products as specified in individual sections, in accordance with manufacturer's instructions and recommendations, and so as to avoid waste due to necessity for replacement.
- B. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- C. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.

- D. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- E. Make neat transitions between different surfaces, maintaining texture and appearance.

3.04 ALTERATIONS

- A. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Architect before disturbing existing installation.
 - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
 - 1. Where openings in exterior enclosure exist, provide construction to make exterior enclosure weatherproof.
 - 2. Insulate existing ducts or pipes that are exposed to outdoor ambient temperatures by alterations work.
- C. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove rotted wood, corroded metals, and deteriorated concrete; replace with new construction specified.
 - 2. Remove items indicated on drawings.
 - 3. Where new surface finishes are to be applied to existing work, perform removals, patch, and prepare existing surfaces as required to receive new finish; remove existing finish if necessary for successful application of new finish.
 - 4. Where new surface finishes are not specified or indicated, patch holes and damaged surfaces to match adjacent finished surfaces as closely as possible.
- D. Services (Including but not limited to HVAC, Plumbing, Fire Protection, Electrical, and Telecommunications): Remove, relocate, and extend existing systems to accommodate new construction.
 - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide access panel.
 - 2. Where existing systems or equipment are not active and Contract Documents require reactivation, put back into operational condition; repair supply, distribution, and equipment as required.
 - 3. Where existing active systems serve occupied facilities but are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
 - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
 - b. Provide temporary connections as required to maintain existing systems in service.
 - 4. Verify that abandoned services serve only abandoned facilities.
 - 5. Remove abandoned pipe, ducts, conduits, and equipment, including those above accessible ceilings; remove back to source of supply where possible, otherwise cap stub and tag with identification; patch holes left by removal using materials specified for new construction.
- E. Protect existing work to remain.
 - 1. Prevent movement of structure; provide shoring and bracing if necessary.
 - 2. Perform cutting to accomplish removals neatly and as specified for cutting new work.
 - 3. Repair adjacent construction and finishes damaged during removal work.
 - 4. Patch as specified for patching new work.
- F. Adapt existing work to fit new work:
 - 1. Where removal of partitions or walls results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads.
 - 2. Where a change of plane of 1/4 inch or more occurs in existing work, submit

recommendation for providing a smooth transition for Architect review and request instructions.

- G. Refinish existing surfaces as indicated:
 - 1. Where materials are indicated to be refinished, refinish all visible existing surfaces to remain to the specified condition for each material, with a neat transition to adjacent finishes.
 - 2. If mechanical or electrical work is exposed accidentally during the work, re-cover and refinish to match.
 - 3. Patch as specified for patching new work.
- H. Clean existing systems and equipment.
- I. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- J. Do not begin new construction in alterations areas before demolition is complete.
- K. Comply with all other applicable requirements of this section.

3.05 CUTTING AND PATCHING

- A. Execute cutting and patching to complete the work, to uncover work in order to install improperly sequenced work, to remove and replace defective or non-conforming work, to remove samples of installed work for testing when requested, to provide openings in the work for penetration of mechanical and electrical work, to execute patching to complement adjacent work, and to fit products together to integrate with other work.
- B. Execute work by methods to avoid damage to other work, and which will provide appropriate surfaces to receive patching and finishing. In existing work, minimize damage and restore to original condition.
- C. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- D. Restore work with new products in accordance with requirements of Contract Documents.
- E. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- F. Refinish surfaces to match adjacent finish. For continuous surfaces, refinish to nearest intersection or natural break. For an assembly, refinish entire unit.
- G. Make neat transitions. Patch work to match adjacent work in texture and appearance. Where new work abuts or aligns with existing, perform a smooth and even transition.

3.06 PROGRESS CLEANING

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas if materials fall into space during roofing activities and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

3.07 PROTECTION OF INSTALLED WORK

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.

- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

3.08 STARTING SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems that were disassembled during roofing activities.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. Submit a written report that equipment or system has been properly installed and is functioning correctly.

3.09 DEMONSTRATION AND INSTRUCTION

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at equipment location.
- C. For equipment or systems requiring seasonal operation, perform demonstration for other season within six months.
- D. Provide a qualified person who is knowledgeable about the Project to perform demonstration and instruction of owner personnel.

3.10 ADJUSTING

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

3.11 FINAL CLEANING

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior if required from roofing debris falling into space and exterior glass, surfaces exposed to view and stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- D. Clean filters of operating equipment.
- E. Clean debris from roofs, gutters, downspouts, and drainage systems.
- F. Clean site; sweep paved areas, rake clean landscaped surfaces.

- G. Remove waste, surplus materials, trash/rubbish, and construction facilities from the site; dispose of in legal manner; do not burn or bury.

3.12 CLOSEOUT PROCEDURES

- A. Make submittals that are required by governing or other authorities.
- B. Notify Architect when work is considered ready for Substantial Completion.
- C. Submit written certification that Contract Documents have been reviewed, work has been inspected, and that work is complete in accordance with Contract Documents and ready for Architect's review.
- D. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.
- E. Notify Architect when work is considered finally complete.
- F. Complete items of work determined by Architect's final inspection.

END OF SECTION

SECTION 01 78 00

CLOSEOUT SUBMITTALS

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and Bonds.

1.02 RELATED SECTIONS

- A. Section 01 30 00 - Administrative Requirements: Submittals procedures, shop drawings, product data, and samples.
- B. Individual Product Sections: Specific requirements for operation and maintenance data.
- C. Individual Product Sections: Warranties required for specific products or Work.

1.03 SUBMITTALS

- A. Project Record Documents: Submit documents to Architect with claim for final Application for Payment.
- B. Operation and Maintenance Data:
 - 1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
 - 2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
 - 3. Submit 1 copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
 - 4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- C. Warranties and Bonds:
 - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
 - 2. Make other submittals within ten days after Date of Substantial Completion, prior to final Application for Payment.
 - 3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within ten days after acceptance, listing the date of acceptance as the beginning of the warranty period.

PART 2 PRODUCTS - NOT USED

PART 3 EXECUTION

3.01 PROJECT RECORD DOCUMENTS

- A. Maintain on site one set of the following record documents; record actual revisions to the Work:
 - 1. Drawings.
 - 2. Addenda.
 - 3. Change Orders and other modifications to the Contract.
 - 4. Reviewed shop drawings, product data, and samples.

- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction including:
 - 1. Field changes of dimension and detail.
 - 2. Details not on original Contract drawings.

3.02 OPERATION AND MAINTENANCE DATA

- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

3.03 OPERATION AND MAINTENANCE MANUALS

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- B. Prepare data in the form of an instructional manual.
- C. Binders: Commercial quality, 8-1/2 x 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- G. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- H. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- I. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
 - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
 - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
 - a. Significant design criteria.
 - b. List of equipment.
 - c. Parts list for each component.
 - d. Operating instructions.
 - e. Maintenance instructions for equipment and systems.

3. Part 3: Project documents and certificates, including the following:
 - a. Shop drawings and product data.
 - b. Certificates.
 - c. Photocopies of warranties and bonds.

3.04 WARRANTIES AND BONDS

- A. Obtain warranties and bonds, executed in duplicate by responsible Subcontractors, suppliers, and manufacturers, within ten days after completion of the applicable item of work. Except for items put into use with Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Include originals of each in operation and maintenance manuals, indexed separately on Table of Contents.

END OF SECTION

SECTION 02 22 50

PARTIAL DEMOLITION FOR REMODELING

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Demolishing designated building equipment and fixtures.
 - 2. Demolishing designated construction.
 - 3. Cutting and alterations for completion of the Work.
 - 4. Removing designated items for reuse and Owner's retention.
 - 5. Protecting items designated to remain.
 - 6. Removing demolished materials.
- B. Related Sections:
 - 1. None.

1.2 SUBMITTALS

- A. Requirements for submittals.
- B. Describe demolition removal procedures and schedule.
- C. Shop Drawings:
 - 1. Indicate demolition and removal sequence.
 - 2. Indicate location of items designated for reuse and Owner's retention.
 - 3. Indicate location and construction of temporary work.

1.3 CLOSEOUT SUBMITTALS

- A. Requirements for submittals.
- B. Project Record Documents: Accurately record actual locations of capped utilities and subsurface obstructions.
- C. Operation and Maintenance Data: Submit description of system, inspection data, and parts lists.

1.4 QUALITY ASSURANCE

- A. Conform to applicable local code for demolition work, dust control, products requiring electrical disconnection and re-connection.
- B. Conform to applicable codes for procedures when hazardous or contaminated materials are discovered.

- C. Obtain required permits from authorities having jurisdiction.
- D. Perform Work in accordance with local building codes.

1.5 SCHEDULING

- A. Schedule Work to coincide with new construction.
- B. Perform noisy, malodorous and dusty work:
 - 1. Between hours of 3:00pm and 5:30am on school days.
 - OR
 - 2. On following days: Saturdays or as approved by the district.
 - 3. Monday through Friday if School is closed for Summer, Spring Break or Winter Break.

PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Mark location and termination of utilities.
- C. Erect, and maintain temporary barriers and security devices as required including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.
- D. Erect and maintain weatherproof closures for exterior openings.
- E. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.
- F. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.
- G. Provide appropriate temporary signage including signage for exit or building egress.
- H. Do not close or obstruct building egress path.
- I. Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to Owner.

3.2 SALVAGE REQUIREMENTS

- A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.
- B. Tag components and equipment Owner designates for salvage.
- C. Protect designated salvage items from demolition operations until items can be removed.
- D. Carefully remove building components and equipment indicated to be salvaged.
- E. Disassemble as required to permit removal from building.
- F. Package small and loose parts to avoid loss.
- G. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
- H. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.
- I. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

3.3 DEMOLITION

- A. Conduct demolition to minimize interference with adjacent and occupied building areas.
- B. Cease operations immediately when structure appears to be in danger and notify Architect/Engineer.
- C. Disconnect remove, cap, and identify designated utilities within demolition areas.
- D. Demolish in orderly and careful manner. Protect existing improvements, supporting structural members and protecting existing finishes.
- E. Carefully remove building components indicated to be reused.
 - 1. Disassemble components as required to permit removal.
 - 2. Package small and loose parts to avoid loss.
 - 3. Mark components and packaged parts to permit reinstallation.
 - 4. Store components, protected from construction operations, until reinstalled.
- F. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- G. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- H. Remove temporary Work.

3.4 SCHEDULES

- A. Remove, store and protect the following materials and equipment:
 - 1. Mechanical to be removed and reinstalled after curbs are raised.

END OF SECTION

SECTION 03 35 43

POLISHED CONCRETE FINISHING

PART I – GENERAL

1.01 SUMMARY

- A. Basis of Design Product: Subject to compliance with requirements, provide Architectural Polished Concrete Finishing System by DIAMATIC®. The system is ULTRAFLOOR Architectural Polished Concrete System as described below. Additional acceptable manufacturers include the following:
 - 1. Pre-Approved Equal.
- B. Complete installation details are provided in the DIAMATIC® Technical Brochures available at www.diamaticusa.com, www.ultraflor.com
- C. ULTRAFLOOR® polished concrete finish is a combination of mechanical grinding, honing and polishing combined with chemical treatments to produce a fully refined surface that's dust proof, durable, stain resistant, light reflective and easy to maintain.

1.02 SECTION INCLUDES

- A. Products and procedures for the installation of the ULTRAFLOOR® Architectural Polished Concrete System using a multi-step dry mechanical process and accessories indicated, specified or required to complete system and achieve specified finish:
 - 1. DIAMATIC® Mechanical Diamond Grinding and Polishing Equipment
 - 2. ULTRAFLOOR® Concrete Treatment Chemicals
 - 3. Joint filler and repair materials.
 - 4. Products and procedures for the initial and long term maintenance of the ULTRAFLOOR® Architectural Polished Concrete System.

1.03 RELATED SECTIONS

- A. Section 09 65 00 40 – Flooring Adhesive System
- B. Section 09 68 13 – Tile Carpet

1.04 SUBMITTALS

- A. Product Data: Submit Manufacturer's technical literature for each product indicated, specified or required. Include manufacturer's technical data, application instructions, recommendations and MSDS.
- B. Installer Qualifications: Data for company, principal personnel, experience, and training. Provide a letter documenting installer's accreditation and certification compliance, as specified under quality assurance.
- C. Maintenance Data: Provide manufacturer's instructions for maintenance of installed work, including methods and frequency recommended for maintaining optimum condition under intended use. These instructions should contain precautions against cleaning products and methods, which may be detrimental to finishes and performance.
- D. Pre-approved Substitutions: Pre-approval will only be granted if sufficient information is received to demonstrate equal system quality and warranty coverage. Manufacturers of equivalent products shall be considered in accordance with provisions of the "Special Terms and Conditions of the IFB." Comply with "Request for Approved Equal."

1.05 QUALITY ASSURANCE / WARRANTY

- A. Warranty Requirements: The ULTRAFLOOR® Architectural Polished Concrete System consists of a process and products engineered and manufactured by DIAMATIC. Any substitutions within the system are not permitted and will void warranty. The complete list of warranty requirements may be obtained through DIAMATIC or DMS @ 800-295-5512

- B. Installer Qualifications:
1. Installer must be an DIAMATIC® ELITE installer for the ULTRAFLOOR® Architectural Polished Concrete System, including the use of DIAMATIC® equipment and diamond abrasives, and DIAMATIC® concrete preparation, and chemical hardening and finishing materials.
 2. Installer must be experienced in performing specified work similar in design, products and scope of this project, with a documented track record of successful, in-service performance and with sufficient production capabilities, facilities and personnel to produce specified work.
 3. An ULTRAFLOOR® DIAMATIC® certified supervisor must be maintained on site during all times during which specified work is performed. For a complete list of qualified installers in your region contact the DMS (Diamatic Management Services) Project Manager at 858-253-1612.
 4. National brand specific projects must have DMS (Diamatic Management Services) personnel present during the pre-construction conference to insure quality control standards are in compliance.
 5. Installer must provide written documentation from the manufacturer confirming the Installer's current accreditation and training from DIAMATIC on installation of the ULTRAFLOOR® Architectural Polished Concrete System and related equipment and processes. Failure to provide current accreditation will void any warranty implied or otherwise associated with the ULTRAFLOOR® Architectural Polished Concrete System.
 6. A current list of qualified installers may be obtained through DIAMATIC MANAGEMENT SERVICES, DIAMATIC® USA 858-253-1612.
- C. Mock-Up: Before performing the work in this section, an adequate on-site mock-up of the ULTRAFLOOR® Architectural Polished Concrete System representative of specified process, surface, finish, color and joint design/treatments must be installed for review and approval. These mock-ups should be installed using the same size machine and personnel who will perform work. The minimum size shall be 10' x 10' to show the complete process. Approved mock-ups may become part of completed work, if undisturbed at time of substantial completion.
- D. Static Coefficient of Friction: A reading of not less than 0.5 for level floor surfaces shall be achieved and documented as determined by certified an NFSI walkway auditor using the ASTM D-2047 quality control test.
- E. Dynamic Coefficient of Friction: A reading not less than 0.6 for level floor surfaces shall be achieved and documented as determined by certified an NFSI walkway auditor using the ANSI B101.3 quality control test.
- F. Test Reports: Comply with the provisions of the following specifications and standards, except as otherwise noted or specified, or as accepted or directed by the Owner and/or Architect. All test data shall be recorded and submitted upon completion of job.
1. Section 03 30 00, Cast-In-Place Concrete
 2. ASTM E1155, Standard Test Method for Determining Floor Flatness and Levelness using the F number system.
 3. ASTM D-523, Standard Test Method for Measurement of Gloss of High-Gloss Surfaces by Abridged Goniophotometry.
 4. ASTM D-5767-95 Distinctness of Image (DOI).
 5. ASTM D-2407 Standard Specification for Coefficient of Friction.
 6. ASTM F-2170 Standard Test Method for Relative Humidity in Concrete Floors.
 7. ASTM F-1869-04 Standard Test Method for Measuring MVER in Concrete Sub Floors.
 8. ANSI B-101.3 Dynamic Coefficient of Friction.
 9. ACI 302 1R-15 Guide for Concrete Floor and Slab Construction, chapters, 8-11
 10. ACI 117-10 Specification for Tolerances for Concrete Construction, section 4.5.6
 11. ACI 310 R-13 Guide to Decorative Concrete, section 7.2
- G. Pre-Installation Conference: Prior to the installation of the ULTRAFLOOR® Architectural

requirements.

1. Required attendees include the Owner, Architect, General Contractor, ULTRAFLOOR® Architectural Polished Concrete System Subcontractor, and DMS representative as required in 1.04-B section d, Quality Assurance.
2. The minimum agenda shall include:
 - i. Review slab finish requirements, F-numbers and finishing practices.
 - ii. Review of System requirements, including drawings, specifications and other contract documents.
 - iii. Review of mock-up location, size and equipment. See reference in section 1.05-C.
 - iv. Review and finalization of installation schedule, and verification of availability of required materials, trained Installer personnel, equipment and facilities to execute specification and avoid delays.
 - v. Limit access to work area by other trades to reduce possible damage to the floor before, during and after completion. To include no pipe cutting on floor. All lifts must be diapered to prevent drips or staining.
 - vi. Review of required inspection, testing, certification and material usage accounting procedures.
 - vii. Review of power requirements and responsibility
 - viii. Review of temporary protection requirements during and after installation.
 - ix. Review of cleaning procedures during and after installation. Reference section 4-01 or ULTRAFLOOR® Maintenance Specification 03 09 00.

1.06 DELIVERY, STORAGE AND HANDLING

- A. Deliver all materials in original containers, bearing manufacturer's labels indicating brand name and directions for storage, factory numbered and sealed until ready for installation.
- B. Maintain copies of all chemical MSDS, and Technical data sheets for all products.
- C. Store all materials in a dry, climate-controlled environment at a minimum of 55°F (13°C) and maximum of 85°F (29°C).

1.07 SITE CONDITIONS

- A. Comply with manufacturer's written instructions for substrate temperature and moisture content, ambient temperature and humidity, ventilation and other conditions affecting the floor finish.
 - B. Close areas to traffic during and after ULTRAFLOOR® Architectural Polished Concrete System application for a time period recommended by DIAMATIC®
 - C. Inspect the existing substrate and document unsatisfactory conditions in writing. Verify that surfaces and site conditions are ready to receive work. Correct unacceptable conditions prior to installation of System. Commencement of work constitutes acceptance of substrate conditions.
 - D. Existing concrete must be cured for a sufficient time period as recommended by DIAMATIC® before the application can begin, typical 21-28 days.
 - E. Protect existing concrete and the new ULTRAFLOOR® Architectural Polished Concrete System from contamination by petroleum, oil, hydraulic fluid, acid and acidic detergents, paint and other liquid dripping from trades and equipment working over these substrates. If construction equipment must be used on these substrates, diaper all components that may drip fluids.
 - F. Prohibit the placement and storage of construction materials over new ULTRAFLOOR® Architectural Polished Concrete System, to include ferrous metals and steel members.
 - G. Prohibit vehicle parking and pipe cutting operations over concrete before and after the ULTRAFLOOR® Architectural Polished Concrete System.
 - H. An exception for high moisture floors may be obtained in writing from DIAMATIC USA or DMS upon request. Contact the main office @ 800-295-5512.
1. The Owner or General Contractor shall be responsible for any and all testing

conducted.

PART 2 – PRODUCTS

2.01 SYSTEM INTEGRITY

- A. The ULTRAFLOOR® Architectural Polished Concrete System is an engineered and integrated complete installation system requiring strict adherence to all specified installation processes, equipment, diamond abrasives, concrete preparation, joint treatment and chemicals to achieve the intended result. Any substitutions from the specified products and/or processes will void the system warranty.

2.02 MATERIALS

- A. DIAMATIC® Equipment
 1. DIAMATIC® BMG-780 Planetary Grinder and Polisher, Large Platform: 32" planetary floor polisher. Minimum head pressure of 725 lbs.
 2. DIAMATIC® Micro Polisher MPS-1827LP Propane Burnisher, MPS-1027E Electric Burnisher.
 3. Vacuums: Dust Collection must be designed for filtering of concrete dust. Minimum air speed of 340 CFM for Large and Medium Platform equipment.
 4. DIAMATIC® Dust Extractors BDC 3140-P, BDC 44, BDC 66.
- B. DIAMATIC® Diamond Abrasives and Blades
 1. Metal Bonded Diamonds – 18/20, 30/40, 60/80, 120-140 Grits.
 - a. Note: Concrete has hardness levels of soft, medium and hard. The hardness of the concrete will determine the required hardness of the metal bonded diamonds:
 - i. Extra Hard Concrete: Extra Soft metal bonded diamonds
 - ii. Hard Concrete: Soft metal bonded diamonds
 - iii. Medium Concrete: Medium metal bonded diamonds
 - iv. Soft Concrete: Hard metal bonded diamonds
 - v. Extra Soft Concrete: Extra Hard metal bonded diamonds
 - b. Transitional Diamonds, - #0, #1, #2 Grit.
 - c. Hybrid Flex-res Resin Bonded Diamonds -50, 100, 200, 400, 800, 1500, 3000 Grit.
 - d. FLOR-GRIT Diamond Impregnated Pads – 200, 400, 800, 1500, 3000 Grit.
 - e. Easy Edge Ceramic wheels for hand grinders – 30-50-100-270-400 Grit. Available in 5" and 7".
- C. ULTRAFLOOR® Concrete Treatment Chemicals 1-800-295-5512
 1. FLOR-SIL™ Lithium Densifier for standard concrete and terrazzo
 2. FLOR-FILL™ (RSG) Reactive Surface Grout and Pin Hole Filler
 3. FLOR-SHIELD™ Surface Densifying and Surface Protective Treatment
 4. FLOR-COLOR™ Micronized Water Borne High Performance Dye
 5. FLOR-FINISH™ Stain and Wear Protection Treatment (high-gloss)
 6. FLOR-CLEAN™ CR Polished Concrete Cleaner & Restorer
- D. DIAMATIC® Repair Materials
 1. DIAMATIC PRM-16 POLISHABLE REPAIR MORTAR
 2. DIAMATIC PC-5614 POLISHABLE CONCRETE TOPPING
- E. Joint Materials
 1. VERSAFLEX 100% solids polyurea joint fillers
 - a. SL/75, SL/85, SL/90
 2. METZGER MCGUIRE 100% solids polyurea joint filler
 - a. SPAL-PRO RS 88 Rapid Set Polyurea Joint Filler
 3. HI TECH SYSTEMS Polyurea elastomeric Joint Filler
 - a. HT-PE85 MI Flexible Joint Filler
- F. Protection Materials
 1. To prevent minor damage from light trade traffic during build out of site, an approved

Construction grade flooring protection material for the ULTRAFLOOR® Architectural Polished Concrete System shall be installed. At no time will any tape be used or applied to a finished ULTRAFLOOR® surface as the adhesive may leave a permanent residue or remove the surface finish.

PART 3 – EXECUTION

3.01 EXAMINATION

- A. Inspect all concrete substrates and conditions under which the ULTRAFLOOR® Architectural Polished Concrete System to be installed.
- B. Verify that all surfaces and site conditions are ready to receive work; document and correct conditions detrimental to timely and proper installation of work. Beginning work constitutes acceptance of substrate condition.
- C. Verify that existing concrete has cured a minimum of 28 days and meets finish and surface profile requirements in Division 03 Section “Cast-In-Place Concrete,” before installing the ULTRAFLOOR® Architectural Polished Concrete System.
- D. Inspect to mock-up panel to insure it is satisfactory and meets all of the owner’s requirements. The mock-up panel shall be a minimum size of 10’x10’.

3.02 PREPARATION

- A. Demolition
 - 1. Clear surfaces of any debris and construction materials.
 - 2. Power connections for the equipment of the ULTRAFLOOR® Architectural Polished Concrete System shall be located and prepared by general contractor.
 - 3. Using the appropriate mechanical means and methods, remove existing floor coverings and coatings, including but not limited to carpet VCT, ceramic tile and grout, wood, epoxy/ urethane, quartz, mastic, adhesives, paint or other non-concrete floor materials. Adhesives must be removed to their penetrated depth.
 - a. Note: The mechanical removal of resilient flooring, backing, lining felt, cutback and other adhesives can be hazardous, as certain materials may contain asbestos or crystalline silica. Do not sand, dry sweep, dry scrape, drill, saw, bead blast, grind, mechanically chip or pulverize these materials, as harmful dust may result. Inhalation of this dust may cause asbestosis or other bodily harm. Please consult the adhesive manufacturer, the Resilient Floor Covering Institute (www.rfci.com) and all applicable government agencies for rules and regulations concerning the handling and removal asbestos-containing materials.
 - b. Prevent any damage to concrete slab surface during demolition from chipping hammers. Existing flooring should be removed mechanically with walk-behind or ride-on scraping equipment.
 - 4. Chemical preparation of the substrate is NOT acceptable, including but not limited to acid etching, sweeping compounds, solvents and adhesive removers.
 - 5. Suppress dust during demolition with the use of dust collection equipment to reduce or eliminate airborne concrete and substrate dust.
 - 6. Where existing concrete is cracked, damaged, spalled, not within specified tolerance, or contains unacceptable levels of contaminants or moisture vapor, the Installer of the ULTRAFLOOR® DIAMATIC® Polished Concrete System will evaluate conditions and proceed with appropriate ULTRAFLOOR® System components.
 - 7. For specific repairs apply the PRM-16 Polishable Repair Mortar in accordance with the Technical Data Sheet.
- B. Joint Fill (Indoor)
 - 1. All joint fill materials shall be installed in accordance with the written instructions provided in the approved manufacturer’s technical data.
 - 2. For the best results all joints should be filled before or after the first pass of metal

bonded diamonds, but before any further grinding continues.

3. If the joint filling will occur after the polishing process, apply soap or another product as instructed by the manufacturer to the edge of the concrete to prevent staining the concrete surface.

3.03 GLOSS ATTAINMENT (ASTM D-523)

- A. Gloss readings are not to be obtained through the use of any microfilming products, sealers, coatings, enhancers or as the result of resin transfer from resin bond abrasives.
- B. Divide the floor into 9 equal segments based on the floor plan drawing, 3 sections for the back of the building, 3 sections for the center, and 3 sections at the front. Take 3 readings per section and record the average for each section on the close out report.
 1. Level A Sheen – Low Gloss reading of 30 to 40. 400 grit diamond finish.
 2. Level B Sheen – Medium Gloss reading of 41 to 55. 800 grit diamond finish.
 3. Level C Sheen – High Gloss reading of 56 or higher. 1500 grit or higher.
- C. For instructions on achieving gloss levels, refer to the appropriate sub-section of section 3.04.

3.04 POLISHING

Use the section below to determine specific finish details for the project. Refer to section 3.04-C for specific tooling and process steps.

- A. Cut Levels
 1. Level 1 Cut / A light cut that removes the surface paste exposing the fine aggregates near the surface. Also referred to as a light aggregate finish. Note that a Level 1 cut will require higher F-numbers to achieve, Min FF 50.
 2. Level 2 Cut / A slightly deeper cut that exposes the fine aggregates and begins to expose the coarse aggregates. Also referred to as a salt and pepper finish.
 3. Level 3 Cut / A deep cut that exposes the coarse aggregates in the surface.
- B. Polished Concrete Project Specific Details:
 1. Specified Floor Finish shall have a Cut Level of “Level 2 / Salt & Pepper”
 2. Specified Floor Finish shall have a Gloss Level of “Level A / Low Gloss”
 3. Specified FLOR-COLOR “N/A”
 4. Alternate #1: At areas indicated on the drawings to receive carpet, Specified Floor Finish shall have a Cut Level of “Level 1 / Light Aggregate Finish”
 5. Alternate #1: At areas indicated on the drawings to receive carpet, Specified Floor Finish shall be polished without the use of treatment chemicals.
 6. Alternate #1: At areas indicated on the drawings to receive carpet, Specified FLOR-COLOR “N/A”
 7. Alternate #1: Assure compatibility of prepared slab with Flooring Adhesive System.
- C. Polishing Steps
 1. GRIND/POLISH #1: DIAMATIC 30/40 Grit Metal Bonded Diamonds. Cross hatch until level of aggregate exposure has been achieved and all existing glue and residue has been removed.
 2. Squeegee, vacuum or auto-scrub to remove all residual dust.
 3. GRIND/POLISH #2: DIAMATIC 60/80 Grit Metal Bonded Diamonds
 4. Squeegee, vacuum or auto-scrub to remove all residual dust.
 5. GRIND/POLISH #3: DIAMATIC #1 Transitional Diamonds, Ceramic Bonded.
 6. Apply DIAMATIC FLOR-SIL™ per application instructions at a rate of 400 square feet per gallon.
 7. Allow DIAMATIC FLOR-SIL™ to dry 1 hour before continuing on to the next step.
 8. GRIND/POLISH #4: DIAMATIC 200 Grit Resin Bonded Diamonds.
 9. Squeegee, vacuum or auto-scrub to remove all residual dust.
 10. Apply DIAMATIC FLOR-SIL™ per application instructions at a rate of 400 square feet per gallon.
 11. Allow DIAMATIC FLOR-SIL™ to dry 1 hour before continuing on to the next step.
 12. GRIND/POLISH #5: DIAMATIC 400 Grit Resin Bonded Diamonds.

13. Squeegee, vacuum or auto-scrub to remove all residual dust.
14. MICROPOLISH/BURNISH #1: FLOR-GRIT 400 Diamond Impregnated Pad.
15. Dry mop the floor clean to remove all debris.
16. Apply DIAMATIC FLOR-FINISH™ with Low-gloss additive per application instructions at a rate of 2500-3,000 square feet per gallon.
17. Allow to dry a minimum of 15 minutes.
18. MICROPOLISH/BURNISH #2: FLOR-GRIT 400 Diamond Impregnated Pad.
19. Apply a second coat of FLOR-FINISH™ with Low-gloss additive. Allow to dry for 15 minutes.
20. MICROPOLISH/BURNISH #3: FLOR-GRIT 400 Diamond Impregnated Pad

3.05 EDGES

- A. Where required polished edge work of all areas shall be done with a 5" or 7" DIAMATIC Hand Held, Walk Behind polishing tool or equal. The edge polishing process will match the corresponding steps outlined above for the desired gloss level, and each edge polishing step shall be done immediately after the matching main polishing step.
- B. NOTE: All grinding and polishing completed with grinder/polisher equipment connected to a dust collector.

3.06 ACCEPTANCE

- A. Remove all installation materials and any foreign materials resulting from the installation, from the site.
- B. Clean adjacent surfaces and materials.
- C. Perform post job walk to ensure that the ULTRAFLOOR® Architectural Concrete System has been completed per the process spec.
- D. Take pictures of final product for documentation and submittal, if requested or required.

3.07 PROTECTION

- A. Prevent any spills or stains from coming into contact with the floor. Clean any spills that may occur as quickly as possible.
- B. Protect the finished ULTRAFLOOR® Architectural Polished Concrete System from continuing construction and build out as needed by installing the protective floor covering system.
 1. The installation of the protective floor covering must be approved by the Installer and General Contractor of the ULTRAFLOOR® installation.
 2. If the protective floor covering material is damaged during use, then that section must be cut out and replaced to maintain the integrity of the protective covering.
 3. The protective floor covering shall be the responsibility of the general contractor.

ONGOING MAINTENANCE

- A. Restrict using water on the surface for 72 hours after initial installation. The surface should not be cleaned using a string mop for 60 days to avoid streaking of the FLOR-FINISH. Avoid using mats or treated coverings for a minimum of 14 days to allow the finish to fully cure.
- B. DO NOT USE cleaners that are acidic or have citrus (de-limonene) or butyl compounds. Although the ULTRAFLOOR® Architectural Polished Concrete System is chemical and stain resistant, the application of these high acid cleaners may etch the surface and cause a residual stain. Regular maintenance and cleaning will help prolong surface shine.
Daily Maintenance.

DAILY MAINTENANCE

- A. Once the system is fully cured out (min. 72 hours), routinely sweep, dry mop, use of a high quality micro-fiber dust mop is the best method FLOR-CLEAN™ CR Polished Concrete Cleaner & Restorer may be used when soils or stains must be removed. Any standing water should be removed immediately after cleaning.

- B. An auto-scrubber may be used if equipped with a vacuum system to remove any standing water. The equipment tank should use FLOR-CLEAN™ diluted in clean water. The scrubber should be equipped with a soft pad only, DO NOT USE A BRUSH attachment.

WEEKLY MAINTENANCE

- A. An auto-scrubber may be used if equipped with a vacuum system to remove any standing water, the equipment tank should use FLOR-CLEAN™ diluted in clean water. The scrubber should be equipped with a soft pad only, DO NOT USE A BRUSH attachment.
- B. Use of a BURNISHER equipped with a FLOR-GRIT pad may be used as needed to restore gloss to specified levels. An 800 or 1500 grit pad is recommended.

EXTENDED MAINTENANCE

- A. After thorough cleaning a coat of the ULTRAFLO® FLOR-FINISH may be applied to restore original gloss and increase the stain resistance on the surface. Follow all technical data instructions for proper application or consult the original floor installer for assistance.
- B. Use of a BURNISHER equipped with a FLOR-GRIT pad may be used after the application of the FLOR-FINISH to restore gloss to specified levels. An 800 or 1500 grit pad is recommended.
- C. For additional information consult the ULTRAFLO® Maintenance Specification 03 90 00.

END OF SECTION 03 35 43

SECTION 09 65 00

RESILIENT BASE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Resilient base.

1.02 REFERENCES

- A. ASTM F 1861 - Standard Specification for Resilient Wall Base; 2002.

1.03 SUBMITTALS

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Product Data: Provide data on specified products, describing physical and performance characteristics; including sizes, patterns and colors available; and installation instructions.
- C. Maintenance Data: Include maintenance procedures, recommended maintenance materials, and suggested schedule for cleaning.

1.04 DELIVERY, STORAGE, AND PROTECTION

- A. Protect materials from damage by storing on end.

1.05 ENVIRONMENTAL REQUIREMENTS

- A. Maintain temperature in storage area between 55 degrees F and 90 degrees F.
- B. Store materials for not less than 48 hours prior to installation in area of installation at a temperature of 70 degrees F to achieve temperature stability. Thereafter, maintain conditions above 55 degrees F.

PART 2 PRODUCTS

2.01 MATERIALS - TILE FLOORING

2.02 MATERIALS - BASE

- A. Resilient Base: ASTM F 1861, Type TS rubber, vulcanized thermoset; top set Style B, Cove, and as follows:
 - 1. Height: **4-1/2 inches (3.2mm) thick.**
 - 2. Thickness: 0.125 inch thick.
 - 3. Finish: Satin.
 - 4. Color: Color as selected from manufacturer's standards.
 - a. Burke Flooring: www.buremercer.com
 - b. Johnsite. A Tarkett Company: www.johnsonite.com
 - c. Roppe Corp.: www.roppe.com
 - d. Or, approved equal.

PART 3 EXECUTION

3.01 EXAMINATION

- A. Verify that wall surfaces are dust-free and free of substances which would impair bonding of adhesive materials to resilient base.

3.02 PREPARATION

- A. Remove ridges and bumps from wall surface. Fill minor low spots, cracks, joints, holes, and

other defects with wall filler to achieve smooth, flat, hard surface.

- B. Clean substrate prior to applying adhesive materials and resilient base.

3.04 INSTALLATION - BASE

- A. Fit joints tightly and make vertical. Maintain minimum dimension of 18 inches between joints.
- B. Miter internal corners. At external corners, use premolded units. At exposed ends, use premolded units.
- C. Install base on solid backing. Bond tightly to wall and floor surfaces.
- D. Scribe and fit to door frames and other interruptions.

3.05 CLEANING

- A. Remove excess adhesive from base, and wall surfaces without damage.

END OF SECTION

Product Guide Specification Commercial Carpet

SECTION 09 68 13

Carpet Tile

PART 1: GENERAL

1.1 SECTION INCLUDES:

- A. Manufacturers
- B. Testing Protocols
- C. Performance Requirements
- D. Product Specifications
- E. Environmental Requirements
- F. Warranties
- G. Exclusions
- H. Installation
- I. Maintenance
- J. Accessories

1.2 REFERENCES

American Association of Textile Chemists and Colorists (AATCC):

- AATCC 16 – Test Method for Colorfastness to Light
- AATCC 107 – Test Method for Colorfastness to Water
- AATCC 129 – Test Method for Colorfastness to Ozone in the Atmosphere under High Humidity.
- AATCC 134 – Test Method for Electrostatic Propensity of Carpets.
- AATCC 165 – Test Method for Colorfastness to Crocking: Carpets – AATCC Crock Meter Method
- AATCC 175 – Test Method for stain Resistance: Pile Floor Coverings

American Society for Testing and Materials (ASTM):

- ASTM D418 – Methods for Testing Pile Yarn Floor Covering Construction (Finished Pile Thickness only)
- ASTM E648 – Test Method for Critical Radiant Flux of Floor Covering Systems
- ASTM E662 – Test Method for Specific Optical Density of Smoke

International Standards Organization (ISO):

- ISO 2551 – Test Method for Dimensional Stability (Aachen Test)

Carpet and Rug Institute (CRI):

- CRI Indoor Air Quality Testing and Labeling Program

1.3 PERFORMANCE REQUIREMENTS

Comply with the following performance requirements:

- Radiant Panel: ASTM E648: >.45 watts/sq. cm: Class 1
- Smoke Density: ASTM E662: 450 Flaming Mode - Maximum
- Static Generation: AATCC 134: 3.5 KV - Maximum
- Lightfastness: AATCC 16E: Min 4.0 at 40 hrs.
- Crocking: AATCC 165: 4.0 – Wet/Dry
- Cold Water Bleed: AATCC 107: 3.0 - Minimum
- Ozone Fade: AATCC 129: 3.0 - Minimum
- Soil Protection: AATCC 189: 500 PPM Min.
- CRI Green Label Plus Air Quality Certification: Pass
- CRI Appearance Retention Rating 3.0 minimum – Heavy Traffic
3.5 minimum – Severe Traffic
- Aachen Test: ISO 2551 Less than .15% shrinkage or growth
- Stain protection: AATCC 175: Equal to or greater than 8.0 on Red 40 stain test.

Special Performance Requirements

- Must have Soil and Stain Resist treatment
- Must have minimum 20 dpf fiber
- Must have hollow core cross-section
- Must be Cationic Dyed Nylon

1.4 SUBMITTALS

- Manufacturer's Data
Submit two (2) copies of manufacturer's specifications and installation instructions for carpet tile and related items specified.
- Fiber Requirements
Submit certification from the fiber producer verifying the following:
 - Use of the specified fiber in the submitted carpet product.
- Warranties
Submit warranties as described in Section 1.13
- Maintenance
 - Maintenance Manual – submit manual of carpet manufacturer's recommendations for the general care, cleaning and maintenance of carpet tile products.
- Certificate of Compliance
Submit certified test reports that carpet tile meets all the performance requirements stated above in section 1.3 Performance requirements. Submit certified test reports from a NVLAP Certified Lab that carpet meets all performance criteria.
- Shop Drawings
For carpeted areas submit shop drawings showing installation of carpeting, pattern direction, necessary installation accessories, and provisions for work of other trades. Show location of different patterns or styles of carpet tile. Also show locations of any threshold conditions

- The contractor will supply reproducible prints on request, to facilitate shop drawing preparation.
- Samples
Submit standard-size carpet tile samples of each type of carpet, in each specified pattern, color and construction.

Any alternates to specified products must be submitted for approval by a representative of the end user or architect/design firm at least ten (10) working days prior to bid or proposal.

- Final Sample Submittal
 - Submit two (2) sets of samples for each carpet type.
 - No carpet shipments are permitted until acceptance of final samples is given by representative of the end user or architect/design firm, certifying that samples are the approved color, pattern and texture.
- Custom Color only
 - A representative of the end user or architect/design firm, certifying that the samples are the approved color, pattern and texture, shall sign high quality color samples.
 - Samples submitted are assumed to be the manufacturer's best obtainable match to the color described under Materials Section.
 - Must have federally registered Branded trademark.

1.5 CLOSEOUT SUBMITTALS

- Maintenance Data
Include maintenance procedures, recommended cleaning and stain removal materials, and recommended cleaning schedule. Include product data and Safety Data Sheets (SDS) for cleaning and stain-removal materials.
- Installation Instructions
Include detailed installation procedures. Include carpet tile installation procedures, adhesive types, trowel sizes, spread rates, open times, and Safety Data Sheets (SDS) for all carpet tile adhesives.
- Warranties and Performance Certifications
Submit written warranties for all products as well as performance testing results on all items included in Warranty section and Performance section of this specification.

1.6 QUALITY ASSURANCE

- Single Source Responsibility: Provide products from a single manufacturer.
 - Warranties must be standard and not job specific.
 - All styles must come from the same manufacturer.
 - Must be single source fiber extrusion and yarn manufacturing.

1.7 QUALIFICATIONS

- Manufacturer
Company specializing in manufacturing carpet tiles with minimum five (5) years (documented) experience.
- Installer/Flooring Contractor Qualifications
 - Carpet contractor must provide all the necessary licenses, performance bonds, and insurance certificates that comply with all local, state, and federal laws, ordinances, or codes prior to the start of the installation.
 - Carpet contractor shall be a firm established not less than five (5) years and, if requested, shall submit evidence of having furnished and installed commercial carpet on commercial carpet projects of similar size and scope for at least five (5) years.
 - Flooring Contractor to provide references at the request of the owner.
 - Carpet Contractor will be responsible for the proper product installation, including floor preparation, in those areas indicated in the Drawings.
 - Carpet Contractor to provide owner a written warranty that guarantees the completed installation be free from defects in materials and workmanship for a period of two (2) years after job completion.
- Corporate Social Responsibility
Corporate social responsibility requirements: Manufacturer shall meet the corporate social responsibility as outlined below.
 - GRI Reporting: Manufacturer to have a corporate sustainability report (CSR) as per the GRI G4 guidelines.
 - Health and Wellness: Manufacturer to have on-site health clinics and biometric screenings, or health facilities displaying commitment towards health and wellness.
 - United Nations Sustainable Development Goals (UN SDGs):
Manufacturer must identify and commit to at least part of the UN SDGs as applicable to their organization and industry.
 - Facility certifications: Product's manufacturing facility shall be ISO 9001 certified. Manufacturer to have at least one green building certification for their own facilities – LEED, Living Building Challenge or WELL Building Standard.

1.8 PRE-INSTALLATION MEETINGS

- Convene one (1) week prior to commencing work of this section.
- Require attendance of (manufacturer), (installer), (contractor), (owner), (architect) and other parties directly affecting the work of this section.

1.9 DELIVERY, STORAGE AND HANDLING

- Deliver carpet tile in sealed protective boxes and accessories in sealed containers. Segregate each carpet product (if several product styles are involved), according to style, color, pattern, dye lot, run number, and quantity.
- Store products in an enclosed and dry area protected from damage and soiling.

1.10 SITE ENVIRONMENTAL REQUIREMENTS

- Do not install carpet tile until all areas have been fully enclosed and the environmental conditions have reached the levels desired for occupancy of the space.
- Maintain ambient temperature and humidity conditions during and after installation of carpet tile at occupancy levels.
- Allow carpet to reach room temperature, or minimum temperature recommended by manufacturer prior to the start of the installation.
- Protect adhesives from freezing. Follow manufacturer's recommendations for minimum temperatures to which adhesives are exposed.

1.11 FIELD MEASUREMENTS

- Verify that field measurements are as indicated on drawings.

1.12 SEQUENCING

- Sequence installation so as to minimize possibility of damage and soiling of carpet.
- Do not commence installation until painting and finishing work are complete, and ceiling and overhead work have been tested, approved and completed.
- Remove and replace existing carpet (renovations) in accordance with pre-approved architectural plan.

1.13 WARRANTY

Warranty Performance Requirements

- Provide manufacturer's lifetime warranties for:
 - Wear
 - Static
 - Edge Ravel
 - Zippering
 - Delamination
 - Dimensional Stability
- Supplemental Fiber Warranties:
 - Lifetime Stain Warranty
 - Lifetime Warranty against color transfer wet or dry
 - Lifetime Warranty against wet fastness
 - 10 Year Colorfastness to Light
 - 10 Year Colorfastness to Atmospheric contaminants

1.14 EXTRA MATERIALS

- Provide percent overage of calculated yardage for each type of carpet (include carpet needed for complete installation plus waste and usable scraps in calculated yardage) as specified by architect and/or end user. Recycle waste, unusable scrap and any carpet tile damaged during installation through a qualified industry recycling or manufacturer environmental program.
- Deliver specified attic stock requirements to Owner's designated storage space, properly packaged and identified.

PART 2: PRODUCTS

2.1 MANUFACTURERS

- Mohawk Group, 160 S. Industrial Blvd, Calhoun GA Telephone 800.241.4494 Web Site: www.mohawkgroup.com.
 - Contact: **Mark Isaacson** Cell: **602-402-4074**
 - **Equal Manufactures for alternate requests are Mannington and Shaw**
- Substitutions or Equals:
 - Substitutions are allowed only if they meet the following criteria:
 - Acceptance of alternate product(s) that are accepted as equals must be approved by parties (including, but not limited to) parties that have material interest in the specifications including: Designer, Architect, End-User and must be approved a minimum of 10 days prior to the bid date.

2.2 CARPET TILE CONSTRUCTION

- All yarn and other carpet materials shall be manufacturer's first quality.
- Carpet tile backing composite shall be constructed in the following manner:
- Backing Material/Composition
 Primary – Reinforced Synthetic – non-woven
 Secondary Backing Layer – Thermoplastic Polymer

DETAILED PRODUCT CONSTRUCTION SPECIFICATIONS

CARPET 1

Style Name:	Swipe right
Product Type:	Carpet Tile
Construction:	Tufted
Surface Texture:	Textured Patterned loop
Gauge:	1/12 (47.00 rows per 10 cm)
Density:	5,719
Weight Density:	97,233
Stitches per Inch:	12.4 (48.82 per 10 cm)
Finished Pile Thickness:	.107 (2.72 mm)
Dye Method:	Solutioned Dyed
Backing Material:	100% non-PVC
Fiber Type:	Type 6 Cationic solution dyed hollow core nylon
Face Weight:	17 oz per sq. yd. (g/m2)
Size:	24" x 24" (.6096 m x .6096 m)
Soil Release Technology:	Topical Soil and Stain Protection
Installation Method:	Quarter Turned, random or Brick Ashlar

Indoor Air Quality:	CRI Green Label Plus GLP 1171
Foot Traffic Recommendation TARR:	
NSF 140	EcoFlex NXT - NSF 140 Gold

All specifications are subject to normal manufacturing tolerances

2.3 ENVIRONMENTAL ATTRIBUTES AND CRITERIA

- Transparency Attributes: Products shall meet the transparency requirements and the following documentation and certifications are acceptable towards compliance.
 - Health Product Declaration (HPD): Manufacturer's publicly available Health Product Declaration (HPD) with full disclosure of ingredients and known hazards that is in compliance with the Health Product Declaration Standard 2.1.
 - Declare Label: Third Party Verified Declare Label
 - Environmental Product Declaration (EPD): Manufacturer's product life cycle assessment documenting environmental impact of the product throughout its life cycle in accordance with ISO 14025.
- Material Health and Indoor Air Quality Attributes: Products shall meet the transparency requirements and the following documentation and certifications are acceptable towards compliance.
 - Health Product Declaration (HPD): Manufacturer's publicly available Health Product Declaration (HPD) with full disclosure of ingredients and known hazards that is in compliance with the Health Product Declaration Standard 2.1.
 - Declare Label: Third Party Verified Declare Label with Living Building Challenge Red List Free status and provide 100% ingredient disclosure.
 - Carpet and Rug Institute (CRI) Green Label Plus (GLP) certification.
 - California Department of Public Health (CDPH) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers (also known as CDPH/EHLB Standard Method v1.2 or California Specification 01350).
- Additional Sustainability Attributes: Products shall meet the following requirements and the following documentation and certifications are acceptable towards compliance.
 - ANSI/NSF 140: For carpet, meet Achievement Level of Gold, 52 to 70 points, based on specific Sustainable Attribute Performance for all product stages according to ANSI/NSF 140.
- Adhesive requirements: Products shall meet the following requirements and the following documentation and certifications are acceptable towards compliance.
 - Volatile Organic Compound (VOC) Emissions: Emissions shall meet the California Department of Public Health (CDPH) Standard Method v1.2, 2017 requirements.

- Volatile Organic Compound (VOC) Emissions: Adhesive shall comply with the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1168.
- Building Certifications: Products shall meet the following building certification standards.
 - LEED 2009 and LEEDv4, Living Building Challenge (Petals including Red List Imperative) and WELL Building Standard
- End of Life Reclamation – Carpet manufacturers must have existing program in place to achieve landfill diversion. Refer to Section 3.7 of this section for specific requirements for reclamation of material. Recover – Carpet recycling program, call toll free 877-373-2925.

2.4 MANUFACTURER'S REQUIREMENTS

- Corporate social responsibility requirements: Manufacturer shall meet the corporate social responsibility as outlined below
 - GRI Reporting: Manufacturer to have a corporate sustainability report (CSR) as per the GRI guidelines.
 - Health and Wellness: Manufacturer to have on-site health clinics and biometric screenings, or health facilities displaying commitment towards health and wellness.
 - United Nations Sustainable Development Goals (UN SDGs): Manufacturer must identify and commit to at least part of the UN SDGs as applicable to their organization and industry.
 - Facility Certifications: Product's manufacturing facility shall be ISO 9001 certified. Manufacturer to have at least one green building certification for their own facilities – LEED, Living Building Challenge or WELL Building Standard.
 - Manufacturer to contribute towards protecting natural and ecological habitat through conservation and provide appropriate documentation.

Manufacturer to have on-site renewable energy as a part of their energy portfolio.

2.5 ACCESSORIES

- Leveling Compound: Latex type as recommended by carpet manufacturer; compatible with carpet adhesive and curling/sealing compound used on concrete.
- Pressure Sensitive Adhesive: Low VOC EnPress® Pressure Sensitive Adhesive carpet tile adhesive, as recommended by carpet manufacturer for direct glue down of carpet tiles; comply with CRI Green Label Plus Certification Program.
- Non-Metallic Carpet Edge Guard: Extruded or molded heavy-duty vinyl or rubber carpet edge guard of size and profile indicated; minimum two (2) inch wide anchorage flange; colors selected by (Architect) (Designer) from manufacturer's standard range of colors.
- Miscellaneous Materials: As recommended by manufacturer of carpet, cushion, and other carpet products; as required to complete installation.

PART 3 EXECUTION

3.1 EXAMINATION

- Examine substrates for conditions under which carpet tiles are to be installed.
- Verify that floor surfaces are smooth and flat within tolerances specified in Section 3.2 and are ready to receive work.
- Beginning of installation means installer accepts existing substrate conditions.

3.2 PREPARATION

- Allow new concrete to cure for 90 days before carpet installation starts.
- Perform moisture content testing as required by manufacturer's instructions to ensure pH readings of no more than nine (9). Moisture transmission of 3.0-lbs/sq. ft per 24 hours is acceptable. If values exceed this level, follow manufacturer's recommendations for moisture transmission mitigation. Do not proceed until unsatisfactory conditions have been corrected.
- Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes and other defects with sub-floor filler.
- Fill, level and make smooth cracks 1/16 inch or more, holes, unevenness, and roughness with compatible latex floor patching compounds. Feather floor filling or leveling compound a minimum of four (4) ft. Sweep floor of loose granular debris prior to filling. After filling, allow filler to dry. Damp mop floor with warm water and allow to dry. Vacuum after mopping to ensure that loose granular debris is removed and to provide a proper substrate to install carpet tile. Prohibit traffic until filler is cured.
- Vacuum floor again immediately before installation of carpeting.
- Confirm compatibility of EnPress® Pressure Sensitive Adhesive with curing compounds on concrete floors.
- Preheat areas to receive carpet tile to a minimum temperature of 65° F for 72 hours prior to installation, with a relative humidity of not more than 65 percent. Maintain minimum temperature of 65° F thereafter. Carpet tile and adhesive must be stored at a minimum temperature of 65° F, for 24 hours prior to installation.
- Store EnPress® Pressure Sensitive Adhesive and other liquid materials in same atmospheric conditions as carpet tile, 65° F for at least 24 hours.

3.3 INSTALLATION

- Install carpet tile in accordance with the Technical Bulletins provided by the manufacturer. These technical bulletins will offer the proper instructions to install carpet tile including: (1) conducting site testing and conditioning, (2) floor preparation, (3) installation of the carpet tile, including carpet tile layout (if more than one pattern or color) and approved adhesives, systems, etc. As a supplement, the CRI 104, section 8 will supply additional installation support guidance for your installation.
- Install carpet tile under open-bottom obstructions and under removable flanges and furnishings, and into alcoves and closets in each space.

- Conceal cut edges with protective edge guards or flanges.
- Install carpet tile under open-bottom items and cut tiles tight against walls, columns, and cabinets so that the entire floor area is covered with carpet tile. Cover over floor-type door closers.
- Install edging guards at openings and doors wherever the carpet tile terminates, unless indicated otherwise.
- Perform cutting in accordance with manufacturer's recommendation using tools designed for carpet tile being installed. Verify carpet tile patterns and colors before cutting to insure minimal variation between dye lots.
- Install carpet tile according to manufacturer's instructions. Depending on the product specification, install either monolithically, quarter turned, Ashlar, or random. Installation requirements will be spelled out in the architectural drawings for the recommended method to be employed.
- Use leveling compound where necessary. Feather floor leveling compounds minimum of 4 ft.
- Trim carpet tile neatly at walls, and around interruptions
- Complete installation of edge strips, concealing exposed edges.
- Cut carpet tile at fixtures, architectural elements, and perimeters.
- Install carpet on stairs using acceptable permanent adhesive. Furnish and use compatible edge strip and nosing products as required.

3.4 FIELD QUALITY CONTROL

- Inspect completed carpet tile installation on each floor.
- Verify that installation is complete; work is properly done and acceptable.
- Remove and replace, at no additional cost to owner, any work found not to be acceptable.

3.5 CLEANING

- On completion of installation in each area, remove dirt and scraps from surface of finished carpet tile. Clean soiling, spots, or excess adhesive on carpet with cleaning materials recommended by carpet manufacturer.
- Remove debris; sort pieces from carpet scraps.
- At completion of work, vacuum carpet using commercial vacuuming equipment as recommended by manufacturer. Remove spots and replace carpet tile where spots cannot be removed. Remove rejected carpet tile pieces and replace with new modules. Remove any protruding yarns with shears or sharp scissors.

3.6 PROTECTION

- Do not permit traffic over unprotected carpet surface.
- Protect carpet tile against damage during construction. Cover with 6-mil thick polyethylene during construction period so that carpet will be without soiling, deterioration, wear, or damage at time of completion.
- Prior to furniture move in, heavy traffic areas will be protected with additional Masonite sheets to protect the carpet from damage.
- Damaged carpet tile will be rejected. As carpet tile is installed, remove trimmings, scraps of carpet and installation materials.
- Maintain protection of carpeting on each floor or area until work is accepted.

3.7 CARPET RECLAMATION – BROADLOOM CARPETING AND CARPET TILE

This specification is for carpet reclamation and is designed to manage carpet recycling for any type of used carpet or carpet pad.

- CARPET REMOVAL – BROADLOOM
 - Remove used carpet in carpet pieces, roll tightly, and pack neatly in container. (Include carpet scrap and waste from new installation.) Immediately remove used carpet from Site. For reclamation projects coordinated by Mohawk Reclamation Department, place in Mohawk provided covered containers.
 - Deposit only clean, dry used carpets in containers. Clean shall be defined as carpet free from demolition debris or asbestos contamination, garbage, and tack strips.
- CARPET REMOVAL – CARPET TILE
 - Remove used carpet tile and stack neatly on pallets. Neatly stack carpet tiles or repack in cardboard boxes prior to placing in container. Do not stack higher than 6 feet on pallets. (Include carpet scrap and waste from new installation.) Immediately remove used carpet from Site. For reclamation projects coordinated by Mohawk Reclamation Department, place in Mohawk provided covered containers.
 - Deposit only clean, dry used carpets in containers. Clean shall be defined as carpet free from demolition debris or asbestos contamination, garbage, and tack strips.
- CONTAINER HANDLING
 - Place used carpet in container supplied by Mohawk Reclamation Department. Containers are fully enclosed and shall be kept locked or supervised.
 - Broadloom carpet must be segregated in separate containers from tile carpeting.
 - Use effective packing techniques to maximize the amount of material in the container. On average the following amounts are the related container capacities.

<u>Container Size</u>	<u>Broadloom Capacity</u>	<u>Tile Capacity</u>
53' Foot	4,800	3,500

- CONTAINER REMOVAL

When container is full, contact Mohawk Reclamation Department to coordinate pickup and drop-off of replacement container if needed. If container is locked for security purposes, remove the lock prior to pick up.

The Mohawk Reclamation Department toll free number is (877) 3RE-CYCL or (877) 373-2925

- RECLAMATION CERTIFICATE

The Mohawk Reclamation Department will issue a reclamation certificate once used carpet is removed from the job site and or dealer location and delivered to reclamation facility.

END OF SECTION

Product Guide Specification Commercial Carpet

SECTION 09 68 16

Broadloom Carpet

PART 1: GENERAL

1.1 SECTION INCLUDES:

- A. Manufacturers
- B. Testing Protocols
- C. Performance Requirements
- D. Product Specifications
- E. Environmental Requirements
- F. Warranties
- G. Exclusions
- H. Installation
- I. Maintenance
- J. Accessories

1.2 REFERENCES

American Association of Textile Chemists and Colorists (AATCC):

- AATCC 16, Test Method of Colorfastness to Light.
- AATCC 107, Test Method for Colorfastness to Water.
- AATCC 129, Test Method for Colorfastness to Ozone in the Atmosphere Under High Humidity.
- AATCC 134, Test Method for Electrostatic Propensity of Carpets.
- AATCC 165-(93), Test Method for Colorfastness to Crocking: Carpets – AATCC Crock meter Method.
- AATCC 175-(98), Test Method for Stain Resistance: Pile Floor Coverings
- AATCC 189, Test Method for Fluorine Content of Carpet Fibers
- AATCC 164, Test Method for Colorfastness to Oxides of Nitrogen in the atmosphere under High Humidity's.

American Society for Testing and Materials (ASTM):

- ASTM D418-(12), Methods for Testing Pile Yarn Floor Covering Construction (Finished Pile Thickness Only)
- ASTM D5848, Standard Test Method for Mass Per Unity of Pile Yarn for Floor Covering.
- ASTM D5823, Standard Test Method for Tuft Height of Pile Floor Coverings
- ASTM D1335 – Standard Test Method for Tuft Bind of Pile Yarn Floor Covering.
- ASTM E648- Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source.
- ASTM E662 – Test Method for Specific Optical Density of Smoke Generated by Solid Materials.
- ASTM D3574, Standard Test Methods for Flexible Cellular Materials – Slab, Bonded, and Molded Urethane Foams.
- ASTM D3936, Standard Test Method for Resistance to Delamination of the Secondary Backing of Pile Yarn Floor Covering.

Supplemental Testing Procedures:

- ASTM D7267 Edge Ravel - PT-155-Rev. 86, Loop Pile Run Resistance test

Carpet and Rug Institute (CRI):

- CRI Indoor Air Quality Testing and Labeling Program

U.S. Department of Housing and Urban Development (HUD):

- HUD UM 44D-(93), HUD Building Product Standards and Certification Program for Carpet.

1.3 PERFORMANCE REQUIREMENTS

Comply with the following performance requirements:

- Radiant Panel: ASTM E648: >.45 watts/sq. cm: Class 1
- Smoke Density: ASTM E662: 450 Flaming Mode - Maximum
- Static Generation: AATCC 134: 3.5 KV - Maximum
- Lightfastness: AATCC 16E: Min 4.0 at 40 hrs.
- Crocking: AATCC 165: 4.0 – Wet/Dry
- Cold Water Bleed: AATCC 107: 3.0 - Minimum
- Ozone Fade: AATCC 129: 3.0 - Minimum
- Soil Protection: AATCC 189: 500 PPM Min.
- CRI Green Label Plus Air Quality Certification: Pass
- Stain Protection: AATCC 175: Equal to or greater than 8.0 on Red 40 stain test
- CRI Appearance Retention Rating. 3.5 minimum – Severe Traffic

Special Performance Requirements:

- Must contain soil protection
- Must have permanent anti-static fiber.
- Must have Trilobal cross-section
- Must be at least 18 dpf fiber

1.4 SUBMITTALS

- Manufacturer's Data
Submit two (2) copies of manufacturer's specifications and installation instructions for Broadloom carpet and related items specified.
- Fiber Requirements
Submit certification from the fiber producer verifying the following:
 - Use of the specified fiber in the submitted carpet product.
- Warranties
Submit warranties as described in Section 1.13
- Maintenance
 - Maintenance Manual – submit manual of carpet manufacturer's recommendations for the general care, cleaning and maintenance of carpet products.
- Certificate of Compliance

Submit certified test reports that carpet meets all the performance requirements stated above in section 1.3 Performance requirements. Submit certified test reports from a NVLAP Certified Lab that carpet meets all performance criteria.

- Shop Drawings

For carpeted areas submit shop drawings showing installation of carpeting, pattern direction, necessary installation accessories, and provisions for work of other trades. Show location of different patterns or styles of carpet. Also show locations of any threshold conditions

- The contractor will supply reproducible prints on request, to facilitate shop drawing preparation.

- Samples

Submit standard-size carpet samples of each type of carpet, in each specified pattern, color and construction.

Any alternates to specified products must be submitted for approval by a representative of the end user or architect/design firm at least ten (10) working days prior to bid or proposal.

- Final Sample Submittal
Submit two (2) sets of samples for each carpet type.
 - No carpet shipments are permitted until acceptance of final samples is given by representative of the end user or architect/design firm, certifying that samples are the approved color, pattern and texture.
 - Custom Color only
A representative of the end user or architect/design firm, certifying that the samples are the approved color, pattern and texture, shall sign high quality color samples.
 - Samples submitted are assumed to be the manufacturer's best obtainable match to the color described under Materials Section.

1.5 CLOSEOUT SUBMITTALS

- Maintenance Data

Include maintenance procedures, recommended cleaning and stain removal materials, and recommended cleaning schedule. Include product data and Safety Data Sheets (SDS) for cleaning and stain-removal materials.

- Installation Instructions

Include detailed installation procedures. Include carpet installation procedures, adhesive types, trowel sizes, spread rates, open times, and Safety Data Sheets (SDS) for all carpet adhesives.

- Warranties and Performance Certifications

Submit written warranties for all products as well as performance testing results on all items included in Warranty section and Performance section of this specification.

1.6 QUALITY ASSURANCE

- Single Source Responsibility: Provide products from a single manufacturer.
 - Warranties must be standard and not job specific.
 - All styles must come from the same manufacturer.

1.7 QUALIFICATIONS

- Manufacturer
Company specializing in manufacturing commercial carpet with minimum five (5) years (documented) experience.
- Installer/Flooring Contractor Qualifications
 - Carpet contractor must provide all the necessary licenses, performance bonds, and insurance certificates that comply with all local, state, and federal laws, ordinances, or codes prior to the start of the installation.
 - Carpet contractor shall be a firm established not less than five (5) years and, if requested, shall submit evidence of having furnished and installed commercial carpet projects of similar size and scope for at least five (5) years.
 - Flooring Contractor to provide references at the request of the owner.
 - Carpet Contractor will be responsible for the proper product installation, including floor preparation, in those areas indicated in the Drawings.
 - Carpet Contractor to provide owner a written warranty that guarantees the completed installation be free from defects in materials and workmanship for a period of two (2) years after job completion.
- Corporate Social Responsibility
Corporate social responsibility requirements: Manufacturer shall meet the corporate social responsibility as outlined below.
 - GRI Reporting: Manufacturer to have a corporate sustainability report (CSR) as per the GRI G4 guidelines.
 - Health and Wellness: Manufacturer to have on-site health clinics and biometric screenings, or health facilities displaying commitment towards health and wellness.
 - United Nations Sustainable Development Goals (UN SDGs): Manufacturer must identify and commit to at least part of the UN SDGs as applicable to their organization and industry.
 - Facility certifications: Product's manufacturing facility shall be ISO 9001 certified. Manufacturer to have at least one green building certification for their own facilities – LEED, Living Building Challenge or WELL Building Standard.

1.8 PRE-INSTALLATION MEETINGS

- Convene one (1) week prior to commencing work of this section.
- Require attendance of (manufacturer), (installer), (contractor), (owner), (architect) and other parties directly affecting the work of this section.

1.9 DELIVERY, STORAGE AND HANDLING

- Deliver carpet in sealed protective rolls and accessories in sealed containers. Segregate each product (if several product styles are involved), according to style, color, pattern, dye lot, run number, and quantity.
- Store products in an enclosed and dry area protected from damage and soiling.

1.10 SITE ENVIRONMENTAL REQUIREMENTS

- Do not install carpet until areas have been fully enclosed and environmental conditions have reached the levels indicated during occupancy.
- Maintain ambient temperature and humidity conditions during and after installation of carpet at levels indicated during occupancy.
- Allow carpet to reach room temperature or minimum temperature recommended by manufacturer before beginning installation.
- Protect adhesives from freezing. Follow manufacturer's recommendations for minimum temperatures to which adhesives are exposed.

1.11 FIELD MEASUREMENTS

- Verify that field measurements are as indicated on drawings.

1.12 SEQUENCING

- Sequence installation so as to minimize possibility of damage and soiling of carpet.
- Do not commence installation until painting and finishing work are complete, and ceiling and overhead work have been tested, approved and completed.
- Remove and replace existing carpet (renovations) in accordance with pre-approved architectural plan.

1.13 WARRANTY

Warranty Performance Requirements:

- Warranties must be for Lifetime on all items.
- Lifetime warranties must cover face components and backing components
- Warranties must be non-prorated
- Carpet manufacturer must warrant both product and adhesive systems.
 - Fiber must have lifetime static warranty.
- Warranty – include coverage for:
 - Provide carpet installer's warranty against defects in installation.
 - Provide full spectrum of Manufacturer's Lifetime warranties as outlined below:
 - Wear

- Stain
- Colorfastness: Wet & Dry
- Wet Fastness
- Static Protection
- Tuftbind
- Liquid Management
- Edge Ravel/Zippering
- Delamination
- Manufacturing Defects
- **Adhesive Failure** – When properly installed with manufactures adhesive. Only manufactures adhesives are allowed

1.14 EXTRA MATERIALS

- Provide percent overage of calculated yardage for each type of carpet (include carpet needed for complete installation plus waste and usable scraps in calculated yardage) as specified by architect and/or end user. Recycle waste, unusable scrap and any carpet damaged during installation through manufacturer's environmental program.
- Elevator carpet: Provide extra stock for two (2) complete carpet changes for each elevator cab.
- Deliver specified attic stock to Owner's designated amounts and to designated storage space, properly packaged and identified. Redirect small pieces of waste to be appropriately recycled.

PART 2: PRODUCTS

2.1 MANUFACTURERS

- Mohawk Group, 160 S. Industrial Blvd, Calhoun GA 30701 Telephone 800.241.4494. Web Site: www.mohawkgroup.com
 - Contact: Mark Isaacson Cell: 602-402-4074
 - Other Equal manufactures allowed to submit equals : Mannington and Shaw
- Substitutions or Equals:
 - Substitutions and Equals are allowed only if they meet the following criteria:
 - Acceptance of alternate product(s) that are accepted as equals must be approved by parties (including, but not limited to) parties that have material interest in the specifications including: Designer, Architect, End-User and must be approved a minimum of 10 days prior to the bid date.

2.2 CARPET CONSTRUCTION

- All yarn and other carpet materials shall be manufacturer's first quality.

DETAILED PRODUCT CONSTRUCTION SPECIFICATIONS

Style Name	Mirada Stitchlock
Product Type	Broadloom
Construction	Tufted
Surface Texture	Textured Pattern loop
Gauge	1/12 (47.00rows per 10 cm)

Density	
Weight Density	
Stitches Per Inch	11 (43.31 per 10 cm)
Finished Pile Thickness	.120" (3.05 mm)
Dye Method	Solution dyed
Backing Material	Unibond Plus or equal
Fiber Type	Type 6 Nylon
Face Weight	28 oz. per sq. yd. (949 g/m2)
Pattern Repeat	none
Soil Release Technology	Sentry Soil Protection
Indoor Air Quality	CRI Green Label Plus GLP
Foot Traffic Recommendation TARR	Severe
NSF 140	

All specifications are subject to normal manufacturing tolerances

2.3 ENVIRONMENTAL ATTRIBUTES AND CRITERIA

- Transparency Attributes: Products shall meet the transparency requirements and the following documentation and certifications are acceptable towards compliance.
 - Health Product Declaration (HPD): Manufacturer's publicly available Health Product Declaration (HPD) with full disclosure of ingredients and known hazards that is in compliance with the Health Product Declaration Standard 2.1.
 - Declare Label: Third Party Verified Declare Label
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- Material Health and Indoor Air Quality Attributes: Products shall meet the transparency requirements and the following documentation and certifications are acceptable towards compliance.
 - Health Product Declaration (HPD): Manufacturer's publicly available Health Product Declaration (HPD) with full disclosure of ingredients and known hazards that is in compliance with the Health Product Declaration Standard 2.1.
 - Declare Label: Third Party Verified Declare Label with Living Building Challenge Red List Free status and provide 100% ingredient disclosure.
 - Carpet and Rug Institute (CRI) Green Label Plus (GLP) certification.
 - California Department of Public Health (CDPH) Standard Method for the Testing and Evaluation of Volatile Organic Chemical Emissions from Indoor Sources Using Environmental Chambers (also known as CDPH/EHLB Standard Method v1.2 or California Specification 01350).
- Additional Sustainability Attributes: Products shall meet the following requirements and the following documentation and certifications are acceptable towards compliance.

- ANSI/NSF 140: For carpet, meet Achievement Level of Gold, 52 to 70 points, based on specific Sustainable Attribute Performance for all product stages according to ANSI/NSF 140.
- Adhesive requirements: Products shall meet the following requirements and the following documentation and certifications are acceptable towards compliance.
 - Volatile Organic Compound (VOC) Emissions: Emissions shall meet the California Department of Public Health (CDPH) Standard Method v1.2, 2017 requirements.
 - Volatile Organic Compound (VOC) Emissions: Adhesive shall comply with the requirements of South Coast Air Quality Management District (SCAQMD) Rule 1168.
- Building Certifications: Products shall meet the following building certification standards.
 - LEED 2009 and LEEDv4, Living Building Challenge (Petals including Red List Imperative) and WELL Building Standard
- End of Life Reclamation – Carpet manufacturers must have existing program in place to achieve landfill diversion. Refer to Section 3.7 of this section for specific requirements for reclamation of material. Recover – Carpet recycling program, call toll free 877-373-2925.

2.4 MANUFACTURER'S REQUIREMENTS

- Corporate social responsibility requirements: Manufacturer shall meet the corporate social responsibility as outlined below
 - GRI Reporting: Manufacturer to have a corporate sustainability report (CSR) as per the GRI guidelines.
 - Health and Wellness: Manufacturer to have on-site health clinics and biometric screenings, or health facilities displaying commitment towards health and wellness.
 - United Nations Sustainable Development Goals (UN SDGs): Manufacturer must identify and commit to at least part of the UN SDGs as applicable to their organization and industry.
 - Facility Certifications: Product's manufacturing facility shall be ISO 9001 certified. Manufacturer to have at least one green building certification for their own facilities – LEED, Living Building Challenge or WELL Building Standard.
 - Manufacturer to contribute towards protecting natural and ecological habitat through conservation and provide appropriate documentation.
 - Manufacturer to have on-site renewable energy as a part of their energy portfolio.

2.5 ACCESSORIES

- Leveling Compound: Latex type as recommended by carpet manufacturer; compatible with carpet adhesive and curling/sealing compound used on concrete.
- Multipurpose Adhesive: Low VOC NuBroadlok™ Premium Multipurpose Adhesive as recommended by carpet manufacturer for direct glue down of carpeting; comply with CRI Green Plus Label Certification Program.
- High Moisture Environments: Mohawk's Vapor Release Technology can be used in installations where the substrate RH reaches as high as 99% and the pH 12.0 when used exclusively with Mohawk's OnGuard backing system.
- Non-Metallic Carpet Edge Guard: Extruded or molded heavy-duty vinyl or rubber carpet edge guard of size and profile indicated; minimum two (2) inch wide anchorage flange; colors selected by (Architect) (Designer) from manufacturer's standard range of colors.
- Miscellaneous Materials: As recommended by manufacturer of carpet, cushion, and other carpet products; as required to complete installation.

PART 3 EXECUTION

3.1 EXAMINATION

- Examine substrates for conditions under which carpeting is to be installed.
- Verify that floor surfaces are smooth and flat within tolerances specified in Section 3.2 and are ready to receive work.
- Beginning of installation means installer accepts existing substrate conditions.

3.2 PREPARATION

- Allow new concrete to cure for 90 days before carpet installation starts.
- Perform moisture content testing as required by manufacturer's instructions to ensure pH readings of no more than nine (9). Moisture transmission of 80% relative humidity, as determined by current ASTM standards 24 hours is acceptable. If values exceed this level, follow Mohawk's recommendations using Mohawk's VRT system for moisture transmission mitigation where an active vapor barrier exist for readings of no more than moisture of 99%, and a pH of no more than twelve (12) Do not proceed until unsatisfactory conditions have been corrected.
- Remove sub-floor ridges and bumps. Fill minor or local low spots, cracks, joints, holes and other defects with sub-floor filler.
- Fill, level and make smooth cracks 1/16 inch or more, holes, unevenness, and roughness with compatible latex floor patching compounds. Feather floor filling or leveling compound a minimum of four (4) ft. Sweep floor of loose granular debris prior to filling. After filling, allow filler to dry. Damp mop floor with warm water and allow to dry. Vacuum after mopping to ensure that loose granular debris is removed and to provide a proper substrate to install Broadloom carpet. Prohibit traffic until filler is cured.
- Vacuum floor again immediately before installation of carpeting.

- Confirm compatibility of Manufactures adhesive with curing compounds on concrete floors.
- Preheat areas to receive carpet to a minimum temperature of 65° F for 48 hours prior to installation, with a relative humidity of not more than 65 percent. Maintain minimum temperature of 65° F thereafter. Carpet and adhesive must be stored at a minimum temperature of 65° F, for 24 hours prior to installation.
- Store NuBroadlok™ Premium Multi-Purpose adhesive and other liquid materials in same atmospheric conditions as carpet, 65° F for at least 24 hours.

3.3 INSTALLATION

- Install carpet in accordance with the Technical Bulletins provided by the manufacturer for tufted and/or woven products. These technical bulletins will offer the proper instructions to install carpet including: (1) Conducting Site Testing and conditioning, (2) Floor Preparation, (3) Installation of the carpet, including layout (seaming, carpet layout and cutting, power stretching, approved adhesives systems and seam sealers, etc.) As a supplement, the CRI 104, section 8 will supply additional installation support guidance for your installation.
- Adhesives and Sealers: Manufactures Carpet adhesives and sealers must be used in accordance with their guidelines,
- Install carpet under open-bottom obstructions and under removable flanges and furnishings, and into alcoves and closets in each space.
- Provide cut outs where required. Conceal cut edges with protective edge guards or flanges.
- Install carpet under open-bottom items and install tight against walls, columns, and cabinets so that the entire floor area is covered with carpet. Cover over floor-type door closers.
- Install edging guards at openings and doors wherever carpet terminates, unless indicated otherwise.
- Perform cutting in accordance with manufacturer's recommendation using tools designed for carpet being installed. Verify carpet match before cutting to insure minimal variation between dye lots.
- Install carpet from same dye lot and run within each continuous carpet area.
- Seal seams with manufacturer recommended seam sealer, if applicable.
- Install carpet with pile-lay in same direction except when indicated otherwise on drawings.
- Use leveling compound where necessary. Feather floor leveling compounds minimum of 4 ft.
- Do not bridge building expansion joints with continuous carpeting. Provide for movement.
- Apply seam adhesive to base of edge glued down. Lay adjoining piece with seam straight, not overlapped or peaked, and free of gaps.

- Roll with appropriate roller for complete contact of adhesive to carpet backing.
- Trim carpet neatly at walls, and around interruptions
OR
- Extend carpet at base finish up vertical surface to form base. Terminate top of base with cap strip.
- Complete installation of edge strips, concealing exposed edges.
- Cut carpet at fixtures, architectural elements, and perimeters.
- Use a fixed reducer trip to secure broadloom area in open perimeter designs.
- Install carpet on stairs using acceptable permanent adhesive. Furnish and use compatible edge strip and nosing products as required.

3.4 FIELD QUALITY CONTROL

- Inspect completed carpet installation on each floor
- Verify that installation is complete; work is properly done and acceptable
- Remove and replace, at no additional cost to owner, any work found not to be acceptable.

3.5 CLEANING

- On completion of installation in each area, remove dirt and scraps from surface of finished carpet. Clean soiling, spots, or excess adhesive on carpet with cleaning materials recommended by carpet manufacturer.
- Remove debris; sort pieces from carpet scraps
- At completion of work, vacuum carpet using commercial vacuuming equipment as recommended by manufacturer. Remove spots and replace carpet where spots cannot be removed. Remove rejected carpet pieces and replace with new carpeting. Remove any protruding yarns with shears or sharp scissors.

3.6 PROTECTION

- Do not permit traffic over unprotected carpet surface.
- Protect carpet against damage during construction. Cover with 6-mil thick polyethylene covering joints during construction period whenever protection is required so that carpet will be without soiling, deterioration, wear, or damage at time of completion.
- Damaged carpet will be rejected. As carpet is installed, remove trimmings, scraps of carpet and installation materials.
- Maintain protection of carpeting on each floor or area until work is accepted.

3.7 CARPET RECLAMATION – BROADLOOM CARPETING AND CARPET TILE

This specification is for carpet reclamation and is designed to manage carpet recycling for any type of used carpet or carpet pad.

- CARPET REMOVAL – BROADLOOM
 - Remove used carpet in carpet pieces, roll tightly, and pack neatly in container. (Include carpet scrap and waste from new installation.) Immediately remove used carpet from Site. For reclamation projects coordinated by Mohawk Reclamation Department, place in Mohawk provided covered containers.
 - Deposit only clean, dry used carpets in containers. Clean shall be defined as carpet free from demolition debris or asbestos contamination, garbage, and tack strips.
- CARPET REMOVAL – CARPET TILE
 - Remove used carpet tile and stack neatly on pallets. Neatly stack carpet tiles or repack in cardboard boxes prior to placing in container. Do not stack higher than 6 feet on pallets. (Include carpet scrap and waste from new installation.) Immediately remove used carpet from Site. For reclamation projects coordinated by Mohawk Reclamation Department, place in Mohawk provided covered containers.
 - Deposit only clean, dry used carpets in containers. Clean shall be defined as carpet free from demolition debris or asbestos contamination, garbage, and tack strips.
- CONTAINER HANDLING
 - Place used carpet in container supplied by Mohawk Reclamation Department. Containers are fully enclosed and shall be kept locked or supervised.
 - Broadloom carpet must be segregated in separate containers from tile carpeting.
 - Use effective packing techniques to maximize the amount of material in the container. On average the following amounts are the related container capacities.

<u>Container Size</u>	<u>Broadloom Capacity</u>	<u>Tile Capacity</u>
53' Foot	4,800	3,500

- CONTAINER REMOVAL
 - When container is full, contact Mohawk Reclamation Department to coordinate pickup and drop-off of replacement container if needed. If container is locked for security purposes, remove the lock prior to pick up.
 - The Mohawk Reclamation Department toll free number is (877) 3RE-CYCL or (877) 373-2925
- RECLAMATION CERTIFICATE
 - The Mohawk Reclamation Department will issue a reclamation certificate once used carpet is removed from the job site and or dealer location and delivered to reclamation facility.

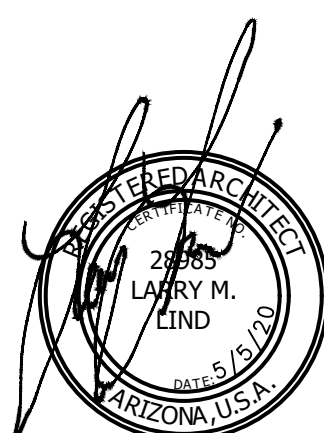
END OF SECTION

FLOORING REPLACEMENT



HAYDEN HIGH SCHOOL

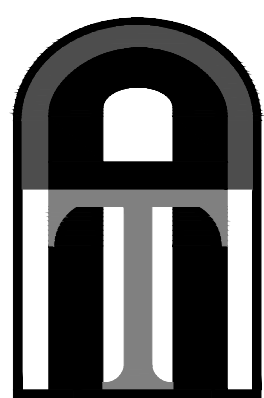
824 THORNE AVENUE
WINKELMAN, ARIZONA 85192



EXPIRES: 3-21-22

REVISIONS

NO.	DATE	COMMENT
1	6/1/20	ADDENDUM NO. 1



ARCHITECHNOLOGY

ARCHITECTURE - ROOF CONSULTING
5229 NORTH 7th AVENUE #101
PHOENIX, ARIZONA 85013
P: 602.347.5226
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WWW.ARCHITECHNOLOGYAZ.COM



BID SET

5/5/20

REVISIONS	NO.	DATE	COMMENT
	1	6/1/20	ADDENDUM NO. 1

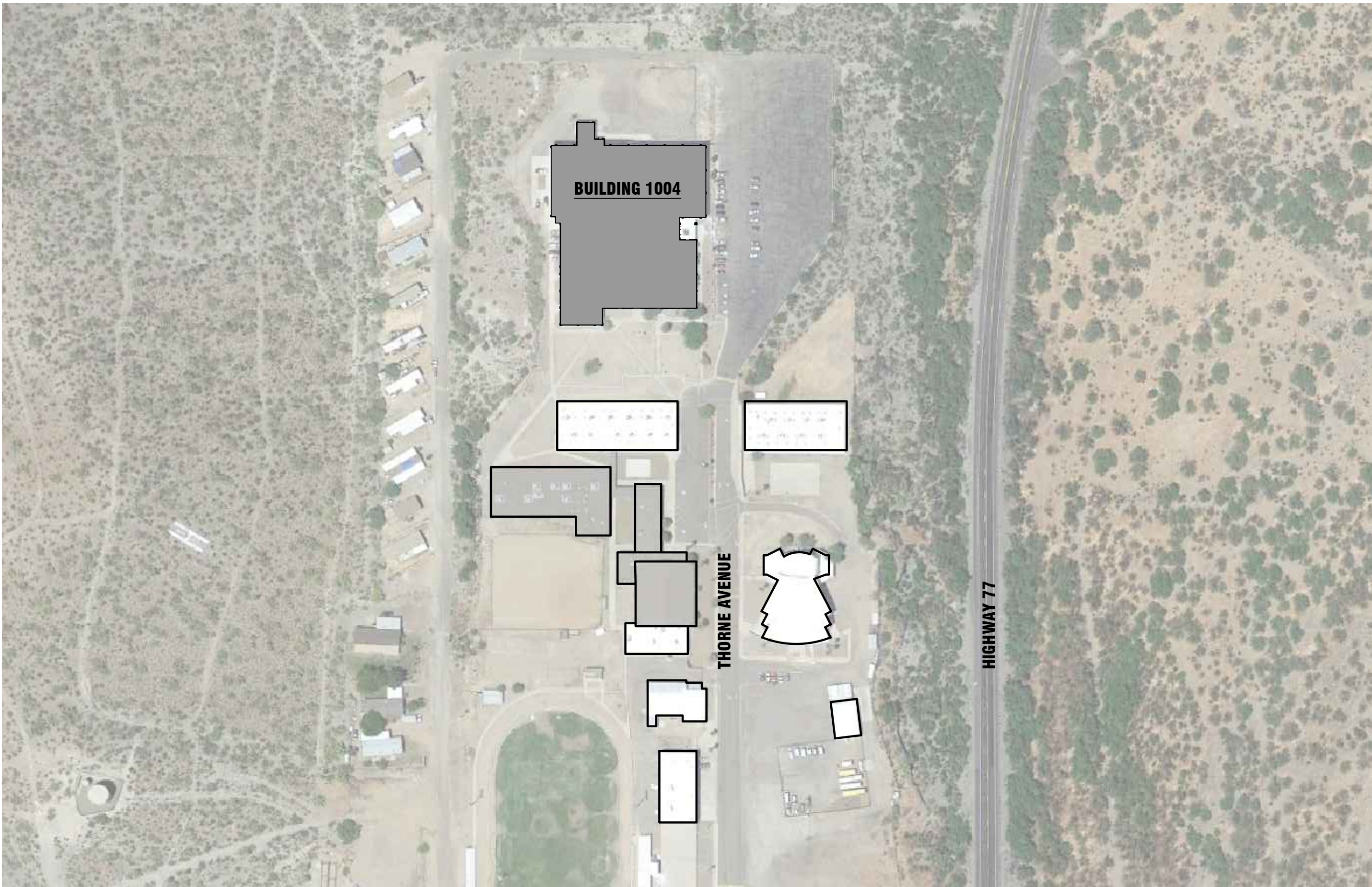


FLOORING REPLACEMENT
HAYDEN HIGH SCHOOL
824 THORNE AVENUE
WINKELMAN, ARIZONA 85192

abbreviations

A.B.	ANCHOR BOLT	I.D.	INSIDE DIAMETER
ACT	ACOUSTICAL CEILING TILE	INSUL.	INSULATION
A.F.F.	ABOVE FINISHED FLOOR	INT.	INTERIOR
AGGR.	AGGREGATE		
AL.	ALUMINUM	JAN.	JANITOR
ALT.	ALTERNATE	JNT.	JOINT
APPROX.	APPROXIMATE	JST.	JOIST
ARCH.	ARCHITECTURAL		
		KIT.	KITCHEN
BD.	BOARD		
BLDG.	BUILDING	LAB.	LABORATORY
BLK.	BLOCK	LAM.	LAMINATE
BLK'G	BLOCKING	LAV.	LAVATORY
BM.	BEAM	LT.	LIGHT
BOT.	BOTTOM		
BTWN.	BETWEEN	MAX.	MAXIMUM
B.U.R.	BUILT UP ROOFING	MECH.	MECHANICAL
B.W.	BOTH WAYS	MEMB.	MEMBRANE
		MFR.	MANUFACTURER
C.J.	CONTROL JOINT	M.H.	MANHOLE
CLG.	CEILING	MIN.	MINIMUM
CLKG.	CAULKING	MISC.	MISCELLANEOUS
CLR.	CLEAR	M.O.	MASONRY OPENING
CMU	CONCRETE MASONRY UNIT	MTL.	METAL
COL.	COLUMN	MUL.	MULLION
CONC.	CONCRETE		
CONSTR.	CONSTRUCTION	N	NORTH
CONT.	CONTINUOUS	N.I.C.	NOT IN CONTRACT
C.T.	CARPET TILE	NO.	NUMBER
		NOM.	NOMINAL
		N.T.S.	NOT TO SCALE
DEG.	DEGREE		
D.E.T.	DETAIL		
D.F.	DRINKING FOUNTAIN	O.C.	ON CENTER
DIAG.	DIAGONAL	O.D.	OUTSIDE DIAMETER
DIA.	DIAMETER	OH.	OVERHEAD
DN.	DOWN	OPG.	OPENING
DS.	DOWNSPOUT	OPP.	OPPOSITE
DWG.	DRAWING		
		PCT.	PRE-CAST
E	EAST	P.L.	PROPERTY LINE
(E)	EXISTING	PLAM.	PLASTIC LAMINATE
EA.	EACH	P.	PLASTER
E.J.	EXPANSION JOINT	PLYWD.	PLYWOOD
E.I.F.S.	EXTERIOR INSULATION & FINISH SYSTEM	PR.	PAIR
EL. / ELEV.	ELEVATION		
ELEC.	ELECTRICAL	R.	RISER
EMER.	EMERGENCY	R.D.	ROOF DRAIN
ENCL.	ENCLOSURE	RE.	REFER TO
EQ.	EQUAL	REFR.	REFRIGERATOR
EQUIP.	EQUIPMENT	REQ'D	REQUIRED
E.W.	EACH WAY	RM	ROOM
E.W.C.	ELECTRIC WATER COOLER	R.O.	ROUGH OPENING
EXP.	EXPANSION		
EXT.	EXTERIOR	S	SOUTH
		S.C.	SOLID CORE
F.A.	FIRE ALARM	SCHED.	SCHEDULE
F.D.	FLOOR DRAIN	SECT.	SECTION
F.D.C.	FIRE DEPARTMENT CONNECTION	S.F.	SQUARE FOOT
F.E.	FIRE EXTINGUISHER	SHT.	SHEET
F.E.C.	FIRE EXTINGUISHER CABINET	SIM.	SIMILAR
F.F.	FINISH FLOOR	SPEC.	SPECIFICATION
F.H.C.	FIRE HOSE CABINET	SQ.	SQUARE
FIN.	FINISH	S.S.	STAINLESS STEEL
F.L.	FLOW LINE	STAGG.	STAGGERED
FLR.	FLOOR	STD.	STANDARD
FLOUOR.	FLUORESCENT	STIFF.	STIFFENER
FND.	FOUNDATION	STL.	STEEL
F.O.B.	FACE OF BRICK	STRUC.	STRUCTURAL
F.O.C.	FACE OF CONCRETE	SUSP.	SUSPENDED
F.S.	FOOT SIZE		
FT.	FOOT OR FEET	TR.	READ
FTG.	FOOTING	T & B	TOP AND BOTTOM
FURR.	FURRING	TER.	TERRAZZO
		T & G	TONGUE AND GROOVE
		THK.	THICK
		T/	TOP OF
GA.	GAUGE	TYP.	TYPICAL
GAUV.	GALVANIZED		
G.C.	GENERAL CONTRACTOR	VCT	VINYL COMPOSITION TILE
GL.	GLASS	VER.	VERIFY
GR.	GRADE	VERT.	VERTICAL
GYP.	GYPSUM		
GYP. BD.	GYPSUM BOARD		
		W	WEST
H.B.	HOSE BIB	W/	WITH
H.C.	HOLLOW CORE	W.C.	WATER CLOSET
H/C	HANDICAPPED	WD.	WOOD
HDWD.	HARDWOOD	W/O	WITHOUT
HDWE.	HARDWARE		
H.M.	HOLLOW METAL		
HR.	HOUR		
HT.	HEIGHT		

reference site plan



project information

PROJECT NAME:	FLOORING REPLACEMENT
OWNER:	HAYDEN WINKLEMAN UNIFIED SCHOOL DISTRICT 824 THORNE AVENUE WINKLEMAN, ARIZONA 85192
PROJECT SITE:	HAYDEN HIGH SCHOOL 824 THORNE AVENUE PHOENIX, ARIZONA 85192
ARCHITECT:	ARCHITECTNOLOGY INC. LARRY M. LIND, A.I.A. PRINCIPAL ARCHITECT / ROOF CONSULTANT 5229 N. 7TH AVE. STE 101 PHOENIX, ARIZONA 85013 P (602) 347-5226 F (602) 234-1561

hayden winkleman unified school district

GOVERNING BOARD:	BOARD PRESIDENT - LOUIS BRACAMONTE
	BOARD MEMBER - ANNA L. GUZMAN
	BOARD MEMBER - ERNESTINE LORONA
	BOARD MEMBER - TOMMY LAGUNAS
	BOARD MEMBER - JOE MARIN
SUPERINTENDENT:	JEFF GREGORICH

applicable codes

GILA COUNTY

ALL CONSTRUCTION SHALL COMPLY WITH THE FOLLOWING BUILDING CODES AND AMENDMENTS PER THEIR ADOPTING ORDINANCES:

2012 INTERNATIONAL RESIDENTIAL CODE
2012 INTERNATIONAL BUILDING CODE
2012 INTERNATIONAL EXISTING BUILDING CODE
2012 INTERNATIONAL FUEL GAS CODE
2012 INTERNATIONAL MECHANICAL CODE
2012 INTERNATIONAL PLUMBING CODE
2012 INTERNATIONAL SWIMMING POOL, SPA AND HOT TUB CODE
2011 NATIONAL ELECTRIC CODE

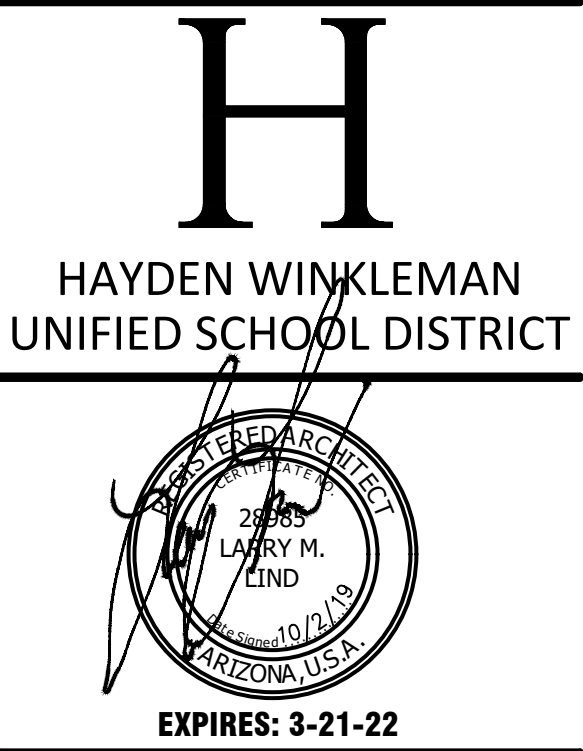
sheet index

G0.0	COVER SHEET
G0.1	PROJECT INFORMATION / REFERENCE SITE PLAN

A0.1	OVERALL REFERENCE PLAN
A1.1	PARTIAL ENLARGED DEMOLITION PLAN
A1.2	PARTIAL ENLARGED DEMOLITION PLAN
A2.1	PARTIAL ENLARGED FLOOR PLAN
A2.2	PARTIAL ENLARGED FLOOR PLAN

general notes

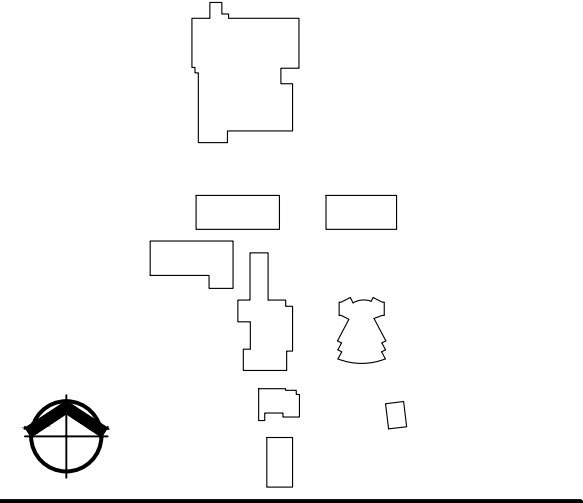
- THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE CODES, LAWS, AND ORDINANCES HAVING JURISDICTION ON THIS PROJECT.
- ALL OMISSIONS AND CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE CONTRACT DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AND RESOLVED PRIOR TO PROCEEDING WITH ANY CONSTRUCTION SO INVOLVED.
- THE CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, CLEARANCES, AND CONDITIONS. ANY DISCREPANCIES OR CONFLICTS SHALL BE REPORTED TO THE ARCHITECT PRIOR TO COMMENCEMENT OF WORK.
- WE CERTIFY TO THE BEST OF OUR KNOWLEDGE, INFORMATION AND BELIEF, THAT THE DESIGN OF THIS PROJECT COMPLIES WITH THE APPLICABLE PROVISIONS & REQUIREMENTS OF SECTION 34-4-1 TO 34-411 INCLUSIVE OF THE STATUTES OF THE STATE OF ARIZONA.
- AS PER THE SPECIFICATION SECTION FOR PROJECT CLOSE-OUT, THE ARCHITECT WILL ISSUE A "CERTIFICATE OF SUBSTANTIAL COMPLETION OF THE PROJECT WORK".
- ANY FUTURE CHANGE OR REVISIONS TO THESE PLANS SHALL BE SUBMITTED TO THE CITY FOR REVIEW, AND APPROVAL PRIOR TO COMMENCING ANY WORK.
- ALL CHANGES AND/OR REVISIONS SHALL BE NOTED ON THE PLANS BY "CLOUDING" THE AREAS AFFECTED BY THESE REVISIONS OR CHANGES, AND WITH "DELTA'S" INDICATING THE NUMBER OF TIMES THE CHANGES OCCUR. IN ADDITION, THE DATE OF THESE CHANGES OR REVISIONS SHALL BE INDICATED. THIS DATA SHALL ALSO BE PLACED IN THE TITLE BLOCK, IN AN APPROPRIATE BULLETIN OR SCHEDULE.
- SEE SPECIFICATIONS FOR PRIOR APPROVALS. IF NO PRIOR APPROVAL IS SUBMITTED THEN BID MUST BE TO ROOF MANUFACTURE SPECIFIED AS "BASIS OF DESIGN"



FLOORING REPLACEMENT
HAYDEN HIGH SCHOOL
824 THORNE AVENUE
WINKLEMAN, ARIZONA 85192

PROJECT NO.:	19165		
DRAWN BY:	D. LIND		
CHECKED BY:	L. LIND		
DATE:	MARCH, 2020		
REVISIONS			
NO.	DATE	COMMENT	
△	6/1/20	ADDENDUM NO. 1	
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KEY PLAN



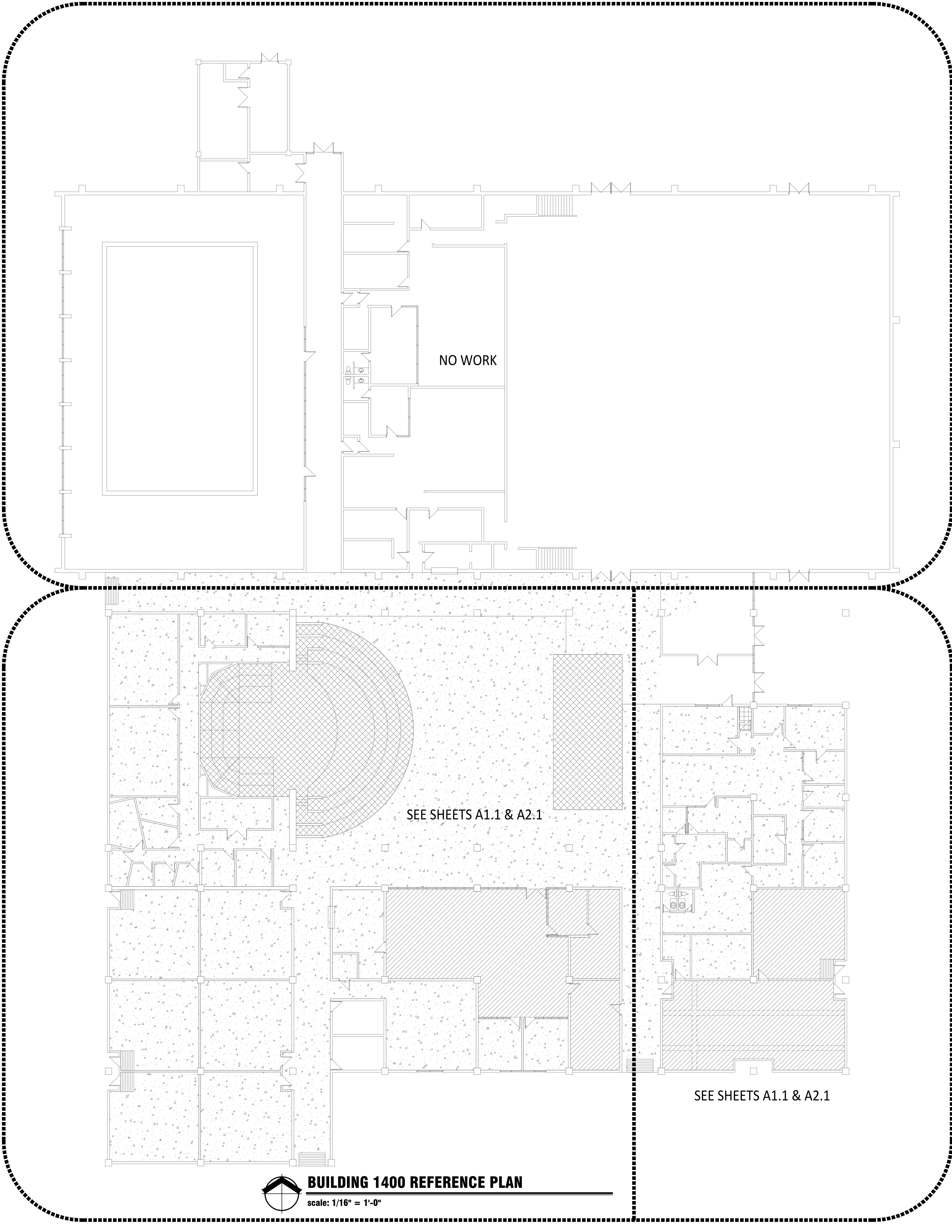
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DRAWING TITLE

GENERAL INFORMATION

DRAWING NUMBER

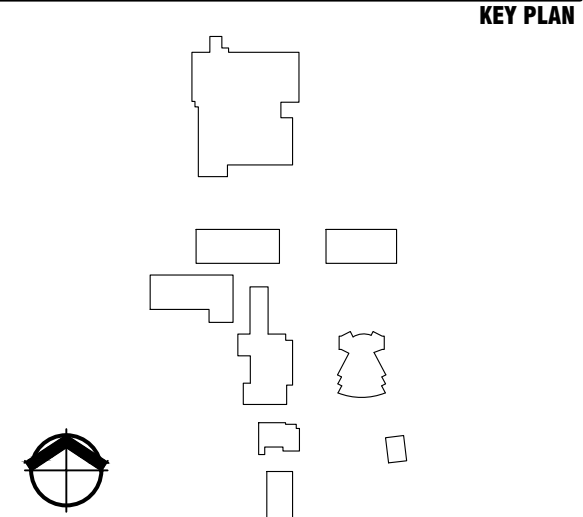
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**FLOORING REPLACEMENT
HAYDEN
HIGH SCHOOL
824 THORNE AVENUE
WINKELMAN, ARIZONA 85192**

PROJECT NO.: 19165
DRAWN BY: D. LIND
CHECKED BY: L. LIND
DATE: MARCH, 2020

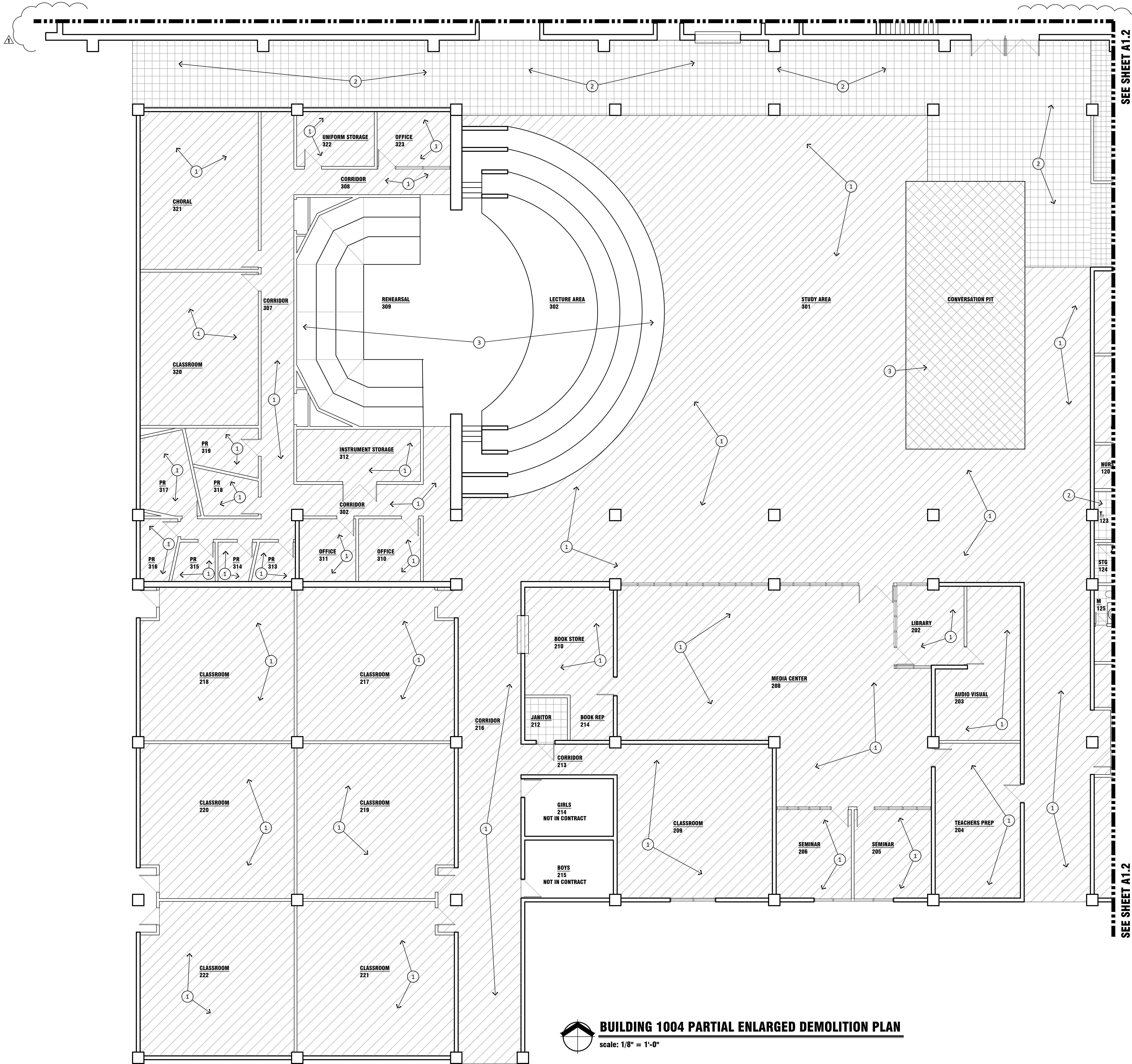
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DRAWING TITLE
**BUILDING 1004 REFERENCE
PLAN**

DRAWING NUMBER
A1.0

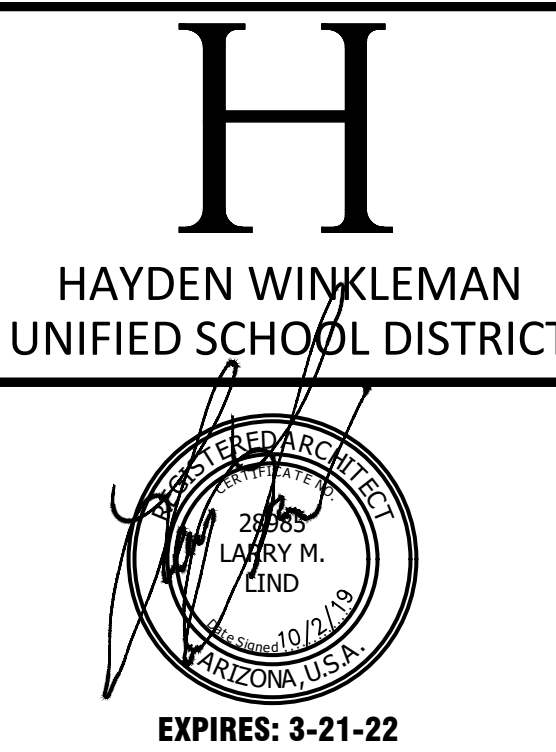


keyed notes

1. REMOVE EXISTING CARPET, BASE AND ASSOCIATED MASTIC. PREP FLOOR AS REQUIRED FOR NEW POLISHED CONCRETE FINISH - SEE SPECIFICATIONS
2. REMOVE EXISTING VCT TILE, BASE AND ASSOCIATED MASTIC. PREP FLOOR AS REQUIRED FOR NEW POLISHED CONCRETE FINISH - SEE SPECIFICATIONS
3. REMOVE EXISTING CARPET, BASE AND ASSOCIATED MASTIC. PREP FLOOR FOR NEW CARPETING - SEE SPECIFICATIONS

general notes

- A. CONTRACTOR TO REVIEW SPECIFICATIONS PRIOR TO BID. NOTIFY ARCHITECT OF ANY CONFLICTS.
- B. KEYNOTES ARE TYPICAL THROUGHOUT
- C. CONTRACTOR TO REMOVE AND REPLACE ALL FIXTURES AS REQUIRED FOR FLOORING REMOVAL AND REPLACEMENT
- D. ANY INCIDENTAL MECHANICAL, PLUMBING OR ELECTRICAL EQUIPMENT SHALL BE PERFORMED BY PROPER LICENSED SUBCONTRACTORS UNDER THIS ROOFING CONTRACT - ALL WORK SHALL BE PERFORMED TO CURRENT CODES.

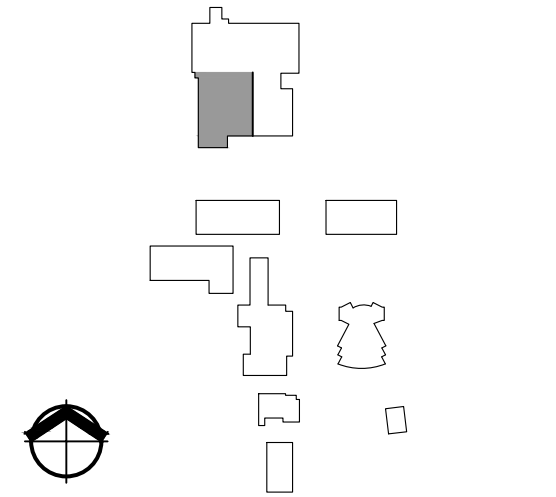


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KEY PLAN

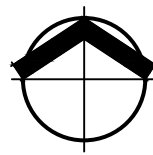


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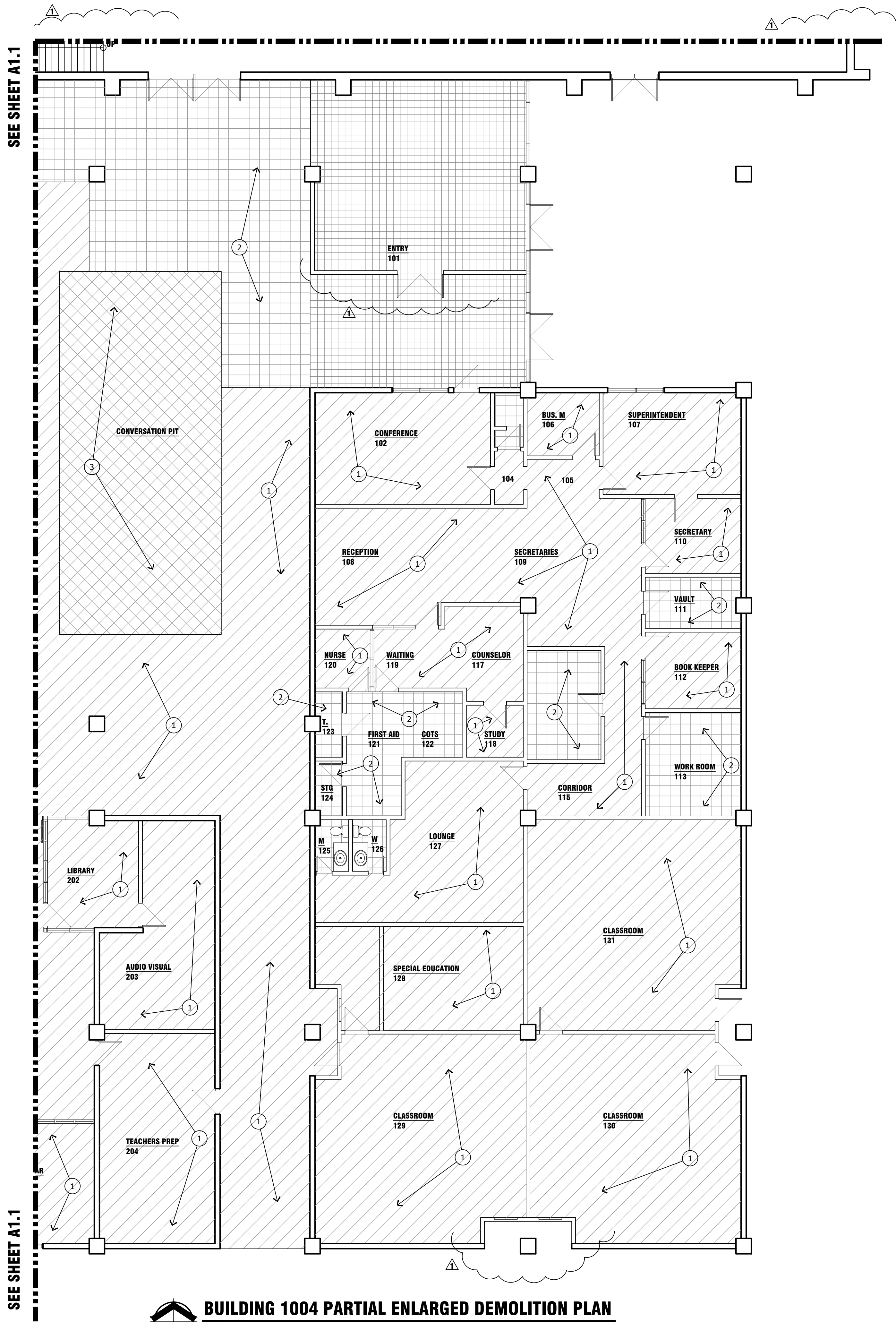
**BUILDING 1004 PARTIAL
ENLARGED DEMOLITION
PLAN**

DRAWING NUMBER

A1.1



BUILDING 1004 PARTIAL ENLARGED DEMOLITION PLAN
scale: 1/8" = 1'-0"

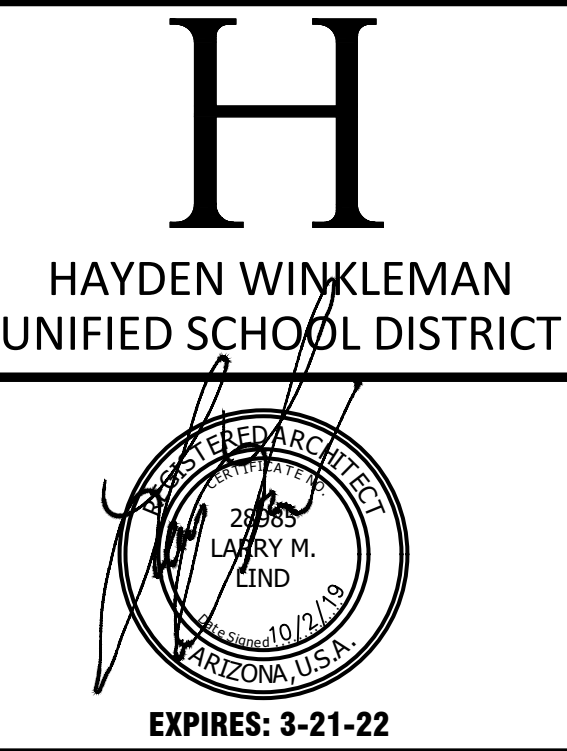


keyed notes

1. REMOVE EXISTING CARPET, BASE AND ASSOCIATED MASTIC. PREP FLOOR AS REQUIRED FOR NEW POLISHED CONCRETE FINISH - SEE SPECIFICATIONS
2. REMOVE EXISTING VCT TILE, BASE AND ASSOCIATED MASTIC. PREP FLOOR AS REQUIRED FOR NEW POLISHED CONCRETE FINISH - SEE SPECIFICATIONS
3. REMOVE EXISTING CARPET, BASE AND ASSOCIATED MASTIC. PREP FLOOR FOR NEW CARPETING - SEE SPECIFICATIONS

general notes

- A. CONTRACTOR TO REVIEW SPECIFICATIONS PRIOR TO BID. NOTIFY ARCHITECT OF ANY CONFLICTS.
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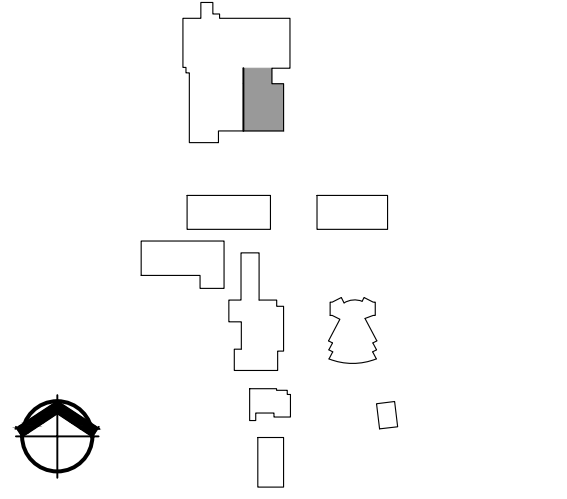


**FLOORING REPLACEMENT
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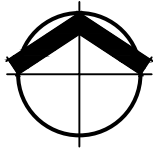


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**BUILDING 1004 PARTIAL
ENLARGED DEMOLITION
PLAN**

DRAWING NUMBER

A1.2



BUILDING 1004 PARTIAL ENLARGED DEMOLITION PLAN
scale: 1/8" = 1'-0"



general notes

- ## key notes

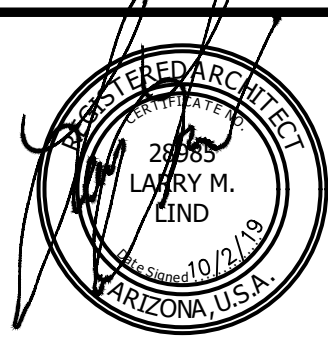
1. PATCH EXISTING CONCRETE
2. INSTALL NEW HANDRAIL TO MATCH EXISTING. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION
3. PATCH AND LEVEL CONCRETE FLOOR AT ELECTRICAL TRENCHES SO FLOOR IS FLUSH THROUGHOUT THE ROOM
4. REMOVE EXISTING HANDRAIL AND PATCH CONCRETE AS REQUIRED



1 NEW RAILING

$$1'' = 1' - 0'$$


H
HAYDEN WINKLEMAN
UNIFIED SCHOOL DISTRICT

**EXPIRES: 3-21-22**

FLOORING REPLACEMENT

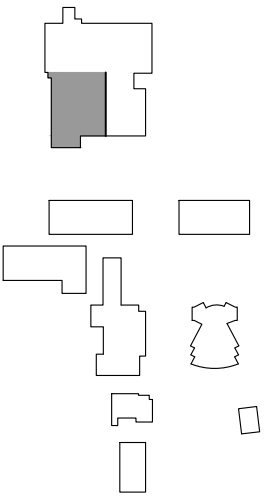
HAYDEN

WINKELMAN, ARIZONA 85192

PROJECT NO.:	19165
DRAWN BY:	D. LIND
CHECKED BY:	L. LIND
DATE:	MARCH, 2020

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NO.	DATE	COMMENT
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2		
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KEY PLAN



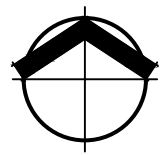
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DRAWING TITLE

BUILDING 1004 PARTIAL ENLARGED FLOOR PLAN

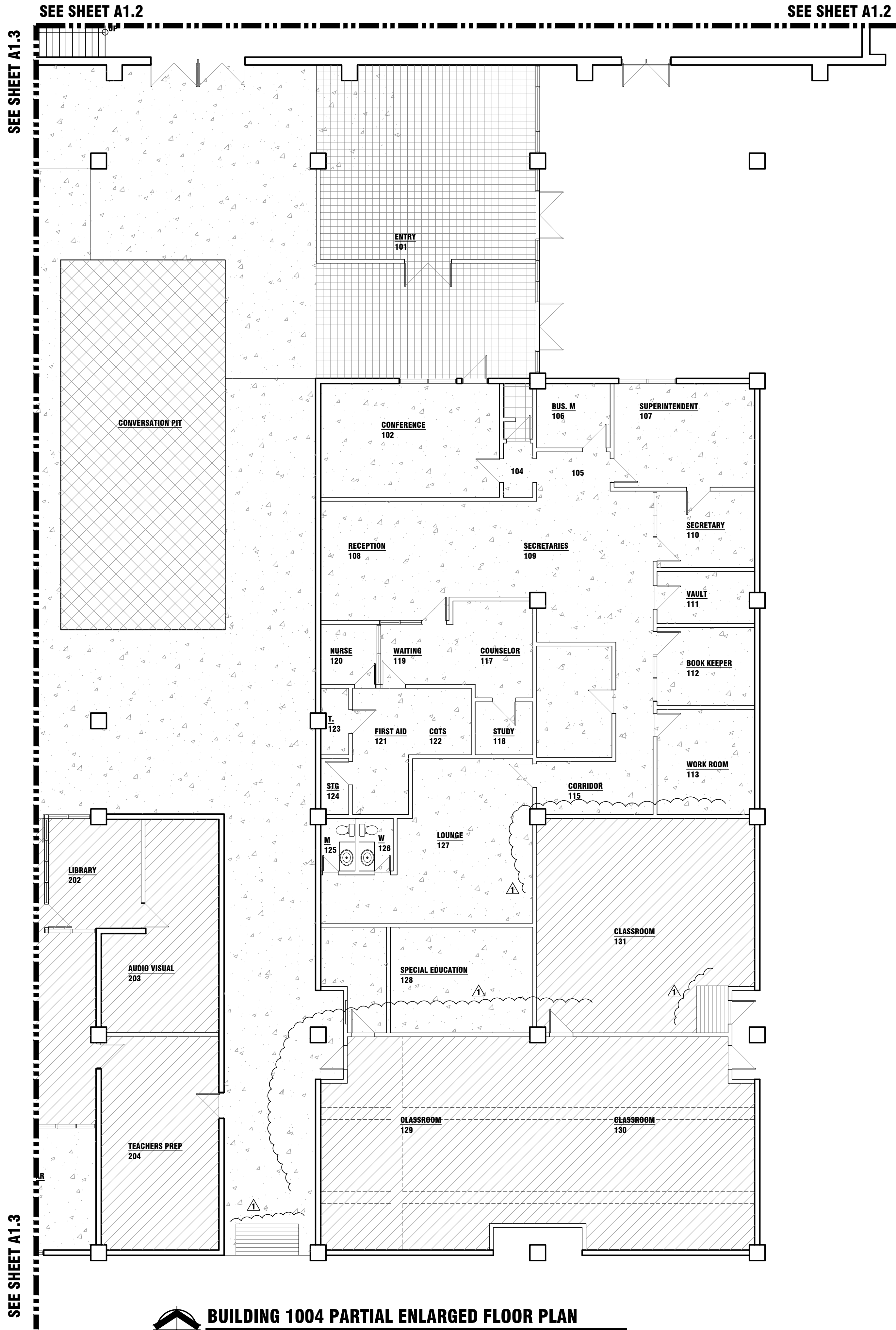
DRAWING NUMBER

A2.1



BUILDING 1004 PARTIAL ENLARGED FLOOR PLAN

scale: 1/8" = 1'-0"



floor legend

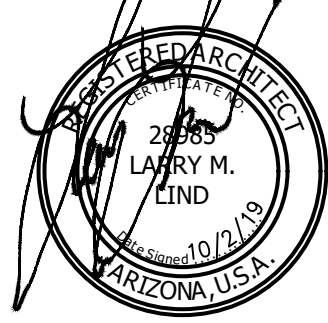
- NEW CARPET SET IN MASTIC PER SPECIFICATIONS. PREP FLOOR PER SPECIFICATIONS. PROVIDE NEW RUBBER BASE PER SPECIFICATIONS
- NEW POLISHED CONCRETE FINISH PER SPECIFICATIONS. PROVIDE NEW BASE PER SPECIFICATIONS
- CERAMIC TILE TO REMAIN STRIP WAX FROM TILE AND APPLY GROUT SEALER
- NEW CARPET TILE PER SPECIFICATIONS
- NEW 4' X 6' WALK OFF CARPET TILES

general notes

- A. CONTRACTOR TO REVIEW SPECIFICATIONS PRIOR TO BID. NOTIFY ARCHITECT OF ANY CONFLICTS.
- B. KEYNOTES ARE TYPICAL THROUGHOUT
- C. CONTRACTOR TO REMOVE AND REPLACE ALL FIXTURES AS REQUIRED FOR FLOORING REMOVAL AND REPLACEMENT
- D. ANY INCIDENTAL MECHANICAL, PLUMBING OR ELECTRICAL EQUIPMENT SHALL BE PERFORMED BY PROPER LICENSED SUBCONTRACTORS UNDER THIS ROOFING CONTRACT - ALL WORK SHALL BE PERFORMED TO CURRENT CODES.

key notes

1. PATCH EXISTING CONCRETE
2. INSTALL NEW HANDRAIL TO MATCH EXISTING. SUBMIT SHOP DRAWINGS FOR APPROVAL PRIOR TO FABRICATION
3. PATCH AND LEVEL CONCRETE FLOOR AT ELECTRICAL TRENCHES SO FLOOR IS FLUSH THROUGHOUT THE ROOM
4. REMOVE EXISTING HANDRAIL AND PATCH CONCRETE AS REQUIRED

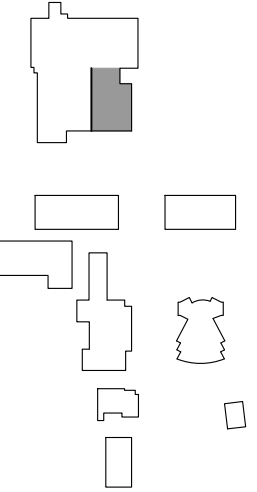


FLOORING REPLACEMENT
HAYDEN
HIGH SCHOOL
824 THORNE AVENUE
WINKELMAN, ARIZONA 85192

PROJECT NO.: 19165
DRAWN BY: D. LIND
CHECKED BY: L. LIND
DATE: MARCH, 2020

REVISIONS		
NO.	DATE	COMMENT
1	6/1/20	ADDENDUM NO. 1

KEY PLAN



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DRAWING TITLE

BUILDING 1004 PARTIAL
ENLARGED FLOOR PLAN

DRAWING NUMBER

A2.2